Good work is good for health and wellbeing

Comcare’s work is centered on the ever increasing evidence that good work, in general, is good for health and wellbeing. Particularly that participation in work as part of recovery is good for people.

The emerging evidence alert

This Emerging Evidence Alert includes the latest news and evidence on the health benefits of work, recovery at and return to work, as well as a WHS issues to keep people healthy and safe in work.

We encourage employers to share their approaches and good practice in the emerging evidence alert. Each month we include a topical theme and provide an overview which covers evidence from the past few years.

Where possible, links to the full text of the articles have been included. The Digital Object Identifier (DOI) has also been included where possible, to enable direct links to the article and journal. Where some records are linked to subscription databases, check with your library to see if you have access or may ask for an interlibrary loan. Registered National Library of Australia users have access to a number of databases and resources.

Occupational disease management and prevention

This overview of recent research on the theme of Occupational disease management and prevention considers a wide range of occupational diseases and risks that are currently prevalent in the workplace. It is particularly important that people are able to overcome or manage these occupational issues, recover and return to work as valuable employees.

Many of these issues may lead to chronic disease, injury or disability. Following work health and safety guidelines and using early intervention strategies is particularly important in discovering these issues before they develop further.

The list is long. It includes: asbestosis and mesothelioma, cardiovascular, diabetes, work stress and psychosocial issues. As well as musculoskeletal problems, chemical, carcinogens, sun and heat exposures, lung and respiratory conditions, shift work issues, noise and hearing concerns.

Further research that addresses government laws and regulation, policies and programs as well as risk and WH&S is continuing world-wide.

Comcare’s website links to many of these issues including managing risks in the workplace, early intervention and recovery and return to work.

Emerging Evidence Topics

- Absenteeism and presenteeism
- Ageing workforce
- Asbestos and mesothelioma
- Bullying
- Chronic health issues
- Disability
- Employment and unemployment
- Occupational issues
- Psychosocial issues
- Public services
- Rehabilitation
- Return to work
- Vocational rehabilitation
- Work ability
OCCUPATIONAL DISEASE MANAGEMENT AND PREVENTION

Addressing risks: mental health, work-related stress, and occupational disease management to enhance well-being

Giorgi, G et Al

BioMed research international April 2018 1-3. 3 DOI: 10.1155/2018/5130676

The literature indicates that mental health and work-related stress are an increasing concern and that the management and mitigation of psychosocial risk require an interdisciplinary approach [[1], [4]]. In the recent international literature, mental health problems are associated with new and broader sources of work-related stress which can increase an individual’s vulnerability to more serious mental health issues as well as physical and psychosomatic complaints. In addition, there is evidence of the detrimental impact of work-related stress and mental health issues on workers’ health and safety, particularly with regard to cardiovascular disease, musculoskeletal disorders, and employee well-being [[2], [3]].

Cardiovascular disease and type 2 diabetes risk across occupational groups and industry in a statewide study of an Australian working population

Kelsall, Helen Louise et al

Journal of occupational & environmental medicine March 2018 60 3 286-294 9 DOI: 10.1097/JOM.0000000000001228

Objective: The aim of this study was to investigate prevalence of type 2 diabetes (diabetes) and cardiovascular disease (CVD) risk in occupational and industry groups in a large, diverse working population.

Methods: Five hundred thousand Victorian workers undertook health checks, including lifestyle, anthropometric, and biomedical cardiovascular risk factor assessment. Five-year diabetes (AUSDRISK) and absolute CVD risk were estimated.

Results: High diabetes and CVD risk was increased in many occupational groups and industries relative to managers and Professional/Scientific/Technical Services, respectively. Significantly more blue-collar workers had high diabetes risk [males prevalence ratio (PR) 1.19 (95% confidence interval, 95% CI 1.17 to 1.20); females 1.34 (95% CI 1.30 to 1.38)], high CVD risk [males 1.45 (95% CI 1.37 to 1.53); females 1.48 (95% CI 1.17 to 1.88), and risk factors including smoking [males 2.26 (95% CI 2.22 to 2.30); females 2.20 (95% CI 2.13 to 2.27)], compared with white-collar workers. Conclusion: Targeting occupational and industry groups within sustainable workplace programs could assist in reducing chronic diseases, lowering sickness absence, and improving productivity.

National prevalence and effects of multiple chemical sensitivities

Steinemann, Anne
Abstract

Objective: The aim of this study was to assess the prevalence of multiple chemical sensitivities (MCS), its co-occurrence with asthma and fragrance sensitivity, and effects from exposure to fragranced consumer products.

Methods: A nationally representative cross-sectional population-based sample of adult Americans (n = 1137) was surveyed in June 2016.

Results: Among the population, 12.8% report medically diagnosed MCS and 25.9% report chemical sensitivity. Of those with MCS, 86.2% experience health problems, such as migraine headaches, when exposed to fragranced consumer products; 71.0% are asthmatic; 70.3% cannot access places that use fragranced products such as air fresheners; and 60.7% lost workdays or a job in the past year due to fragranced products in the workplace.

Conclusion: Prevalence of diagnosed MCS has increased over 300%, and self-reported chemical sensitivity over 200%, in the past decade. Reducing exposure to fragranced products could help reduce adverse health and societal effects.

Title

Physical activity participation and the association with work-related upper quadrant disorders (WRUQDs): A systematic review

Author/s

Mansfield, Michael; Thacker, Michael; Smith, Toby.

Source

Musculoskeletal care March 2018 16 1 178-187 10 DOI: 10.1002/msc.1204

Abstract

Background: Workers in various occupations often report work-related upper quadrant disorders (WRUQDs). Research has shown that associative factors for WRUQDs include psychosocial and environmental elements, gender and physical activity levels. To date, no review has investigated whether physical activity participation is associated with and/or predicts the development of WRUQDs, so the present study set out to determine this.

Methods: A systematic review was conducted including searches of PubMed (MEDLINE), EMBASE and CINAHL from inception to 31 March 2017. Quantitative studies, including any outcome measure of physical activity participation and its association with and/or prediction of WRUQDs, were included. One reviewer conducted the search and two reviewers independently assessed eligibility and completed methodological quality assessment using a modified Downs and Black checklist. Data were analysed narratively.

Results: Eight studies were eligible for inclusion in the final review. The quality of these ranged from moderate to high quality. Three studies reported no statistical difference between physical activity participation and the risk of developing WRUQD. Three studies reported a negative and one study a positive association between physical activity participation and WRUQDs. One study reported that little or no physical exercise participation was a risk factor for WRUQD.

Conclusions: There is limited evidence for a negative association between physical activity participation and the development of WRUQDs. However, this was not a consistent finding across all studies included. Further research is indicated in standardizing diagnostic criteria and the measurement of physical activity participation in this patient population.

Title

Is occupational sun exposure important for squamous cell carcinoma risk?

Author/s

Von Schuckmann, L. A.

Source

British journal of dermatology February 2018 178 2 325-326 2 DOI: 10.1111/bjd.16168

Abstract

The article discusses exposure to ultraviolet radiation (UVR) as an occupational hazard as well as the main risk factor for developing cutaneous squamous cell carcinomas (SCC). It mentions the growing evidence that a high level of UVR exposure occurs in the occupational setting and that SCC is recognized as an occupational disease. It mentions a population-based study on the relative impact of occupational versus nonoccupational UVR exposure.
Title: Occupational lung diseases in Australia

Author/s: Hoy, Ryan F.; Brims, Fraser

Source: Medical journal of Australia November 2017 207 10 443-448

Abstract: Occupational exposures are an important determinant of respiratory health. International estimates note that about 15% of adult-onset asthma, 15% of chronic obstructive pulmonary disease and 10-30% of lung cancer may be attributable to hazardous occupational exposures. One-quarter of working asthmatics either have had their asthma caused by work or adversely affected by workplace conditions. Recently, cases of historical occupational lung diseases have been noted to occur with new exposures, such as cases of silicosis in workers fabricating kitchen benchtops from artificial stone products. Identification of an occupational cause of a lung disease can be difficult and requires maintaining a high index of suspicion. When an occupational lung disease is identified, this may facilitate a cure and help to protect coworkers. Currently, very little information is collected regarding actual cases of occupational lung diseases in Australia. Most assumptions about many occupational lung diseases are based on extrapolation from overseas data. This lack of information is a major impediment to development of targeted interventions and timely identification of new hazardous exposures. All employers, governments and health care providers in Australia have a responsibility to ensure

Title: Mesothelioma in Australia: a review.

Author/s: Musk, Arthur (Bill) W.; de Klerk, Nicholas; Brims, Fraser J.;

Source: Medical journal of Australia November 2017 207 10 449-452

Abstract: The incidence of malignant mesothelioma in Australia is among the highest in the world as a result of widespread use of asbestos by industry and in construction throughout the 20th century. The risk of developing malignant mesothelioma after asbestos exposure is dose-related; a transient, low dose exposure confers a correspondingly very low risk of disease. Malignant mesothelioma is a heterogeneous disease, partly explaining the limited role of biomarkers in screening and diagnosis. The prognosis remains poor, and early advice on medico-legal compensation and a collaborative team approach to managing malignant mesothelioma are both essential. Chemotherapy can have a modest treatment effect in some people. New therapies, such as immunotherapy, do not yet have a defined role in the treatment of malignant mesothelioma. As treatment options for malignant mesothelioma are limited and no cure is available, there is no established role for early detection or screening of at risk populations. A multidisciplinary approach to caring for patients with malignant mesothelioma and their carers is vital.

Title: Development of a job-exposure matrix (asbjem) to estimate occupational exposure to asbestos in Australia

Author/s: Van Oyen, Svein C

Source: Annals of occupational hygiene July 2015 59 6 737-748 DOI: 10.1093/annhyg/mev017

Abstract: Introduction: Occupational exposure data on asbestos are limited and poorly integrated in Australia so that estimates of disease risk and attribution of disease causation are usually calculated from data that are not specific for local conditions. Objective: To develop a job-exposure matrix (AsbJEM) to estimate occupational asbestos exposure levels in Australia, making optimal use of the available exposure data. Methods: A dossier of all available exposure data in Australia and information on industry practices and controls was provided to an expert panel consisting of three local industrial hygienists with thorough knowledge of local and international work practices. The expert panel estimated asbestos exposures for combinations of occupation, industry, and time period. Intensity and frequency grades were estimated to enable the calculation of annual exposure levels for each occupation-industry combination for each time period. Two indicators of asbestos exposure intensity (mode and peak) were used to account for different patterns of exposure between occupations. Additionally, the probable type of asbestos fibre was
determined for each situation.

Results: Asbestos exposures were estimated for 537 combinations of 224 occupations and 60 industries for four time periods (1943-1966; 1967-1986; 1987-2003; ≥2004). Workers in the asbestos manufacturing, shipyard, and insulation industries were estimated to have had the highest average exposures. Up until 1986, 46 occupation-industry combinations were estimated to have had exposures exceeding the current Australian exposure standard of 0.1 fm⁻¹. Over 90% of exposed occupations were considered to have had exposure to a mixture of asbestos varieties including crocidolite.

Conclusion: The AsbJEM provides empirically based quantified estimates of asbestos exposure levels for Australian jobs since 1943. This exposure assessment application will contribute to improved understanding and prediction of asbestos-related diseases and attribution of disease causation.
autonomy), sedentary time, low fitness motivation, and family/social life conflicts. Work organizational barriers included communication issues, low organizational support, and existing social norms. Job design barriers included rostering, fatigue, stimulant reliance, and family/social life imbalances. Self-regulatory barriers included dietary and exercise patterns habits and patterns.

**Weblink**

Conclusions: Occupational health interventions for Australian train drivers must address work organizational, job design, and self-regulatory barriers to healthier lifestyle behaviors.

**Title**
Scoping review of work disability policies and programs.

**Author/s**
MacEachen, Ellen et al

**Source**

**Abstract**
Purpose: This scoping review identifies the foci of research articles that address government laws, policies and programs designed to foster labour market integration of people who, due to illness or disability, face challenges entering or staying in the workforce. Method: A systematic search of English-language peer-reviewed articles published between 2000 and 2014 yielded 14,474 articles. Title and abstract review identified 723 included articles that addressed government-led programs, policy or legislation on work integration and or income support after injury, illness or impairment. These were sorted by theme, work disability program or policy, disability type, jurisdiction and year published. Results: The number of articles published that address work disability laws, policies and programs increased steadily. Most articles addressed disability in general. Among articles with a specific health focus, mental health was the most common. Research gaps are identified for mixed method study designs, chronic and episodic conditions, illness and cancer and for work disability policy studies outside of North America, Northern Europe and Australia. Conclusions: We find a growing number of published articles about work disability and policy and identify specific areas where is a need for further research.

**Weblink**

**Title**
Energy intake of shift workers compared to fixed day workers: a systematic review and meta-analysis

**Author/s**
Bonham, Maxine P et al

**Source**
*Chronobiology international: the journal of biological & medical rhythm research* October 2016 33 8 1086-1100 15 1 6 DOI: 10.1080/07420528.2016.1192188.

**Abstract**
Shift work is an established risk factor for a number of chronic conditions associated with excess energy intake including obesity, cardiovascular disease and type 2 diabetes. This systematic review investigated whether the 24 h energy intake of shift workers differs to that of fixed day workers. Included articles compared energy intake of shift workers (shift included midnight) with fixed day workers. There were 10 367 day workers and 4726 shift workers from 12 studies included in the qualitative analysis and meta-analyses. The standardised mean difference (95% CI) in energy intake between shift and day workers was −0.04 (−0.11, 0.03);I²= 54%. Qualitative results on macronutrient intakes were conflicting. Reported energy intakes were not different between day workers and shift workers, suggesting that other factors such as circadian misalignment, meal timing, food choice and diurnal variation of energy metabolism at night may be responsible for the increased rates of obesity observed in shift workers. Guidance on health and well-being is required for this at-risk population group.

**Weblink**

**Title**
Feasibility and acceptability of reducing workplace sitting time: a qualitative study with Australian office workers
Abstract
Background: Office workers spend a large proportion of their working hours sitting. This may contribute to an increased risk of chronic disease and premature mortality. While there is growing interest in workplace interventions targeting prolonged sitting, few qualitative studies have explored workers’ perceptions of reducing occupational sitting outside of an intervention context. This study explored barriers to reducing office workplace sitting, and the feasibility and acceptability of strategies targeting prolonged sitting in this context.
Methods: Semi-structured interviews were conducted with a convenience sample of 20 office workers (50% women), including employees and managers, in Melbourne, Australia. The three organisations (two large, and one small organisation) were from retail, health and IT industries and had not implemented any formalised approaches to sitting reduction. Questions covered barriers to reducing sitting, the feasibility of potential strategies aimed at reducing sitting, and perceived effects on productivity. Interviews were audiotaped and transcribed verbatim. Data were analysed using thematic analysis.
Results: Participants reported spending most (median: 7.2 h) of their working hours sitting. The nature of computer-based work and exposure to furniture designed for a seated posture were considered to be the main factors influencing sitting time. Low cost strategies, such as standing meetings and in-person communication, were identified as feasible ways to reduce sitting time and were also perceived to have potential productivity benefits. However, social norms around appropriate workplace behaviour and workload pressures were perceived to be barriers to uptake of these strategies. The cost implications of height-adjustable workstations influenced perceptions of feasibility. Managers noted the need for an evidence-based business case supporting action on prolonged sitting, particularly in the context of limited resources and competing workplace health priorities.
Conclusions: While a number of low-cost approaches to reduce workplace sitting are perceived to be feasible and acceptable in the office workplace, factors such as work demands and the organisational social context may still act as barriers to greater uptake. Building a supportive organisational culture and raising awareness of the adverse health effects of prolonged sitting may be important for improving individual-level and organisational-level motivation for change.

Title
Occupational skin disease in Victoria, Australia

Author/s
Cahill, Jennifer L et al

Source
Australasian journal of dermatology May 2016 57 2 108-114 7 5 1 DOI: 10.1186/s12889-016-2957-5

Abstract
Objectives To describe the characteristics of patients with occupational skin disease (OSD) in a tertiary referral clinic in Victoria, Australia.
Methods A retrospective review was conducted of records from patients seen at the Occupational Dermatology Clinic in Melbourne, Australia between 1 January 1993 and 31 December 2010. Results Of the 2894 people assessed in the clinic during the 18-year period, 44% were women and 56% were men. In all, 2177 (75%) were diagnosed with occupational skin disease (OSD). Of the patients with a work-related skin condition, 45% (n = 979) were considered to be atopic. The most common diagnosis in those with OSD was irritant contact dermatitis (ICD) (44%), followed by allergic contact dermatitis (33%) and endogenous eczema (11%). Women were significantly more likely to have soaps and detergents (P < 0.001) and water/wet work (P < 0.001) as causes of their ICD than men. Men were significantly more likely to have oils and coolants (P < 0.001) and solvent exposures (P < 0.001) as causes of their ICD. Occupational groups with the highest incidence of OSD were the hair and beauty professions (70 per 100 000), followed by machine and plant operators (38 per 100 000) and health-care workers (21 per 100 000).
Conclusion We confirm the importance of occupational contact dermatitis as the most common cause of OSD, with ICD being the most common diagnosis. There are differences in the causes of ICD between our group of male and female workers. For the first time in Australia, rates of OSD in certain industries have been calculated.
Factors associated with sickness certification of injured workers by general practitioners in Victoria, Australia

Ruseckaite, Rasa et al

BMC public health June 2016 16 1 1-10 10 3 DOI: 10.1186/s12889-016-2957-5

Abstract

Work-related injuries resulting in long-term sickness certification can have serious consequences for injured workers, their families, society, compensation schemes, employers and healthcare service providers. The aim of this study was to establish what factors potentially are associated with the type of sickness certification that General Practitioners (GPs) provide to injured workers following work-related injury in Victoria, Australia.

Methods: This was a retrospective population-based cohort study was conducted for compensation claims lodged by adults from 2003 to 2010. A logistic regression analysis was performed to assess the impact of various factors on the likelihood that an injured worker would receive an alternate/modified duty (ALT, n = 28,174) vs. Unfit for work (UFW, n = 91,726) certificate from their GP.

Results: A total of 119,900 claims were analysed. The majority of the injured workers were males, mostly age of 45-54 years. Nearly half of the workers (49.9%) with UFW and 36.9% with ALT certificates had musculoskeletal injuries. The multivariate regression analysis revealed that for most occupations older men (55-64 years) were less likely to receive an ALT certificate, (OR = 0.86, (95%CI, 0.81 - 0.91)). Workers suffering musculoskeletal injuries or occupational diseases were nearly twice or three times at higher odds of receiving an ALT certificate when compared to fractures. Being seen by a GP experienced with workers' compensation increased the odds of receiving ALT certificate (OR = 1.16, (95%CI, 1.11 - 1.20)). Occupation and industry types were also important factors determining the type of certificate issued to the injured worker.

Conclusions: This study suggests that specific groups of injured workers (i.e. older age, workers with mental health issues, in rural areas) are less likely to receive ALT certificates.

Trends in sickness certification of injured workers by general practitioners in Victoria, Australia

Ruseckaite, Rasa et al

Journal of occupational rehabilitation September 2014 24 3 525-532 8

Abstract

Background General practitioners (GPs) play a critical role in facilitating injured workers return to work via their ability to certify capacity to return to employment. However, little is known about the sickness certification patterns of GPs in the context of workers' compensation claims. Aim To determine if GPs' sickness certification behaviour has changed between 2003 and 2010 in Victoria, Australia.

Method Retrospective population-based cohort study of all injured workers with an accepted compensation claim. Sickness certification rates per 1,000 working population per annum were calculated. General regression models adjusted for workers' age and annual claim number were fitted to summarize changes in count and duration (expressed as incidence rate ratios or IRRs) of unfit for work (UFW) versus alternate duties (ALT) certificates within six categories of work-related injury and disease.

Results 92,134 UFW and 28,293 ALT certificates were identified. A significant decrease in the unadjusted annual certification rates per 1,000 working population was observed. However, after adjusting for the annual number of claims and age, the IRRs of certificates increased over time. The rate of injuries and IRRs of certificates varied across affliction categories, IRRs being higher in mental health conditions in women than in men (IRR: 0.40, 95 % CI 0.38-0.41 vs. IRR: 0.17, 95 % CI 0.16-0.18). The duration of certificates remained stable, with the ALT being longer than UFW certificates in all claimants.

Conclusion Our findings indicate that GPs in Victoria issue an increasing number of UFW certificates, with specific groups of injured workers (i.e. older age, workers with mental health issues, in rural areas) being less likely to receive ALT certificates.
sickness certificates each year. Further research is required to investigate the reasons for such practises.

Consensus report: recognizing non-melanoma skin cancer, including actinic keratosis, as an occupational disease - a call to action

Non-melanoma skin cancer (NMSC) is by far the most common cancer diagnosed in westernized countries, and one of the few almost preventable cancers if detected and treated early as up to 90% of NMSC may be attributed to excessive exposure to ultraviolet radiation. The incidence of NMSC is increasing: 2-3 million people are diagnosed worldwide annually, with an average yearly increase of 3-8% among white populations in Australia, Europe, the US and Canada over the last 30 years. The link between solar ultraviolet (UV) radiation and certain forms of NMSC is clearly recognized. It is estimated that outdoor workers are exposed to an UV radiation dose 2-3 times higher than indoor workers, and there is a growing body of research linking UV radiation exposure in outdoor workers to NMSC: Occupationally UV-exposed workers are at least at a 43% higher risk of basal cell carcinoma (BCC) and almost doubled risk of squamous cell carcinoma (SCC) compared to the average population, with risk increasing with decreasing latitude. The risk for BCC, SCC and actinic keratosis (AK) among workers who have worked outdoors for more than 5 years is 3-fold higher than the risk among those with no years of working outdoors. Primary prevention, early detection, treatment and regular follow-up of skin cancer (NMSC and melanoma) are shown to be beneficial from a health economic perspective. Action is needed at international, European and national level to legislate for recognizing AK and NMSC as an occupational disease, which has the potential to improve access to compensation and drive preventative activities. This report is a Call to Action for: The engagement of key stakeholders, including supranational institutions, national governments, trade organizations, employers, workers and patient organizations to drive change in prevention and protection of at-risk groups. Employers should be obliged to prevent outdoor worker's UV exposure from exceeding limit values, and to implement occupational skin cancer screening programmes among the at-risk workforce. Educational programmes for the outdoor workforce are needed to improve health literacy and drive behavioural change. Nationally, steps to improve notifications and surveillance of skin cancers through both occupational services and public health programmes are required. Future research activities should focus on the precise definition of at-risk groups among outdoor workers through increased data gathering, including UV-dosimetry, and evaluation.

Construction accident causality: an institutional analysis of heat illness incidents on site.

The behaviour-based approach has been widely used to develop interventions for construction accident prevention. The actual effects of such interventions, however, often do not meet expectation or have only a short-term effect. Recent studies look beyond the immediate accident circumstances to shed light on systemic factors that lead to accidents. The authors present an institutional analysis of construction accident causality through investigation of heat illness cases on construction sites. Heat illness is a special type of incident in which the individual is both the victim and, to a certain extent, the agent. Its consequence can be fatal, but its spread to uninvolved personnel is limited. Like other construction accidents, it affects individuals but cannot be effectively managed without addressing the risks embedded in the institutional environment of the system in which the individual is situated. This provides a simplified event for identifying institutional factors affecting construction accident causation at different systems levels in construction projects. The analysis is based on 216 individual construction workers’ cases from 29 construction projects.
sites, including 36 reported critical incidents of heat illness cases. These are triangulated with data from site observation, interviews with managers and field notes of stakeholders’ meetings. Institutional factors that contribute to proactive and reactive behavioural intervention of heat illness development are identified at eight levels of systems. The findings can be used in guiding accident investigation, developing effective interventions and identifying improvement opportunities for stakeholders at different levels of systems related to a construction project.

**Title**
Psychosocial safety climate, psychosocial and physical factors in the aetiology of musculoskeletal disorder symptoms and workplace injury compensation claims

**Author/s**
Bailey, Tessa S et al

**Source**

**Abstract**
Causal agents for workers’ compensation claims and physical injury have largely been identified as physical demands. We proposed an integrated theory of physical injury (i.e. musculoskeletal disorder symptoms [MSDs]) and workers’ compensation claims, which combined psychosocial and physical mechanisms. A random, population-based sample of 1095 Australian workers completed a telephone interview on two occasions 12 months apart. As expected, the physical mechanism was confirmed; physical demands were related to MSDs, which in turn predicted workers’ compensation claims. Further, a novel psychosocial mechanism was confirmed. Psychosocial safety climate (PSC; perceptions about the organisation's climate for psychological health) was a precursor to psychosocial risks (e.g. harassment, violence, bullying and work pressure). In turn, these psychosocial risks were related to emotional exhaustion, MSDs and then workers’ compensation claims. Evidence was therefore provided for psychosocial-physical processes explaining MSDs and workers' compensation for claims for physical injury. Occupational health and safety legislators and policy makers should be aware that, beyond physical demands, factors usually associated with risk for mental stress claims (e.g. harassment, bullying, and violence) may additionally manifest in physical health problems and workers’ compensation injury claims. Focusing on modifying the PSC in an organisation, “the cause of the causes”, may be an effective injury prevention and intervention strategy.

**Title**
Chronic respiratory conditions in a cohort of metropolitan fire-fighters: associations with occupational exposure and quality of life

**Author/s**
Schermer, Tjard et al

**Source**
*International archives of occupational & environmental health* November 2014 87 89 19-928 10 DOI: 10.1007/s00420-014-0935-8

**Abstract**
Objectives: To assess the prevalence of chronic respiratory conditions in metropolitan fire-fighters and to study associations between occupational exposure, use of respiratory protection and health-related quality of life (HRQoL) in fire-fighters with and without chronic respiratory conditions. Methods: Cross-sectional cohort analysis: Respiratory symptoms, medical conditions, occupational tasks and exposures and consistency of using respiratory protection were inquired by questionnaire. The SF12V2 Health Survey was used to measure physical (PCS-12) and mental (MCS-12) HRQoL. Fire-fighters were categorised in subgroups: asthma; COPD/emphysema/chronic bronchitis; no chronic respiratory conditions; and as being 'not involved' or 'involved' in fire-fighting tasks, the latter further categorised as 'consistent' or 'inconsistent' use of respiratory protection. PCS-12 and MCS-12 scores were compared between subgroups and categories using linear regression.

Results: Five hundred and seventy fire-fighters were analysed, 24 (4 %) fulfilled the criteria for asthma, 39 (7 %) for COPD/emphysema/chronic bronchitis. Fire-fighters with asthma were older than those in the other two subgroups and had been employed in the fire service longer. Respiratory subgroups did not differ in their involvement in fire-fighting tasks. Ninety-one percent of fire-fighters reported relevant occupational exposure in the past year. Mean PCS-12 scores for fire-fighters with no chronic respiratory conditions, asthma and COPD/emphysema/bronchitis were 52.0 (SD 6.9), 47.0 (8.5) and 48.1 (9.4). For PCS-12 (but not for MCS-12), interaction between having a chronic respiratory condition and inconsistent
use of respiratory protection during fire knockdown was observed (p < 0.001).

Conclusions: Ten percent of metropolitan fire-fighters reported underlying chronic respiratory conditions. Presence of such a condition in combination with suboptimal protection from inhaled exposures may lead to poorer physical HRQoL.
The epidemiology of noise exposure in the Australian workforce.

**Author/s** Williams, Warwick.

**Source** *Noise & health* September October 2013 15 66 326-331 6 DOI: 10.4103/1463-1741.116578

**Abstract** This work considers an alternate methodology for the estimation of the noise exposed population of the Australian workforce. Previous methods relied on the statistics from the annual rate of application for worker's hearing loss compensation claims, the generalization of small scale surveys to the broader population or larger scale telephone surveys. This proposed method takes measured noise exposure data from sampled industries and combines that with official demographic information on the numbers employed in the respective industries. From the Australian data, it is estimated that around 20.1% of the workforce regularly work in noise above the recommended exposure standard (L_{Aeq, 8 h} = 85 dB) and 9.4% above and exposure of 90 dB. These figures lie within the range of estimates derived from other methodologies.

**Title** Estimated prevalence of exposure to occupational carcinogens in Australia (2011-2012)

**Author/s** Carey, Renee N et al

**Source** *Occupational & environmental medicine* January 2014 71 1 55-62 8

**Abstract** Background and objectives: Although past studies of workplace exposures have contributed greatly to our understanding of carcinogens, significant knowledge gaps still exist with regard to the actual extent of exposure among current workers, with no routinely collected population-based data being available in most countries. This study, the Australian Work Exposures Study (AWES), aimed to investigate the current prevalence of occupational exposure to carcinogens.

Methods: A random sample of men and women aged between 18 and 65, who were currently in paid employment, were invited to participate in a telephone interview collecting information about their current job and various demographic factors. Interviews were conducted using a web-based application (OccIDEAS). OccIDEAS uses the expert exposure method in which participants are asked about their job tasks and predefined algorithms are used to automatically assign exposures. Responses were obtained from 5023 eligible Australian residents, resulting in an overall response rate of 53%.

Results: 1879 respondents (37.6%) were assessed as being exposed to at least one occupational carcinogen in their current job. Extrapolation of these figures to the Australian working population suggested 3.6 million (40.3%) current workers could be exposed to carcinogens in their workplace. Exposure prevalence was highest among farmers, drivers, miners and transport workers, as well as men and those residing in regional areas.

Conclusions: This study demonstrates a practical, web-based approach to collecting population information on occupational exposure to carcinogens and documents the high prevalence of current exposure to occupational carcinogens in the general population.

**Return to top**

**ABSENTEEISM AND PRESENTEEISM**

**Title** Time pressure, time autonomy, and sickness absenteeism in hospital employees: a longitudinal study on organizational absenteeism records

**Author/s** Kottwitz, MU et al

**Source** *Safety and health at work* 9 1 March 2018 109-114

**Abstract** Background Although work absenteeism is in the focus of occupational health, longitudinal studies on organizational absenteeism records in hospital work are lacking. This longitudinal study tests time pressure and lack of time autonomy to be related to higher sickness
absenteeism

Methods Data was collected for 180 employees (45% nurses) of a Swiss hospital at baseline and at follow-up after 1 year. Absent times (hours per month) were received from the human resources department of the hospital. One-year follow-up of organizational absenteeism records were regressed on self-reported job satisfaction, time pressure, and time autonomy (ie control) at baseline.

Results A multivariate regression showed significant prediction of absenteeism by time pressure at baseline and time autonomy, indicating that a stress process is involved in some sickness absenteeism behavior. Job satisfaction and the interaction of time pressure and time autonomy did not predict sickness absenteeism.

Conclusion Results confirmed time pressure and time autonomy as limiting factors in healthcare and a key target in work redesign.

Unhealthy lifestyle and sleep problems as risk factors for increased direct employers’ cost of short-term sickness absence

Kaqnerva, N et al

Scandinavian journal of work & environmental health 2018 44 2192-201 doi:10.5271/sjweh.3695

Objectives Unhealthy lifestyle (eg, smoking) as well as sleep problems are associated with increased risk of sickness absence, but the financial impact of these associations beyond risk ratios is not well known. We aimed to estimate the additive contribution of lifestyle and sleep problems (risk factors) to direct costs of short-term (<15 days) sickness absence.

Methods the Helsinki Health Study is a longitudinal cohort of employees of the City of Helsinki, Finland (N=8960, response rate 67%). During 2000–2002 the participants were mailed a survey questionnaire that gathered information on their lifestyle and sleep. A sum of the risk factors was calculated: participants received one point for being a smoker; high alcohol user (>7 servings/week for women and >14 servings/week for men); physically inactive [<14 metabolic equivalents (MET) hours/week]; having low fruit and vegetable consumption (<1 times/day); or suffering from frequent insomnia symptoms. Sickness absence, salary, and time of employment were followed through the employer’s register between 2002–2016. Individual salary data were used to calculate the direct costs of short-term sickness absence. Data were analyzed using a two-part model.

Results Direct costs of short-term sickness absences were on average €9057 (standard deviation €11 858) per employee over the follow-up. Those with ≥3 risk factors had €3266 [95% confidence interval (95% CI) €2114–4417] higher direct costs for the employer over the follow-up compared to those without any risk factors.

Conclusions Unhealthy lifestyle and sleep problems may increase the costs of short-term sickness absence to the employer by 10–30%. Consequently, programs addressing lifestyle and sleep may yield to significant savings.

Bringing successful aging theories to occupational practice: is selective optimization with compensation trainable?

Muller, A et al

Work, aging and retirement April 2018 4 2 161–174

Selective optimization with compensation (SOC) is regarded as a powerful action strategy to cope with age-related changes in resources. Occupational interventions based on SOC might therefore make an important contribution to successful aging at work. However, SOC interventions at work are scarce. Against this background we investigated (a) whether employees can be trained with SOC, (b) whether job characteristics (job autonomy, job
Weblink

Title
Early labor force exit subsequent to permanently impairing occupational injury or illness among workers 50-64 years of age

Author/s
Scott, K et al

Source
American journal of industrial medicine April 2018 61 4 317-325 https://doi.org/10.1002/ajim.22817

Abstract
Background Severity of workplace injury tends to increase with age. Whether older workers who experience a workplace injury or illness exit the labor force sooner than comparable peers is not established.
Methods A case-cohort study design and complementary log-log model were used to identify factors associated with average time to early substantial labor force exit among workers’ compensation claimants 50-64 years of age with permanent impairment from an occupational injury or illness. Analysis was based on Ontario’s workers’ compensation claimant data from 1998 to 2006 linked with Canadian tax files.
Results Workers with permanent impairment left the labor force earlier, on average, than peers without claims. Early retirement was associated with older age in the injury/illness year, greater impairment, lower pre-claim income, physically demanding jobs, and soft-tissue injuries.
Conclusions Policies aiming to extend older adults’ working lives should account for the potentially disparate impacts on older workers of occupational injury and illness.

Weblink

Title
The influence of successful aging at work upon simulated performance decisions

Author/s
Hanscom, ME Cleveland, JN

Source
Work, aging and retirement April 2018 4 2 129–144

Abstract
As the age of the workforce increases, it is important to understand how information other than job performance influences the performance evaluation process and outcomes. Performance information is used as a basis for multiple organizational decisions and as such, it is critical to understand how alternative age constructs influence these important work outcomes. Although much research has been conducted using chronological age, emerging age constructs such as successful aging at work have not been examined in relation to such decisions. Using three samples and 2 × 3 × 2 within subjects experimental vignette methodology, the present study examined the influence of successful aging at work (i.e., successful and not successful), the age-type of the job (i.e., whether the job is typically or stereotypically perceived to be an “older,” “younger,” or “age-neutral” type of job) and age related task-based performance patterns (i.e., pattern of behavior reflecting a stereotypically old or young employee) on ratings of performance-based outcomes (i.e., a composite of performance ratings, promotional and layoff decisions, recommendations for upgrade training, and organizational resource investments). Results showed that when decision makers perceived an employee as successfully aging at work, more positive ratings were given than when an employee was viewed as unsuccessfully aging at work. The age-type of the job and task performance patterns both interacted with successful aging at work to influence overall
performance ratings and other performance related decisions. Implications regarding successful aging at work and its role in providing performance-relevant information to decision makers are discussed.

Title Successful aging at work: empirical and methodological advancements
Author/s Zascher, H et al
Source Work, aging and retirement April 2018 4 2 April 2018 123–128
Abstract The workforce is aging in most developed and many developing countries, and there is a need to further extend and improve older employees’ working lives. Organizational scientists and practitioners, therefore, have become more and more interested in the topic of successful aging at work. Over the past few years, scholars have introduced theoretical frameworks that help distinguish successful from unsuccessful aging at work and that explain how workers can age successfully at work. To move research in this area forward, this special issue focuses on rigorous empirical contributions and methodological advancements. After introducing the topic and its theoretical background, we summarize the 6 empirical studies included in this special issue. A remarkable feature of this collection of articles is the diversity of topics related to successful aging at work addressed (e.g., motives, emotion regulation, action strategies, performance, and human resource practices) and research designs used (e.g., experimental vignette methodology, experience sampling, randomized controlled interventions, and mixed-method designs). We conclude this guest editorial by outlining implications for future research and organizational practice.

Title Successful motivational aging at work: antecedents and retirement-related outcomes
Author/s Beier, ME LoPilato, AC Kanfer, R
Source Work, aging and retirement April 2018 4 2 April 2018 213–224
Abstract The current study integrates ideas from the successful aging at work paradigm with theory and research on retirement motivation with a sample of midlife workers (N = 397; Mage = 52.34; SD = 5.87) over a 16 month period. We conceptualized successful motivational aging at work as a typology of successful, usual, and unsuccessful motivational aging and provide empirical support for the validity of this typology. Motivation to work was defined as retirement age and post-retirement work intentions. We found that promotion-focused trait orientation and person–job fit were predictive of successful aging classification and that work centrality and retirement-related attitudes were related to motivation to work outcomes. Successful aging at work classification, however, did not predict motivation to work outcomes, operationalized as intended retirement age and post-retirement work intentions. Our findings provide support for the dynamic process of motivational aging at work and provide evidence that trait and contextual variables can predict this process. Furthermore, we show that retirement decisions are complex and influenced by an array of work and nonwork attitudes.

Title Thriving, surviving and performing in late career: a mixed-method study of pathways to successful aging in organizations
Author/s Taneva, SK Arnold, J
Source Work, aging and retirement April 2018 4 2 April 2018 189–212
Abstract We develop and test a model of successful aging at work in 2 studies. The first identifies key human resource (HR) practices that late-career workers find valuable, and explores workers’ experiences of them. The second examines the role of those practices along with individual behavioral strategies in successful aging at work, as expressed by a sense of thriving and by 3 dimensions of job performance. We also introduce the new construct of surviving at work, contrasting with thriving. Study 1 reports qualitative data from interviews with 37 older workers (nearly all 55+) and 10 HR managers in the United Kingdom and Bulgarian healthcare and
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Return to top

ASBESTOS AND MESOTHELIOMA

Title

The epidemiology of malignant mesothelioma in women: gender differences and modalities of asbestos exposure

Author/s

Marinaccio, A et al

Source

Occupational & environmental medicine April 2018 75 4

Abstract

Introduction The epidemiology of gender differences for mesothelioma incidence has been rarely discussed in national case lists. In Italy an epidemiological surveillance system (ReNaM) is working by the means of a national register. Methods Incident malignant mesothelioma (MM) cases in the period 1993 to 2012 were retrieved from ReNaM. Gender ratio by age class, period of diagnosis, diagnostic certainty, morphology and modalities of asbestos exposure has been analysed using exact tests for proportion. Economic activity sectors, jobs and territorial distribution of mesothelioma cases in women have been described and discussed. To perform international comparative analyses, the gender ratio of mesothelioma deaths was calculated by country from the WHO database and the correlation with the mortality rates estimated. Results In the period of study a case list of 21 463 MMs has been registered and the modalities of asbestos exposure have been investigated for 16 458 (76.7%) of them. The gender ratio (F/M) was 0.38 and 0.70 (0.14 and 0.30 for occupationally exposed subjects only) for pleural and peritoneal cases respectively. Occupational exposures for female MM cases occurred in the chemical and plastic industry, and mainly in the non-asbestos textile sector. Gender ratio proved to be inversely correlated with mortality rate among countries. Conclusions The consistent proportion of mesothelioma cases in women in Italy is mainly due to the relevant role of non-occupational asbestos exposures and the historical presence of the female workforce in several industrial settings. Enhancing the awareness of mesothelioma aetiology in women could support the effectiveness of welfare system and prevention policies.

BULLYING

Title

Workplace bullying: a review of researchers’ findings and a forward-thinking approach for practitioners.

Author/s

Walker, Sean.

Source

Academy of business research journal 2017 1 43-51 9

Abstract

Workplace bullying is a topic that is ever-increasing in its popularity within management and organizational literature. Furthermore, the topic is also garnering a higher level of acceptance of managerial and organizational practitioners. In other words, it is no longer a phenomenon
that can be ignored. The following research serves two purposes: 1) to provide a summary of what researchers have found to date and 2) provide postulations for how management and organizations should move forward to combat the effects or occurrence of bullying.

**Title**
The international association for the study of pain definition of pain: as valid in 2018 as in 1979, but in need of regularly updated footnotes: commentary

**Author/s**
Treede, R-D

**Abstract**
PAIN Reports 2018 634 Commentary on: Cohen M, Quintner J, van Rysewyk S. Reconsidering the IASP definition of pain.

**Source**
Pain reports March/April 2018 3 2 e643 doi: 10.1097/PR9.0000000000000643

**Title**
Pain as a risk factor for common mental disorders. results from the Netherlands mental health survey and incidence study-2: a longitudinal, population-based study

**Author/s**
De Heer, EW et al

**Source**
Pain April 2018 159 4 712–718 doi: 10.1097/j.pain.0000000000001133

**Abstract**
Pain might be an important risk factor for common mental disorders. Insight into the longitudinal association between pain and common mental disorders in the general adult population could help improve prevention and treatment strategies. Data were used from the first 2 waves of the Netherlands Mental Health Survey and Incidence Study-2, a psychiatric epidemiological cohort study among the Dutch general population aged 18 to 64 years at baseline (N = 5303). Persons without a mental disorder 12 month before baseline were selected as the at-risk group (n = 4974 for any mood disorder; n = 4979 for any anxiety disorder; and n = 5073 for any substance use disorder). Pain severity and interference due to pain in the past month were measured at baseline using the Short Form Health Survey. DSM-IV mental disorders were assessed at both waves using the Composite International Diagnostic Interview version 3.0. Moderate to very severe pain was associated with a higher risk of mood (odds ratio [OR] = 2.10, 95% confidence interval [CI] = 1.33-3.29) or anxiety disorders (OR = 2.12, 95% CI = 1.27-3.55). Moderate to very severe interference due to pain was also associated with a higher risk of mood (OR = 2.14, 95% CI = 1.30-3.54) or anxiety disorders (OR = 1.92, 95% CI = 1.05-3.52). Pain was not significantly associated with substance use disorders. No interaction effects were found between pain severity or interference due to pain and a previous history of mental disorders. Moderate to severe pain and interference due to pain are strong risk factors for first-incident or recurrent mood and anxiety disorders, independent of other mental disorders. Pain management programs could therefore possibly also serve as a preventative program for mental disorders.

**Title**
Youth labour force absence and chronic health conditions in Australia
Abstract

Background: Among older workers, chronic disease is known to be a key reason for early retirement.

Aims: To determine whether chronic health conditions act as a barrier to young Australians (aged 15–29) participating in the labour force.

Methods: Multiple logistic regression analysis to assess the adjusted odds ratio of people with different chronic health conditions being out of the labour force compared to those with no chronic conditions. Negative binomial regression models to predict the number of years people with different chronic health conditions would remain out of the labour force for.

Results: Of the 550,000 people aged 15–29 who were not in the labour force, 20% cited ill-health as the reason, reducing Australia’s gross domestic product by around $3.7 billion per annum. When adjusted for age and education attainment, males with mental and behavioural disorders had 5.95 times the odds (95% confidence interval [CI] 3.90–9.08) of being out of the labour force, and females with development/intellectual disorders had 2.90 times the odds (95% CI 1.47–2.51), compared to those with no chronic health conditions. Males and females with development/intellectual disorders who were out of the labour force were estimated to spend an additional 2.7 and 3.5 years out of the labour force over the next 5 years.

Conclusions: Prevention of chronic health conditions may help more younger Australians participate in the labour force, reducing the known long-term health and social problems associated with labour force absence.

Title

Employment status and changes in working career in relation to asthma: a cross-sectional survey

Abstract

Background: Asthmatics confront inconveniences in working life that make it more difficult to pursue a sustainable career, such as unemployment and work disability. Ways of dealing with these inconveniences may be career changes. More needs to be known about the backgrounds and consequences of career changes among asthmatics, especially their relation to asthma or a change in asthma symptoms. The aim of this study was to compare earlier career changes of adults with asthma who are working full time to those who have drifted away from active working life because of work disability, unemployment or early retirement. The frequency of having changed tasks, work place or occupation, whether the changes had been driven by asthma and furthermore, whether the change had affected their asthma symptoms were investigated.

Methods: In this population-based survey study, all patients with reimbursement rights for asthma aged 20–65 years in the city of Tampere (total population 190,000), Finland (n = 2613) were recruited. The questionnaire was sent in October 2000 and the response rate was 79%. The questionnaire included questions e.g. on changing tasks, work place and occupation, whether these changes were driven by asthma or associated with change of asthma symptoms. The respondents were divided into four groups: working full-time, work disability, unemployed and retired due to age. We applied ANOVA with Dunnet's post-test (variances were not equal between the groups) for a continued variable age and Chi-squared tests for categorical variables. Logistic regression models were built using unemployment vs. full-time work or work disability vs. full-time work as an outcome variable. A p-value of <.05 was considered statistically significant.

Results: Adults with asthma working full time had more often made changes in their career, but not as often driven by asthma as those with current work disability. The reason for changing work place compared to full-time workers (24.9%) was more often mainly or partly due to asthma among those with work disability (47.9%, p < 0.001) and the unemployed (43.3%, p = 0.006). Of those who made career changes because of asthma, a major proportion (over 67%) reported relief in asthma symptoms. Changing tasks (OR 5.8, 95% CI 1.9–18.0, for unemployment vs. full-time work), work place (OR 2.8, 95% CI 1.1–7.0, for work disability vs. full-time work and OR 2.6, 95% CI 1.3–5.4, for unemployment vs. full-time work) or occupation (OR 2.7, 95% CI 1.2–6.0, for unemployment vs. full-time work) mainly because of asthma was associated with an elevated risk for undesirable employment status even after
adjusting for age, gender, smoking and professional status. Conclusions: Career changes that were made mainly because of asthma were associated with undesirable employment status in this study. However, asthma symptoms were relieved after career changes especially among those who reported asthma to be the reason for the change. In addition to proper treatment and counselling of asthma patients towards applicable area of work or study, it may be beneficial to support early career changes in maintaining sustainable working careers among adults with asthma.

Title From acute to persistent low back pain: a longitudinal investigation of somatosensory changes using quantitative sensory testing—an exploratory study
Author/s Marcuzzi, A et al
Source *Pain reports* March/April 2018 3 2 e641 doi: 10.1097/PR9.0000000000000641
Abstract
Introduction: Chronic low back pain (LBP) is commonly associated with generalised pain hypersensitivity. It is suggested that such somatosensory alterations are important determinants for the transition to persistent pain from an acute episode of LBP. Although cross-sectional research investigating somatosensory function in the acute stage is developing, no longitudinal studies designed to evaluate temporal changes have been published.
Objectives: This exploratory study aimed to investigate the temporal development of somatosensory changes from the acute stage of LBP to up to 4 months from onset.
Methods: Twenty-five people with acute LBP (<3 weeks’ duration) and 48 pain-free controls were prospectively assessed at baseline using quantitative sensory testing with the assessor blinded to group allocation, and again at 2 and 4 months. Psychological variables were concurrently assessed. People with acute LBP were classified based on their average pain severity over the previous week at 4 months as recovered (≤1/10 numeric rating scale) or persistent (≥2/10 numeric rating scale) LBP.
Results: In the persistent LBP group, (1) there was a significant decrease in pressure pain threshold between 2 and 4 months (P < 0.013), and at 4 months, pressure pain threshold was significantly different from the recovered LBP group (P < 0.001); (2) a trend towards increased temporal summation was found at 2 months and 4 months, at which point it exceeded 2 SDs beyond the pain-free control reference value. Pain-related psychological variables were significantly higher in those with persistent LBP compared with the recovered LBP group at all time points (P < 0.05).
Conclusion: Changes in mechanical pain sensitivity occurring in the subacute stage warrant further longitudinal evaluation to better understand the role of somatosensory changes in the development of persistent LBP. Pain-related cognitions at baseline distinguished persistent from the recovered LBP groups, emphasizing the importance of concurrent evaluation of psychological contributors in acute LBP.

Title Psychological adjustment to chronic disease and rehabilitation – an exploration
Author/s Dekker, J de Groot, V
Source *Disability and rehabilitation* 2018 40 1 116-120
[https://doi.org/10.1080/09638288.2016.1247469](https://doi.org/10.1080/09638288.2016.1247469)
Abstract
Purpose: Psychological adjustment has a major impact on chronic disease health outcomes. However, the classification of psychological adjustment is unclear in the current version of the International Classification of Functioning, Disability and Health (ICF). We aim (i) to characterize the process of psychological adjustment to chronic disease, and (ii) to analyze how various categories of the psychological adjustment process could be incorporated into the ICF.
Method: We provide a summary of models of psychological adjustment to chronic disease. We also evaluate various options for incorporating categories of psychological adjustment into
the ICF.

Results: Acute and ongoing illness stressors; emotional, cognitive and behavioral responses; personal background; and social and environmental background are major categories in the adjustment process. These categories could, in principle, be integrated with various components of the ICF. Any future revision of the ICF should explicitly incorporate psychological adjustment and its (sub)categories.

Conclusion: The ICF could incorporate categories of psychological adjustment to chronic disease, although several adaptations and clarifications will be required. Implications for Rehabilitation

In the context of an ageing society and large numbers of people living with chronic diseases, it is essential to understand psychological adjustment to chronic disease. However, the classification of psychological adjustment to chronic disease is unclear in the current version of the International Classification of Functioning, Disability and Health (ICF). We demonstrate that the ICF could incorporate categories of psychological adjustment to chronic disease, although several adaptations and clarifications would first be required. We suggest that these adaptations and clarifications should be considered in any future revision of the ICF.

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**Weblink**

**Title** Healthnavigator: a mobile application for chronic disease screening and linkage to services at an urban primary health network

**Author/s** Seneviratne, M Hersch, F Peiris, DP

**Source** *Australian journal of primary health* 24 2 116-122 [https://doi.org/10.1071/PY17070](https://doi.org/10.1071/PY17070)

**Abstract** Mobile applications (apps) are promising tools to support chronic disease screening and linkage to health services. They have the potential to increase healthcare access for vulnerable populations. The HealthNavigator app was developed to provide chronic disease risk assessments, linkage to local general practitioners (GPs) and lifestyle programs, and a personalised health report for discussion with a GP. Assessments were either self-administered or facilitated by community health workers through a Primary Health Network (PHN) initiative targeting ethnically diverse communities. In total, 1492 assessments (80.4% self-administered, 19.6% facilitated) were conducted over a 12-month period in Queensland, Australia. Of these, 26% of people screened came from postcodes representing the lowest quartile of socioeconomic disadvantage. When compared against self-administered assessments, subjects screened by the facilitated program were more likely to be born outside Australia (80.5 v. 33.2%, \( P < 0.001 \)), and to fall within a high-risk category based on cardiovascular risk scores (19.8 v. 13.7%, \( P < 0.01 \)) and type 2 diabetes mellitus risk scores (58.0 v. 40.1%, \( P < 0.001 \)). Mobile apps embedded into PHN programs may be a useful adjunct for the implementation of community screening programs. Further research is needed to determine their effect on health service access and health outcomes.

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**Title** Is sleep disturbance in patients with chronic pain affected by physical exercise or ACT-based stress management? – a randomized controlled study

**Author/s** Wiklund, T et al

**Source** *BMC musculoskeletal disorders* [https://doi.org/10.1186/s12891-018-2020-z](https://doi.org/10.1186/s12891-018-2020-z)

**Abstract** Background Most people suffering chronic pain are plagued by sleeping difficulties. Cognitive behaviour therapy has produced promising results for insomnia comorbid with chronic pain, but the access to such treatment is often limited. Over the last ten years, interventions aiming to increase cognitive flexibility and physical activity have been assumed to be effective treatments for a variety of conditions, including insomnia and chronic pain. If proven effective, these treatments could constitute the first steps in a stepped care model for chronic pain and insomnia

Methods Two hundred ninety-nine chronic pain subjects were randomized to Exercise, ACT-based stress management (ACT-bsm), or an active control group. Two hundred thirty-two participants (78%) received their allocated intervention at least to some extent. These participants were evaluated using mixed model analyses for changes in sleep (Insomnia
Severity Index, ISI), pain intensity, depression, and anxiety immediately after treatment, six months and twelve months after treatment

Results The mixed model analyses revealed that Exercise had a positive effect on insomnia compared with the control group and the effect remained after 12 months. No clear effect (i.e., both for completers and for completers together with treatment non-completers) upon ISI was found for the ACT-bsm. Pain intensity decreased significantly both in the exercise group and in the control group. For the two psychological variables (i.e., symptoms of anxiety and depression) were found significant improvements over time but no group differences. The treatment effects for ISI and pain intensity did not reach clinical significance per definitions presented in other relevant studies

Conclusions Beneficial significant effects on insomnia was confirmed in the exercise condition. However, these changes were probably not clinically important. For pain intensity a general decrease was found in the Exercise condition and in the control condition, while no change occurred in ACT-bsm. No group differences were found for the two psychological variables.

Postural awareness and its relation to pain: validation of an innovative instrument measuring awareness of body posture in patients with chronic pain

Background: Habitual postural patterns are associated with musculoskeletal pain, and improving a maladaptive posture requires postural awareness in order to lead to clinical improvements. This study aimed to develop and evaluate the psychometric properties of an innovative postural awareness scale.

Methods: A 12-item Postural Awareness Scale (PAS) was developed and administered to 512 chronic pain patients (50.3 ± 11.4 years, 91.6% female, 37.1% spinal/shoulder pain) to assess its factor structure and reliability. To determine convergent validity, measures of body awareness, body responsiveness, body image, and mindfulness were correlated with the PAS, as were clinical measures of pain intensity, disability, and mental health. Sensitivity to change was assessed in 202 outpatients participating in a 10-week multimodal mind-body program.

Results: Factor analysis revealed two factors (Ease/Familiarity with Postural Awareness and Need for Attention Regulation with Postural Awareness) that explained 50.8% of the variance. Cronbach's alpha for the complete scale was 0.80; Spearman-Brown coefficient of split-half reliability was 0.67; and intra-class correlation was ICC2,1 = 0.75 (95% confidence interval = 0.71, 0.78). Significant positive correlations were found for body awareness (r = 0.23), body responsiveness (r = 0.41), body image (r = 0.22-0.32), and mindfulness (r = 0.38); negative correlations for pain intensity (r = -0.14), disability (r = -0.12), depression (r = -0.23), and stress (r = -0.29). Postural awareness scores increased with a mind-body program (p < 0.001); changes in the PAS were negatively correlated with changes in pain intensity (r = -0.35) in patients with spinal/shoulder pain.

Conclusion: Self-reported postural awareness is associated with clinical symptoms in chronic pain patients; improvements in postural awareness are longitudinally associated with reduced pain in patients with spinal/shoulder pain.

The relationship between negative metacognitive thoughts, pain catastrophizing and adjustment to chronic pain

Author/s  Ziadni, MS Stugeon, J A Darnall, BD

Source  European journal of pain April 2018 22 4 756-762 DOI: 10.1002/ejp.1160
Abstract

Background Cognitive appraisals, most notably pain catastrophizing, play an important role in chronic pain. The role of metacognition and its impact on the relationship between pain catastrophizing and health are understudied. The identification of metacognition as a moderator of psychological constructs may have clinical and empirical implications. We hypothesized that negative metacognitive beliefs would moderate the relationships between pain catastrophizing and emotional functioning and physical activity.

Method Participants (N = 211) with mixed aetiology chronic pain were primarily Caucasian females with severe average pain intensity. Over the course of 2 weeks, participants completed online daily-diary measures of pain catastrophizing, pain intensity, mood, physical activity and metacognition. Results Participants with higher average levels of daily pain intensity and negative metacognitive beliefs about worry reported higher levels of daily pain catastrophizing, as well as daily depression, and anxiety. Some aspects of metacognitive beliefs (i.e. dangerousness and uncontrollability of thoughts) were also negatively associated with average daily levels of positive affect. However, these effects were not interactive; metacognitive beliefs did not moderate the relationships of pain catastrophizing with other daily variables.

Conclusions From a daily coping perspective, findings reveal that people with stronger negative metacognitive beliefs report greater emotional distress on a day-to-day basis. However, negative metacognitive beliefs did not appear to modify the effects of pain catastrophizing on psychological and physical functioning at the daily level, suggesting that metacognitive beliefs may be better conceptualized as a more parallel indicator of emotional maladjustment to chronic pain whose effects do not reliably manifest in daily measurement models.

Significance Findings highlight the need to better characterize the value of metacognitive beliefs as an important predictor and therapeutic target. Despite limited evidence of a dynamic relationship between metacognition and daily adjustment to chronic pain, results emphasize the potential importance of interventions that target cognitive appraisal process beyond catastrophizing, including uncontrollability and danger-laden thought patterns.

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findings present information on the similarities and differences that individuals with various physical disabilities face when working.

Title: Community conversations on integrated employment: examining individualization, influential factors, and impact
Author/s: Bumble, Jennifer L

Abstract: Although “community conversations” are a promising approach to address employment outcomes for young people with intellectual and developmental disabilities (IDDs), little research has addressed how these events are tailored to address the unique needs, assets, and resources of communities. Through in-depth interviews, organizers from seven diverse communities addressed their motivations for involvement, their pathways of personalization, and the factors contributing to the success of the events. Collectively, attendees generated more than 2,000 strategies to expand integrated employment locally, falling across six primary areas. Attendees considered these events to be a good investment of their time; however, they reported that additional action, education, and partnerships were needed in their communities. Following the events, attendees reported taking a variety of follow-up actions including sharing information, developing new relationships, talking with neighbors, and educating employers. We offer implications for policy, practice, and research aimed at expanding integrated employment for young people with disabilities.

Title: Defining customized employment as an evidence-based practice: the results of a focus group study
Author/s: Inge, K J Wehman, P
Source: *Journal of vocational rehabilitation* 48 2 155-166, 2018 DOI: 10.3233/JVR-180928

Abstract: Background: Customized employment has generated support at the national, state, and individual participant levels to expand employment for people with significant disabilities. The next step is movement from practitioner-based descriptions to evidenced-based practices that can be consistently replicated. Objective: The objective of this qualitative research study was to begin the development of a research-based description that agencies can use to replicate customized employment when supporting individuals with significant disabilities. Methods: Twenty-eight professionals representing national experts and implementers of customized employment participated in five phone-administered focus groups. The calls were recorded, transcribed, and analyzed to identify themes associated with customized employment implementation. RESULTS: Twelve key components or practices emerged as comprising customized employment. Conclusion: This research provides insight into the practices that are associated with customized employment that facilitate integrated employment outcomes for individuals with disabilities. Additional research is needed including random control trial studies to further the development of a replicable set of evidence-based practices.

Title: Educational differences in years of working life lost due to disability retirement
Author/s: Laaksonen, M.et al

Abstract: Background To assess the contribution of disability retirement on lost working years, we calculated the length of time spent on disability pension in various diagnostic groups by the
level of education over the past 10 years, during which time the incidence of disability retirement has sharply decreased in Finland.

Methods The expectancy for time on disability pension due to mental disorders, musculoskeletal diseases, cardiovascular diseases and other diseases at age groups 25–63 was calculated using the Sullivan method based on nationwide register data for 2005–2014. The effect of the rise in overall education levels was estimated using counterfactual analysis.

Results Time spent on disability pension differed widely between educational groups. People in lower educational groups spent more time on disability pension due to all diagnoses and musculoskeletal diseases in particular. Time spent on disability pension decreased in all educational groups over time. In 2014, primary educated men were expected to spend 2.67 years on disability pension, compared to 0.57 years for higher tertiary educated men. The figures for women were closely similar. Educational differences in time spent on disability pension due to somatic diseases decreased over time, whereas the opposite was true for mental disorders. The reduced amount of time spent on disability pension was explained in part by the rise in overall education levels.

Conclusions Time spent on disability pension due to somatic conditions has decreased in all educational groups. Educational differences in time spent on disability pension are increasingly attributable to mental disorders.

Title Discussion group networks in occupational medicine: a tool for continuing education to promote the integration of workers with disabilities

Author/s Rinsky-Halivni, L Lerman, Y

Source American journal of industrial medicine April 2018 61 6 344-350 DOI: 10.1002/ajim.22818

Abstract Background Despite their legal rights, individuals with disabilities face numerous obstacles to integration in the workplace which can result in their discharge from the labor force. Currently occupational physicians have few resources to help decide whether to integrate disabled workers in pre-placement, or in cases of return-to-work.

Methods A network of 13 discussion groups comprised of the occupational physicians of each regional clinic of a large Health Maintenance Organization (HMO) in Israel was created to deal with disability management dilemmas. A moderator compiles and shares the physicians’ opinions and experiences with all network members thus assisting the consulting physician in decision-making.

Results Successful management of three representative cases is described to illustrate real-life implementations of this network.

Conclusion The network enables both the consulting and other physicians to tap a large knowledge base and decision-making experience concerning cases of occupational disability management, contributing to professional development and improved service delivery.

EMLOYMENT AND UNEMPLOYMENT

Title Period effects in the risk of subsequent labour market marginalization in young suicide attempters

Author/s Niederkrotethaler, T et al

Source European journal of public health April 2018 28 2 Pages 258–263 DOI: 10.1093/eurpub/ckx140

Abstract Background Unemployment and alcohol use have often been found to correlate and to act as risk factors for each other. However, only few studies have examined these associations at longitudinal settings extending over several life phases. Moreover, previous studies have
mostly used total consumption or medical diagnoses as the indicator, whereas subclinical measures of harmful alcohol use, such as heavy episodic drinking (HED), have been used rarely. The aim of this study was to examine the associations between HED and unemployment from adolescence to midlife in two Nordic countries.

Methods Participants of separate cohort studies from Sweden and Finland were recruited at age 16 in 1981/1983 and followed up at ages 21/22, 30/32 and 43/42, (n = 1080/2194), respectively. Cross-lagged autoregressive models were used to determine associations between HED and unemployment.

Results In the Swedish cohort, HED at ages 16 and 30 in men and HED at age 21 in women were associated with subsequent unemployment. In the Finnish cohort, we found corresponding associations at age 16 in women and at age 22 in men. However, the gender differences were not statistically significant. The associations from unemployment to HED were non-significant in both genders, in both cohorts and at all ages.

Conclusions Our results suggest that heavy drinkers are more likely to experience unemployment in subsequent years. The associations from HED to unemployment seem to exist through the life course from adolescence to midlife. More emphasis should be put on reducing alcohol related harms in order to improve labour-market outcomes.

Title A taxonomic foundation for evidence-based research on employee performance management
Author/s Posthuma, Richard A et al
Source European journal of work & organizational psychology April 2018 27 2 168-187
Abstract This study presents a taxonomic foundation for research on employee performance management practices based on a comprehensive review of the literature (198 articles and book chapters). The taxonomy consists of 50 practices organized within seven topic categories, including an evaluation of the amount of research evidence supporting each practice. This taxonomic foundation facilitates the aggregation, integration, interpretation, and explanation of performance management research based on a role-theoretic perspective derived from the behavioural approach to strategic human resource management. The proposed direct-linkage path model shows how this taxonomic foundation ties performance management practices to behaviours and results. We build on this Practice - Behaviour - Results (PBR) critical path model with moderators and mediators based on cognitive and social factors identified in the extensive previous research. This PBR model provides a foundation for orderly and structured growth for future research that will enhance the connection between research and improved organizational practices in performance management, as well as a guide to best practices in performance management.

Title Teaming up with temps: the impact of temporary workers on team social networks and effectiveness.
Author/s Wilkin, Christa L.; de Jong, Jeroen P.; Rubino, Cristina
Source European journal of work & organizational psychology April 2018 27 2 204-218
https://doi.org/10.1080/1359432X.2017.1418329
Abstract
Temporary workers offer immediate benefits to the bottom line; yet, it is unclear how incorporating temporary workers into teams affects how they function. We apply social identity theory to propose that temporary workers significantly reduce individual- and team-level networks and team effectiveness but that commitment to the leader and intergroup competition can help temporary and permanent employees work together more effectively. Using a sample of employees nested in teams (Study 1, \(n\) = 312), we found that status differences affected member interactions resulting in sparser advice and friendship networks for temporary workers compared to their permanent counterparts. At the team level (Study 2, \(n\) = 58), these team member differences or contract diversity impacted team functioning through advice networks, such that, teams with greater contract diversity had sparser networks and were less effective. Further, commitment to the leader was found to moderate the negative impact of contract diversity on advice and friendship network density. With the increasing use of temporary worker and the prevalent use of teams, these findings have broader implications for HR functions and present possible avenues to mitigate the negative consequences of temporary workers.

Weblink

Return to top

ERGONOMICS

Title
Participatory ergonomics: evidence and implementation lessons

Author/s
Burgess-Limerick, Robin

Source
Applied ergonomics April 2018 68 289-293. DOI: 10.1016/j.apergo.2017.12.009

Abstract
Participatory ergonomics programs have been proposed as the most effective means of eliminating, or redesigning, manual tasks with the aim of reducing the incidence of occupational musculoskeletal disorders. This review assesses the evidentiary basis for this claim; describes the range of approaches which have been taken under the banner of participatory ergonomics in diverse industries; and collates the lessons learned about the implementation of such programs.

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Title
User systems architectures - two studies in design and assessment

Author/s
Tainsh, Michael

Source
Applied ergonomics Apr 2018 68 61-71. DOI: 10.1016/j.apergo.2017.10.012

Abstract
The concept of User System Architectures (USA) is introduced as part of the overall systems architecture. A USA is defined as a set of ergonomics information and knowledge assembled to represent system structure and content. It is described in the context of the system development lifecycle. The characteristics associated with a USA are outlined. These include layers of description, viewpoints, coherency and traceability. The concept of coherency between layers and the techniques for tracing the design characteristics back to the requirements (i.e. traceability) are discussed with their implications for ergonomics. Two studies (one design and one assessment) are used to demonstrate the use of USA techniques. The benefits, shortfalls and costs of using the USA technique are outlined for each case, and in a more general range of applications. The validity and reliability of the representations are discussed.

Weblink
Participatory ergonomics: evidence and implementation lessons.

Burgess-Limerick, Robin

Applied ergonomics April 2018 68 289-293 5 DOI: 10.1016/j.apergo.2017.12.009

Participatory ergonomics programs have been proposed as the most effective means of eliminating, or redesigning, manual tasks with the aim of reducing the incidence of occupational musculoskeletal disorders. This review assesses the evidentiary basis for this claim; describes the range of approaches which have been taken under the banner of participatory ergonomics in diverse industries; and collates the lessons learned about the implementation of such programs.

The effects of breaks on low back pain, discomfort, and work productivity in office workers: a systematic review of randomized and non-randomized controlled trials

Waongenngarm, Pooriput; Areerak, Kantheera; Janwantanakul, Prawit.


The purpose of this study was to evaluate the effectiveness of breaks on low back pain, discomfort, and work productivity in office workers. Publications were systematically searched in several databases from 1980 to December 2016. Relevant randomized and non-randomized controlled trials were retrieved and assessed for methodological quality by two independent reviewers. Quality of evidence was assessed and rated according to GRADE guidelines. Eight randomized controlled trials and three non-randomized controlled trials were included in this review, of which 10 were rated as high-quality studies. The break programs were highly heterogeneous with work duration ranging from 5 min to 2 h and break duration ranging from 20 s to 30 min. The results showed low-quality evidence for the conflicting effect of breaks on pain and low-quality evidence for the positive effect of breaks on discomfort. When stratified by type of breaks, moderate-quality evidence was found for the positive effect of active breaks with postural change for pain and discomfort. Moderate-quality evidence indicated that the use of breaks had no detrimental effect on work productivity. More high-quality studies are needed before recommendations can be given. Within a number of methodological limitations that are present in the published studies, active breaks with postural change may be effective in reducing pain in workers with acute low back pain and to prevent discomfort in healthy subjects.

Ergonomic interventions and prevention – a need for better understanding of implementation: editorial

Takala, E-P


The essential aim of occupational safety and health is to protect workers against negative consequences of work. The logic of prevention is based on the following assumption: If you can identify risk factors having causal association with a disease, and then remove or reduce these factors, the occurrence of the disease should decrease. Because interventions for the reduction of risk factors require resources and can sometimes be harmful, we are able to acquire empirical proof of the benefits of actions in the era of evidence-based medicine. The results of individual trials vary and therefore systematic reviews achieve the best evidence. In this issue, Stock et al (1) review the effects of commonly recommended organization interventions against work-related musculoskeletal disorders. In their selection of studies, they have followed the generally accepted standard of excluding studies with potential high bias. The reports selected for analysis included two studies of high and nine of medium quality; ie, eleven studies with estimated low or medium risk of bias. The results showed moderate
evidence of the effectiveness of supplementary rest breaks investigated in four studies. The other interventions included did not show similar benefits and the authors state, eg, that “… participatory ergonomic (PE) interventions are not more effective than work activity as usual …” in reducing the outcome measures of musculoskeletal disorders.

**Title**
Posture and discomfort assessment in computer users while using touch screen device as compared with mouse-keyboard and touch pad-keyboard

**Author/s**
Kargar, N et al

**Source**
*Work*, 59 3 341-349 2018 DOI: 10.3233/WOR-182685

**Abstract**
Background: Touch screen computers require significant arm and hand movements. This can result to body discomfort and biomechanical load in users. OBJECTIVES: This study was carried out to examine posture and users’ discomfort while using touch screen device as compared with mouse-keyboard and touch pad-keyboard.

Methods: Twenty-three (23) students participated in this experimental study. The subjects completed pre-defined tasks in three 15min trials by means of touch screen, touch pad-keyboard and mouse-keyboard as input devices. Postural angles were measured by Qualisys motion capture system. Body discomfort was assessed by a 10-cm visual analog scale. Rating scale was employed to assess the perception of subjects on the posture of body parts while utilizing the three devices.

Results: There was no significant difference in head inclination when using the three types of devices. Nevertheless, the mean of neck (p=0.005) and trunk (p<0.0001) inclinations as well as arm angle (p<0.0001) while using touch screen, differed significantly from the two other devices and were more deviated from neutral posture. The type of input device was found to have significant effect on the right shoulder (p =0.017), right elbow (p=0.031), right wrist/hand (p=0.004) and whole-body discomfort (p=0.026). Touch screen caused more discomfort in the mentioned regions when compared to the other two devices. Friedman test showed that differences of mean ratings for perceived shoulder and elbow postures in the 3 trials were significant (p=0.005 and p=0.011, respectively). Touch screen was the most unfavorable input device based on the subjects’ judgment. Conclusion: Touch screen caused more deviated postural angles, increased body discomfort and unfavorable postures.

**Title**
Recent developments in work–life balance in Finland

**Author/s**
Pontinen, L

**Source**
Eurofound February 2018

**Abstract**
The European Quality of Life Survey (EQLS), carried out by Eurofound every four years, explores a variety of aspects related to living standards, health, family and work–life balance, as well as people’s happiness levels, satisfaction with their lives, and their perceptions regarding the quality of their society. The latest survey results for Finland paint a generally positive picture of the country in 2016, just a year before the country’s 100th anniversary of its independence. Finland came out on top of the 28 EU Member States on several indicators: happiness, optimism about children’s future and the quality of education, to mention just a few. This no doubt reflects the fact that the economic and social development of Finland during the 20th century has led to an exceptionally high quality of life in this Nordic country – a cause for celebrations, indeed. However, the EQLS 2016 results regarding work–life balance reveal that combining life and work in Finland today is proving quite challenging – and the findings are especially worrying for women and people in the lowest income quartile.
Improving the public health impact of eHealth and mHealth interventions

With more than three billion internet users worldwide, it is hard to overstate the potential benefits for public health of electronic and mobile technologies. These technologies offer the opportunity to deliver tailored interventions to the population with high fidelity at low cost, and can provide a means of addressing health inequities by enabling the delivery of sophisticated public health services to communities that find traditional forms of healthcare inaccessible.

Harnessing electronic health (eHealth) and mobile health (mHealth) technologies to advance public health, however, has proven challenging.

Connections between unemployment insurance, poverty and health: a systematic review

Background: Since the global economic crisis in 2007, unemployment rates have escalated in most European and North American countries. Unemployment protection policies, particularly the unemployment insurance (UI) system, have become a weighty issue for many modern welfare states. Decades of research have established concrete findings on the adverse impacts of unemployment on poverty- and health-related outcomes. This provided a foundation for further exploration into the potential protective effects of UI in offsetting these adverse outcomes.

Methods: We developed a systematic review protocol in four stages (literature search, study selection, data extraction and quality appraisal) to ensure a rigorous data collection and inter-rated reliability. We examined the full body of empirical research published between 2000 and 2013 on the pathways by which UI impacts poverty and health.

Results: Out of 2233 primary studies identified, a total of 12 met our inclusion criteria. The selected studies assessed poverty-related outcomes (absolute/relative poverty and material hardship) or one or more health-related outcomes (health behaviors, self-rated health, well-being and mental health). Across various UI systems, jurisdictions from high income countries, and study designs, we found good support for our conceptual framework, by which UI attenuates the effect of unemployment on both poverty and health, with a few exceptions.

Conclusion: Whether UI impacts differ by age and region might be explored further in future research. The complex mediating relationship between unemployment, UI, poverty and health should further be assessed in light of economic and historical contexts. This could inform decision-making processes during future periods of economic recession.

Well-being through learning: a systematic review of learning interventions in the workplace and their impact on well-being

The view that learning is central to well-being is widely held and the workplace is an important setting in which learning takes place. Evaluations of the effectiveness of well-being interventions in work settings are commonplace, but to date, there has been no systematic review of the effectiveness of learning interventions with regard to their impact on well-being. The review synthesizes evidence from 41 intervention studies, and although no studies report a negative impact on well-being, 14 show no effect on well-being, with 27 studies having a positive impact. We classify the studies according to the primary purpose of the learning intervention: to develop personal resources for well-being through learning; to develop professional capabilities through learning; to develop leadership skills through learning; and to improve organizational effectiveness through organizational-level learning. Although there is an abundance of
workplace learning interventions, few are evaluated from a well-being perspective despite the commonly held assumption that learning yields positive emotional and psychological outcomes. The evidence indicates an important gap in our evaluation of and design of workplace learning interventions and their impact on well-being, beyond those focusing on personal resources. This raises important theoretical and practical challenges concerning the relationship between learning and well-being in the context of professional capability enhancement, leadership capability and organizational learning.

MANAGEMENT AND LEADERSHIP

Title The antecedents and dimensionality of knowledge-sharing intention
Author/s Han, Seung-Hyun
Source European journal of training & development 2018 42 1 125-142 18
Abstract Purpose This paper aims to focus on the relationships between situational/dispositional variables and an individual’s intention to knowledge sharing, and has theoretical implications for researchers in human resource development and management, as well as implications for practicing managers in organizations. First, this study examines whether an integrative model of knowledge sharing reveals an impact of various antecedents on sharing of knowledge between individuals, which has been rarely explored in a single study. In particular, this study is interested in examining whether the two dimensions improve individual sharing of explicit and tacit knowledge, respectively. Design/methodology/approach A quantitative survey design approach is used as the research method for data collection. Initially, a pilot study is conducted to examine the psychometric properties of the measures. A 120-item questionnaire is used to measure personality traits, organizational climate and knowledge-sharing intention. The main study is conducted at the Korean IT companies, which have knowledge management system and actively share knowledge between R&D engineers. Findings The results of regression analyses indicate that conscientiousness, openness and extroversion of dispositional variables are positively related to an individual’s intention to share knowledge. Of situational variables, organizational support and identity are positively related to knowledge sharing, and reward is negatively associated with knowledge-sharing intention. Theoretical and practical implications for future research are discussed. Originality/value Scholars focused with increasing emphasis over the past 20 years on an organization’s ability to facilitate, utilize and share knowledge as critical components of organizational success. Several scholarly attempts tried to explain the antecedents of knowledge sharing. Despite an increasing demand for a coherent and integrated approach to knowledge sharing, empirical efforts remain largely absent with regard to how knowledge transfer and knowledge-sharing practices among individuals are affected by dispositional and situational variables. Also, individual intention to share knowledge was primarily measured as a unidimensional concept. This is a surprising oversight, given that tacit knowledge and explicit knowledge are critical. Indeed, these may be collectivized successfully for the firm’s driver. To address this gap in our understanding of the personal dynamics involved in knowledge-sharing practices, this study seeks to investigate whether dispositional and situational variables lead to changes in individual’s intention to share tacit and explicit knowledge.

Title The future of workplace commitment: key questions and directions
Author/s Van Rossenberg e al
Source European journal of work & organizational psychology April 2018 27 2 153-167 15
Abstract This position paper presents the state-of-the art of the field of workplace commitment. Yet, for workplace commitment to stay relevant, it is necessary to look beyond current practice and to extrapolate trends to envision what will be needed in future research. Therefore, the aim of...
The impact of team characteristics and context on team communication: an integrative literature review

Tiferes, Judith; Bisantz, Ann M

Applied ergonomics April 2018 68 146-159 14 DOI:10.1016/j.apergo.2017.10.020

Many studies on teams report measures of team communication; however, these studies vary widely in terms of the team characteristics, situations, and tasks studied making it difficult to understand impacts on team communication more generally. The objective of this review is systematically summarize relationships between measures of team communication and team characteristics and situational contexts. A literature review was conducted searching in four electronic databases (PsycINFO, MEDLINE, Ergonomics Abstracts, and SocINDEX). Additional studies were identified by cross-referencing. Articles included for final review had reported at least one team communication measure associated with some team and/or context dimension. Ninety-nine of 727 articles met the inclusion criteria. Data extracted from articles included characteristics of the studies and teams and the nature of each of the reported team and/or context dimensions-team communication properties relationships. Some dimensions (job role, situational stressors, training strategies, cognitive artifacts, and communication media) were found to be consistently linked to changes in team communication. A synthesized diagram that describes the possible associations between eleven team and context dimensions and nine team communication measures is provided along with research needs.

An innovative work behaviour-enhancing employability model moderated by age.

Stoffers, Jol M. M.; Van der Heijden, Béatrice I. J. M

European journal of training & development 2018 42 1 143-163 21 https://doi.org/10.1108/EJTD-10-2016-0074

Purpose This study aims to empirically validate an innovative work behaviour-enhancing model of employability in small- and medium-sized enterprises (SMEs), and to examine possible moderating effects of age.

Design/methodology/approach Data have been collected from 487 pairs of employees and their immediate supervisors who worked in 151 SMEs. Structural equation modelling (SEM) has been used to investigate the predictive validity of employability on innovative work behaviour using a multi-source approach. The moderating effect of employee age on the relationship between, on the one hand, self-ratings and supervisor ratings of employability, and, on the other hand, innovative work behaviour has been tested using multi-group SEM. Findings Results suggest that self-rated employability correlates positively with supervisor-rated innovative work behaviour, and that supervisor-rated employability correlates positively with self-rated innovative work behaviour. Age appeared to have a weak influence on the relationship between employability and innovative work behaviour; more specifically, in case of a higher age, the relationship was stronger.

Research limitations/implications The cross-sectional design is a limitation of this study. Another limitation relates to the generalizability of the study findings outside the context in which the research has been undertaken. The relational meaning of employee age might be different in other cultures. Practical implications Supervisors appear to play an essential role in providing an age-friendly working life for employees. Moreover, as SMEs often do not employ professionals to manage human resources, supervisors themselves have to carry the

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responsibility to encourage aging employees to develop themselves the enhancing innovative work behaviour. Originality/value This study is the first to investigate the predictive validity of employability on innovative work behaviour and the effects of age on this relationship.

Title The performance implication of obsessive work passion: unpacking the moderating and mediating mechanisms from a conservation of resources perspective
Author/s Kong, Dejun Tony; Ho, Violet T
Source European journal of work & organizational psychology April 2018 27 2 269-279
Abstract Work passion is an important determinant of work performance. While harmonious work passion (HWP) shows its consistent predictive value, obsessive work passion (OWP) appears to have a mixed relationship with work performance. To address this puzzle, we integrate research on OWP and emotional exhaustion with conservation of resources (COR) theory. Specifically, we argue that OWP determines emotional exhaustion, whose relationship with work performance is attenuated by leader-member exchange (LMX). By conducting a field study with a sample of 262 US employees, we found supportive evidence, even when controlling for psychological detachment from work. The findings somewhat reconcile the inconsistent results about OWP and work performance in the literature, shed light on research on work passion, LMX, and emotional exhaustion, and provide implications for managerial practice.

Title Survey feedback improves service quality perceptions among employees of an NGO: an organizational-level positive intervention
Author/s Molan, Ingrid et al
Source European journal of work & organizational psychology April 2018 27 2 235-246 12
Abstract The goal of this research study is to examine whether employees’ service quality perceptions improve after they participate in survey-feedback sessions. We tested an organizational-level positive intervention with the participation of 49 small organizations pertaining to an NGO for individuals with intellectual disabilities. Data were collected from employees (<italic>n</italic> = 430) and family members (<italic>n</italic> = 625), then informing employees about service quality perceptions. We hypothesized that, compared to family members, employees would underestimate the service quality they deliver, and that survey-feedback sessions would help to improve employees’ perceptions. We conducted a randomized controlled trial study, analyzing data at the organizational level. Randomly selected participants - employees and family members - were asked to assess functional and relational service quality (T1). One month later, 25 organizations participated in a survey-feedback session. Data were collected again 4 months after the first assessment (T2) in both the survey-feedback and control conditions. The <italic>t</italic>-test and ANOVA analyses showed that employees underestimate their service quality, and that survey feedback improves their relational service quality perceptions. The manuscript concludes with theoretical and practical implications of the study.

Title When proactivity produces a power struggle: how supervisors’ power motivation affects their support for employees’ promotive voice.
Author/s Urbach, Tina; Fay, Doris
Source European journal of work & organizational psychology April 2018 27 2 280-295 16
Previous research informs us about facilitators of employees’ promotive voice. Yet little is known about what determines whether a specific idea for constructive change brought up by an employee will be approved or rejected by a supervisor. Drawing on interactionist theories of motivation and personality, we propose that a supervisor will be least likely to support an idea when it threatens the supervisor’s power motive, and when it is perceived to serve the employee’s own striving for power. The prosocial versus egoistic intentions attributed to the idea presenter are proposed to mediate the latter effect. We conducted three scenario-based studies in which supervisors evaluated fictitious ideas voiced by employees that - if implemented - would have power-related consequences for them as a supervisor. Results show that the higher a supervisors’ explicit power motive was, the less likely they were to support a power-threatening idea (Study 1, \(N=60\)). Moreover, idea support was less likely when this idea was proposed by an employee that was described as high (rather than low) on power motivation (Study 2, \(N=79\)); attributed prosocial intentions mediated this effect. Study 3 (\(N=260\)) replicates these results.

**Flow experience in teams: the role of shared leadership**

**Aubé, Caroline; Rousseau, Vincent; Brunelle, Eric.**

*Journal of occupational health psychology* April 2018 23 2 198-206 9 DOI:10.1037/ocp0000071

**Investigating the longitudinal effects of surface acting on managers’ functioning through psychological needs**

**Huyghebaert, Tiphaine**

*Journal of occupational health psychology* April 2018 23 2 207-222 16 DOI:10.1037/ocp0000080
The diversity and inclusion revolution: eight powerful truths

Bourke, J Dillon, B

Deloitte review January 2018 22

Diversity and inclusion are recognised as important to business. This document presents eight insights into diversity and inclusion from research studies that cover topics such as diversity of thinking and, inclusive leadership. The eight points discussed are: diversity of thinking; diversity without inclusion is not enough; inclusive leaders cast a long shadow; middle managers matter; rewire the system to rewire behaviours; tangible goals make ambitions real; match the inside and the outside; and perform a culture reset, not a tick-the-box-program.

Managers' social support: facilitators and hindrances for seeking support at work

Lundqvist, D Fogelberg Eriksson, A Ekberg, K

Work, 59 3 351-365 2018 DOI: 10.3233/WOR-182690

Background: Previous research has shown that social support is important for health and performance at work, but there is a lack of research regarding managers’ social support at work, and if it needs to be improved

Objective: To investigate managers’ perception of work-related social support, and facilitators and hindrances that influence their seeking of social support at work.

Methods: Semi-structured interviews with sixty-two managers in two Swedish organizations.

Results: Work-related support, which strengthened their managerial image of being competent, was sought from sources within the workplace. Sensitive and personal support, where there was a risk of jeopardizing their image of being competent, was sought from sources outside the workplace. Access to arenas for support (location of the workplace, meetings, and vocational courses) and the managerial role could facilitate their support-seeking, but could also act as hindrances. Because attending different arenas for support were demanding, they refrained from seeking support if the demands were perceived as too high.

Conclusions: Different supportive sources are distinguished based on what supportive function they have and in which arenas they are found, in order to preserve the confidence of the closest organization and to maintain the image of being a competent and performing manager.

Respectful inquiry: a motivational account of leading through asking questions and listening

Van Quaquebeke, Niels Felps, Will

Academy of management review January 2018 43 1 5-27 23 2

Practitioners repeatedly note that the everyday behavior of asking followers open questions and attentively listening to their responses is a powerful leadership technique. Yet, despite such popularity, these practices are currently undertheorized. Addressing this gap, we formally define the behavioral configuration of asking open questions combined with attentive listening as “respectful inquiry,” and we draw on self-determination theory to provide a motivational account of its antecedents, consequences, and moderators within a leader-follower relationship. Specifically, we argue that respectful inquiry principally satisfies followers’ basic psychological needs for competence, relatedness, and autonomy. Against this background, we highlight “paradoxical” contexts where respectful inquiry is likely to be especially rare but would also be especially valuable. These paradoxical contexts include situations where interpersonal power difference, time pressure, physical distance, cognitive load, follower dissatisfaction, or organizational control focus is high. We additionally outline how the effect of respectful inquiry behaviors critically hinges on the interaction history a follower has with a leader. More generally, we suggest that the leadership field would benefit
from complementing its traditional focus on "gestalt" leadership styles with research on concrete and narrow communicative behaviors, such as respectful inquiry.

MUSCULOSKELETAL ISSUES

Title
Effects of footrest heights on muscle fatigue, kinematics, and kinetics during prolonged standing work

Author/s
Son, Jae-Ik

Source
Journal of back & musculoskeletal rehabilitation 2018 31 2 389-396 8 DOI: 10.3233/BMR-170798

Abstract
Background: Among the tools for relieving lower back pain, footrests are commonly recommended. Few studies have investigated the effects of footrest and the proper application of footrest height. Objective: The purpose of this study was to compare the effects of the normalized footrest height on muscle fatigue, kinematics, kinetics, and pain intensity. Methods: In total, 13 males who had a history of non-specific lower back pain during prolonged standing were recruited. The experimental conditions were 2-hour prolonged standing with no footrest and with footrests of 5%, 10%, and 15% of body height. Muscle fatigue was investigated through measurements of the median frequency ratio and the muscle activity ratio (post/pre) in lumbar erector spinae. The lumbo-pelvic angles, and the external moment in the lumbar region were investigated. A visual analog scale was used to investigate the intensity of the pain. Results: The footrests at 10% and 15% of the body height caused a lower change in the median frequency ratio and the muscle activity ratio than the other conditions. The footrest at 10% of the body height placed the lowest external moment on the lumbar region among all the conditions. The pain intensity was significantly lower in with footrest conditions than with no footrest condition. Conclusions: The results suggests that a footrest height of 10% of the body height can be recommended as a normalized height for prolonged standing work in subjects with a history of non-specific lower back pain during prolonged standing.

Title
Integration of musculoskeletal disorders prevention into management systems: a qualitative study of key informants' perspectives

Author/s
Yazdani, Amin et al

Source
Safety science April 2018 104 110-118 9 DOI: 10.1016/j.ssci.2018.01.004

Abstract
Introduction Musculoskeletal disorders (MSD) constitute a substantial fraction of workplace injuries and can result in costs to employers, workers, and societies as a whole. MSD prevention programs disparate from wider organizational approaches can be costly, ineffective and unmaintainable. Objective This study examines key informants’ perspectives on the integration of MSD prevention programs into management systems as a solution to issues associated with isolated or separate program. Method Seven Health & Safety (H&S) consultants, five H&S managers, five researchers, three policy makers, and three labour representatives were interviewed on this topic. A thematic analysis approach was used to code and analyze the data from the key informants’ interviews. Results The participants consistently suggested that a disconnect of MSD prevention strategies from management system frameworks can lead to inadequate attention and ineffective prevention policies. Integration of MSD prevention into management systems was highly supported. Incorporating MSD hazard identification and assessment into tools such as Failure Mode Effects Analysis, Job Safety Analysis, decision making tools, and Kamishibai and Ishakawa (for Lean) was suggested to improve MSD prevention. Contribution This study gives expert insight into challenges associated with MSD risk factors as well as solutions regarding current approaches to MSD prevention and effective tools for implementation.
Title: Sickness absence due to different musculoskeletal diagnoses by occupational class: a register-based study among 1.2 million Finnish employees

Author/s: Pekkala, J et al

Source: Occupational & environmental medicine April 2018 75 4 DOI: 10.1136/oemed-2017-104571

Abstract:

Objectives Those in lower occupational classes have an increased risk of sickness absence due to musculoskeletal diseases (MSDs), but studies examining the associations simultaneously across specified diagnostic groups within MSDs are lacking. We examined occupational class differences in the occurrence and length of long-term sickness absence due to different musculoskeletal diagnoses.

Methods A 70% random sample of employed Finns aged 25–64 years old at the end of 2013 was linked to data on sickness absence of over 10 working days obtained from The Social Insurance Institution of Finland and occupational class from Statistics Finland. Sickness absences due to MSDs initiated in 2014 were followed until the end of each episode for female (n=675 636) and male (n=604 715) upper non-manuals, lower non-manuals and manual workers. Negative binomial hurdle models were used to analyse the associations.

Results Within the studied MSDs, the most common causes of absence were back disorders, particularly back pain, and shoulder disorders. Osteoarthritis, disc disorders and rheumatoid arthritis induced the longest episodes of absence. Clear hierarchical class differences were found throughout, but the magnitude of the differences varied across the diagnostic causes. The largest class differences in the occurrence were detected in shoulder disorders and back pain. The class differences in length were greatest in rheumatoid arthritis, disc disorders and, among men, also in hip osteoarthritis.

Conclusions Hierarchical occupational class differences were found across different MSDs, with large differences in back and shoulder disorders. Occupational class and diagnosis should be considered when attempting to reduce sickness absence due to MSDs.

Title: Are work organization interventions effective in preventing or reducing work-related musculoskeletal disorders? a systematic review of the literature

Author/s: Stock, SR et al

Source: Scandinavian journal of work & environmental health 2018 44(2) 113-133 doi:10.5271/sjweh.3696

Abstract:

Objectives We sought to determine whether interventions that target work organization or the psychosocial work environment are effective in preventing or reducing work-related musculoskeletal disorders (WMSD) compared to usual work.

Methods We systematically reviewed the 2000–2015 English- and French-language scientific literature, including studies evaluating the effectiveness of an organizational or psychosocial work intervention on incidence, prevalence or intensity of work-related musculoskeletal pain or disorders in the neck, shoulders, upper limbs and/or back or work absence due to such problems, among non-sick-listed workers. We excluded rehabilitation and individual-level behavioral interventions and studies with >50% attrition. We analyzed medium- and high-quality studies and synthesized the evidence using the Grading of Recommendations Assessment, Development & Evaluation (GRADE) approach. An analysis of key workplace intervention elements supplemented the interpretation of results.

Results We identified 884 articles; 28 met selection criteria, yielding 2 high-quality, 10 medium-quality and 16 low-quality studies. There was moderate evidence that supplementary breaks, compared to conventional break schedules, are effective in reducing symptom intensity in various body regions. Evidence was low-to-very-low quality for other interventions, primarily due to risk of bias related to study design, high attrition rates, co-interventions, and insensitive indicators. Most interventions lacked key intervention elements, such as work activity analysis and ergonomicist guidance during implementation, but the relation of these elements to intervention effectiveness or ineffectiveness remains to be demonstrated.

Conclusions Targeting work–rest cycles may reduce WMSD. Better quality studies are needed.
needed to allow definitive conclusions to be drawn on the effectiveness of other work organizational or psychosocial interventions to prevent or reduce WMSD

Title
Integration of musculoskeletal disorders prevention into management systems: a qualitative study of key informants’ perspectives

Author/s
Yazdani, A et al

Source
Safety science April 2018 104 110-118 https://doi.org/10.1016/j.ssci.2018.01.004

Abstract
Highlights Key informant interviews provided recommendations for MSD prevention. MSD prevention is unsustainable and inefficient as a stand-alone program. MSD prevention should be integrated into broader organizational frameworks. MSD hazard assessment needs to be incorporated into simple engineering tools.

Introduction
Musculoskeletal disorders (MSD) constitute a substantial fraction of workplace injuries and can result in costs to employers, workers, and societies as a whole. MSD prevention programs disparate from wider organizational approaches can be costly, ineffective and unmaintainable.

Objective
This study examines key informants’ perspectives on the integration of MSD prevention programs into management systems as a solution to issues associated with isolated or separate program.

Method
Seven Health & Safety (H&S) consultants, five H&S managers, five researchers, three policy makers, and three labour representatives were interviewed on this topic. A thematic analysis approach was used to code and analyze the data from the key informants’ interviews.

Results
The participants consistently suggested that a disconnect of MSD prevention strategies from management system frameworks can lead to inadequate attention and ineffective prevention policies. Integration of MSD prevention into management systems was highly supported. Incorporating MSD hazard identification and assessment into tools such as Failure Mode Effects Analysis, Job Safety Analysis, decision making tools, and Kamishibai and Ishakawa (for Lean) was suggested to improve MSD prevention.

Contribution
This study gives expert insight into challenges associated with MSD risk factors as well as solutions regarding current approaches to MSD prevention and effective tools for implementation

Title
Prediction models to identify workers at risk of sick leave due to low-back pain in the Dutch construction industry

Author/s
Bosman, LC et al

Source
Scand j work environ health 2018 44 2 156-162 doi:10.5271/sjweh.3703

Abstract
Objective
The aim of this study was to develop a prediction model based on variables measured in occupational health checks to identify non-sick listed workers at risk of sick leave due to non-specific low-back pain (LBP).

Methods
This cohort study comprised manual (N=22 648) and non-manual (N=9735) construction workers who participated in occupational health checks between 2010 and 2013. Occupational health check variables were used as potential predictors and LBP sick leave was recorded during 1-year follow-up. The prediction model was developed with logistic regression analysis among the manual construction workers and validated in non-manual construction workers. The performance of the prediction model was evaluated with explained variances (Nagelkerke’s R-square), calibration (Hosmer-Lemeshow test), and discrimination (area under the receiver operating curve, AUC) measures.

Results
During follow-up, 178 (0.79%) manual and 17 (0.17%) non-manual construction workers reported LBP sick leave. Backward selection resulted in a model with pain/stiffness in the back, physician-diagnosed musculoskeletal disorders/injuries, postural physical demands, feeling healthy, vitality, and organization of work as predictor variables. The Nagelkerke’s R-square was 3.6%; calibration was adequate, but discrimination was poor (AUC=0.692; 95% CI 0.568–0.815).
Conclusions A prediction model based on occupational health check variables does not identify non-sick listed workers at increased risk of LBP sick leave correctly. The model could be used to exclude the workers at the lowest risk on LBP sick leave from costly preventive interventions.

Predictors of disability and absenteeism in workers with non-specific low back pain: a longitudinal 15-month study

Lardon, Arnaud et al

Applied ergonomics April 2018 68 176-185 10 DOI:10.1016/j.apergo.2017.11.011

The objective of this study was to identify baseline predictors of disability and absenteeism in workers with a history of non-specific low back pain (LBP).

Methods: One hundred workers with a history of non-specific LBP participated in three evaluations (baseline, 7 and 15 months follow-up). Current and past history of LBP, clinical pain intensity, disability, absenteeism, fear-avoidance beliefs, pain catastrophizing, pain hypervigilance, work satisfaction and patient stratification based on "risk of poor clinical outcome assessment" (RPCO) were evaluated using questionnaires and interviews. In addition, cutaneous heat pain thresholds, cutaneous heat pain tolerance thresholds, conditioned pain modulation (CPM), trunk kinematics and muscle activity were measured during each evaluation. Logistic regression models were used to determine predictors of LBP disability and absenteeism at 15-months.

Results: Sixty-eight workers returned for the 15-month follow-up and among this sample, 49% reported disability and 16% reported absenteeism at follow-up. Baseline clinical pain intensity predicted disability (OR = 1.08, 95%CI: 1.03-1.13) at 15-month while work satisfaction (OR = 0.99, 95%CI: 0.94-0.99) and RPCO (OR = 1.51, 95%CI: 1.05-2.16) predicted absenteeism. These results remained significant after adjustments for age, gender as well as type of work and intervention.

Conclusion: This study highlights the importance of clinical pain and psychological factors in the prediction and potentially the prevention of future disability. Screening tools assessing these risk factors can be useful to evaluate workers with past history of low back pain.

Effectiveness of ultrasonography and nerve conduction studies in the diagnosing of carpal tunnel syndrome: clinical trial on accuracy

Pimentel, Benedito Felipe Rabay et al

BMC musculoskeletal disorders April 2018 19 1 115 DOI:10.1186/s12891-018-2036-4

Background: The aim of this study was to evaluate the effectiveness of two diagnostic tests routinely used for diagnosing carpal tunnel syndrome (CTS)-ultrasonography (US) and nerve conduction studies (NCS)-by comparing their accuracy based on surgical results, with the remission of paresthesia as the reference standard.

Methods: We enrolled 115 patients, all of the female gender with a high probability of a clinical diagnosis of CTS. All patients underwent US and NCS for a diagnosis and subsequent surgical treatment. As a primary outcome, the accuracy of the US and NCS diagnoses was measured by comparing their diagnoses compared with those determined by the surgical outcomes. Their accuracy was secondarily evaluated based on before and after scores of the Boston Carpal Tunnel Questionnaire (BCTQ).

Results: Overall, 104 patients (90.4%) were diagnosed with CTS by the surgical reference standard, 97 (84.3%) by NCS, and 90 (78.3%) by US. The concordance of NCS and surgical treatment (p < 0.001; kappa = 0.648) was superior to that of US and surgical treatment (p < 0.001; kappa = 0.423). The sensitivity and specificity of US and NCS were similar.
Conclusions: US and NCS effectively diagnosed CTS with good sensitivity but were not effective enough to rule out a suspicion of CT.

Additional text: Weblink

Title Insomnia and risk of chronic musculoskeletal complaints: longitudinal data from the hunt study, Norway
Author/s Uhlig, B et al
Source Bmc musculoskeletal disorders 2018 19 128
Abstract Background The aim of this study was to investigate the prospective association between insomnia and risk of chronic musculoskeletal complaints (CMSC) and chronic widespread musculoskeletal complaints (CWMSC). A second aim was to evaluate the association between insomnia and number of body regions with CMSC at follow-up. Methods We used data from the second (HUNT2, 1995–1997) and third (HUNT3, 2006–2008) wave of the Nord-Trøndelag Health Study (the HUNT Study). The population-at-risk included 13,429 people aged 20–70 years who reported no CMSC at baseline in HUNT2 and who answered the questionnaires on insomnia in HUNT2 and CMSC in HUNT3. Insomnia was defined according to the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) with minor modification, whereas CMSC was assessed for nine different body regions. CWMSC was defined according to the 1990 criteria by the American College of Rheumatology. We used Poisson regression to estimate adjusted risk ratios (RRs) for CMSC and CWMSC at 11 years follow-up. Precision of the estimates was assessed by a 95% confidence interval (CI). Results Insomnia at baseline was associated with increased risk of any CMSC (RR 1.16, 95% CI 1.03–1.32) and CWMSC (RR 1.58, 95% CI 1.26–1.98) at follow-up. RR for CMSC for specific body regions ranged from 1.34 (95% CI 1.05–1.73) for the knees and 1.34 (1.10–1.63) for the neck to 1.60 (95% CI 1.19–2.14) for the ankles/ft. Further, insomnia was associated with increased risk of CMSC in 3–4 regions (RR 1.36, 95% CI 1.05–1.77), and 5 or more regions (RR 1.93, 95% CI 1.40–2.66), but not 1–2 regions (RR 0.99, 95% CI 0.80–1.24). Conclusions Insomnia is associated with increased risk of CMSC, CWMSC, and CMSC located in 3 or more body regions.

Additional text: Weblink

Title Predictors of disability and absenteeism in workers with non-specific low back pain: a longitudinal 15-month study
Author/s Lardon, Arnaud et al
Abstract Objectives: The objective of this study was to identify baseline predictors of disability and absenteeism in workers with a history of non-specific LBP. Methods: One hundred workers with a history of non-specific LBP participated in three evaluations (baseline, 7 and 15 months follow-up). Current and past history of LBP, clinical pain intensity, disability, absenteeism, fear-avoidance beliefs, pain catastrophizing, pain hypervigilance, work satisfaction and patient stratification based on "risk of poor clinical outcome assessment" (RPCO) were evaluated using questionnaires and interviews. In addition, cutaneous heat pain thresholds, cutaneous heat pain tolerance thresholds, conditioned pain modulation (CPM), trunk kinematics and muscle activity were measured during each evaluation. Logistic regression models were used to determine predictors of LBP disability and absenteeism at 15-months. Results: Sixty-eight workers returned for the 15-month follow-up and among this sample, 49% reported disability and 16% reported absenteeism at follow-up. Baseline clinical pain intensity
predicted disability (OR = 1.08, 95%CI: 1.03-1.13) at 15-month while work satisfaction (OR = 0.93, 95%CI: 0.87-0.99) and RPCO (OR = 1.51, 95%CI: 1.05-2.16) predicted absenteeism. These results remained significant after adjustments for age, gender as well as type of work and intervention.

Conclusion: This study highlights the importance of clinical pain and psychological factors in the prediction and potentially the prevention of future disability. Screening tools assessing these risk factors can be useful to evaluate workers with past history of low back pain.

Title Sit-stand workstations and impact on low back discomfort: a systematic review and meta-analysis.

Author/s Agarwal, Shuchi; Steinmaus, Craig; Harris-Adamson, Carisa

Source *Ergonomics* April 2018 61 4 538-552 DOI: 10.1080/00140139.2017.1402960

Abstract Background: Sit-stand workstations are proposed solutions to reduce sedentary time at work. Numerous companies are using them to mitigate health concerns such as musculoskeletal discomfort.

Objective: To review the literature on sit-stand workstations and musculoskeletal discomfort.

Method: We conducted a meta-analysis on literature published before 17 November 2016 that addressed the relationship between sit-stand workstations and musculoskeletal discomfort, focusing on the low back.

Results: Twelve articles were identified and eight that presented results in means (SD) were included. Among a pain-free population, the standardised mean difference was −0.230 for low back discomfort with use of sit-stand workstations. When applying the SMD to studies using the 10-point pain scale, the effect estimates ranged between −0.30 and −0.51.

Conclusion: Sit-stand workstations may reduce low back pain among workers. Further research is needed to help quantify dosage parameters and other health outcomes.

Practitioner Summary: In a sedentary population, changing posture may reduce the chance of developing low back pain. The literature lacks studies on specific populations such as those who have pre-existing low back pain and does not adequately address the dosage of sit-stand time required to help reduce pain.

Title Risk factors for episodic neck pain in workers: a 5-year prospective study of a general working population

Author/s Petit, A et al

Source *International archives of occupational and environmental health* April 2018 91 3 251-261 DOI: 10.1007/s00420-017-1272-5

Abstract Purpose: Development of neck pain (NP) in workers has a multifactorial etiology and depends on both individual and workplace factors. The aim of this study was to investigate risk factors for episodic NP in a large diverse sample of active workers.

Methods: A prospective study based on the surveillance program implemented by the French Public Health Agency in the Loire Valley region. Between 2002 and 2005, 3710 workers were included. Between 2007 and 2010, 2332 workers responded to a follow-up questionnaire which assessed: (1) musculoskeletal symptoms (Nordic questionnaire) and (2) individual and work-related risk factors. Associations between episodic NP in 2007 (i.e., free subjects at baseline and who suffered at least 8 days during the preceding 12 months) and individual and work-related risk factors at baseline were studied using logistic regression modeling, stratified by sex.

Results: Among the 1510 workers (914 men, 596 women) still active at follow-up, 10.4% (8.4–12.4) of men and 14.6% (11.8–17.4) of women declared episodic NP. Among men, work pace dependence of guests or permanent hierarchical controls were risk factors of NP [OR = 1.8 (1.1–2.8) and OR = 2.1 (1.3–3.3), respectively]. Among women, the combination of
sustained/repeated arm abduction with high physical perceived exertion was the strongest risk factor for NP [OR = 3.5 (1.7–7.2)]; age and paced work were also predictors for NP in women. Conclusions NP results from complex relationships between individual and work-related variables. High physical workload, awkward postures, and poor organizational environment together with age differently predicted episodic NP according to the sex.

Title The role of managers in addressing employees with musculoskeletal pain: a mixed methods study
Author/s Larsen, AK et al
Source *International archives of occupational and environmental health* April 2018 91 361-372 DOI:10.1007/s00420-017-1284-1

Abstract Purpose This study investigates management awareness of employee musculoskeletal pain and conditions that shape managers’ handling of employees with pain. Methods We used a mixed methods design including data from a questionnaire survey and focus group sessions. All employees and managers from seven nursing homes were invited to participate in the questionnaire survey and 327 employees (81%) and 31 managers (82%) responded. Employees were asked about their worst pain intensity the past month and managers were asked to estimate the percentage of their employees who had experienced pain. Thirty-eight managers (93%) participated in focus group sessions addressing the culture for handling pain at the workplace. A multiple case study approach allowed for an integrated interpretation of the empirical findings. Results indicate limited manager awareness of employee pain. We identified four conditions that shape managers’ handling of employees with pain: (1) Employee handling of—and communication about—pain, (2) the collegial culture for handling pain, (3) managers’ perception of their role towards employees with pain and (4) procedures and informal approaches for handling employees with pain. Across these conditions various degrees of openness characterized the nursing homes. Conclusions The degree of openness towards communicating about—and handling pain—in the organization (individual, collegial and managerial levels) influences how managers handle employees with pain. Awareness about employee health is a prerequisite for management to initiate relevant action towards supporting employees. Future workplace initiatives are likely to benefit from addressing openness in the organization to increase awareness and support employees with pain.

Title Theoretical impact of simulated workplace-based primary prevention of carpal tunnel syndrome in a French region.
Author/s Yves Roquelaure, et al
Source *BMC public health*, published online April 2018, doi: 10.1186/s12889-018-5328-6

Title Different autonomic responses to occupational and leisure time physical activities among blue-collar workers
Author/s Sato, TO
Abstract
Purpose: The differential effect of occupational and leisure time physical activity on cardiovascular health is termed the physical activity health paradox. Cardiac autonomic modulation could bring insights about the underlying mechanism behind this differential effect. The aim was to compare heart rate variability (HRV) during different activities (sitting, standing and moving) at work and leisure among blue-collar workers.

Methods One hundred thirty-eight workers from the NOMAD cohort were included. Data from physical activity and HRV were obtained for 3–4 days using tri-axial accelerometers (Actigraph GT3X+) and a heart rate monitor (Actiheart). HRV indices were determined during sitting, standing and moving both at work and leisure. Linear mixed-models with two fixed factors (activities and domains) were applied to investigate differences in HRV indices adjusting for individual and occupational factors.

Results The results showed significant effects of domain ($p < 0.01$), physical activity type ($p < 0.01$) and interaction between domain and activity type ($p < 0.01$) on HRV indices. Mean heart rate (IBI) and parasympathetic measures of HRV (RMSSD and HF) were lower for sitting ($p < 0.01$) and higher for moving ($p < 0.01$) during work compared with leisure, while no difference between domains was found for standing ($p > 0.05$). Sympathovagal balance (LF/HF) was higher during work for sitting and moving ($p < 0.01$), but showed no difference for standing ($p = 0.62$).

Conclusions Differences in cardiac autonomic modulation between work and leisure were found, indicating sympathetic predominance during work and parasympathetic predominance during leisure for sitting. Autonomic responses can be part of the mechanism that explains the differential effect of occupational and leisure time physical activity on health.

Title
Ocular surface and tear film status among contact lens wearers and non-wearers who use VDT at work: comparing three different lens types

Author/s
Tauste, A et al

Source
International archives of occupational and environmental health April 2018 91 3 293-304
DOI:10.1007/s00420-017-1279-y

Abstract
Purpose To analyze differences in the ocular surface appearance and tear film status of contact lens wearers and non-wearers in a group of visual display terminals (VDT) workers and additionally to assess differences between lens materials.

Methods Cross-sectional study of 236 office workers, of whom 92 were contact lens wearers. Workers provided information on their contact lenses (conventional hydrogel, silicone hydrogel or rigid gas permeable lenses) and exposure to VDT at work. Ocular surface and tear film status were determined by the presence of bulbar, limbal and lid redness, lid roughness and corneal staining type, and by Schirmer's and tear break-up time tests (TBUT). A generalized linear model was used to calculate the crude (cRR) and age- and sex-adjusted (aRR) relative risk to measure the association between ocular surface and tear film abnormalities and contact lens use and type.

Results The aRR of ocular surface abnormalities was higher in contact lens wearers compared to non-wearers: bulbar redness (aRR 1.69; 95% CI 1.25–2.30), limbal redness (aRR 2.87; 1.88–4.37), lid redness (aRR 2.53; 1.35–4.73) and lid roughness (aRR 7.03; 1.31–37.82). VDT exposure > 4 h/day increased wearers’ risk of limbal and lid redness. Conventional hydrogel wearers had the highest risk of ocular surface abnormalities, followed by silicone hydrogel wearers. Both contact and non-contact lens wearers had a high prevalence of altered TBUT (77.3 and 75.7% respectively) and Schirmer (51.8 and 41.3%). Conclusions Regular contact lens use during VDT exposure at work increases risk of bulbar, limbal and lid redness, and lid roughness, especially in soft contact lens wearers. The high prevalence of altered TBUT and Schirmer’s results in all participants suggests that VDT use greatly affects tear film characteristics.
Cortisol on Sunday as indicator of recovery from work: prediction by observer ratings of job demands and control

Elferong, A et al


Several considerations guided the research reported in this paper. First, recovery is pivotal for preventing stressful experiences from inducing long-term consequences. Second, cortisol levels under relaxed conditions constitute a good baseline measure. Third, there are many calls to avoid common method problems. Therefore, the Job Demands–Control (JDS) model, one of the most prominent models in occupational stress, should be tested by a combination of observation, self-report, and physiological data in terms of predicting recovery-related variables. In a sample of 53 Swiss employees, we assessed the JDS variables, demands and control, by systematic observation, fatigue at the end of work as an indicator of short-term recovery by questionnaire, and delayed recovery by baseline levels of cortisol on a Sunday under relaxing conditions. In line with expectations, regression analyses showed an impact of job demands and control on Sunday cortisol levels, and this effect was fully mediated by after work fatigue. Contrary to expectations, there was no significant interaction between job demands and control. Demonstrating that job demands and control predict after-work fatigue as well as a delayed physiological marker of recovery, these findings suggest that high after-work fatigue may entail costs to the individual’s physiological systems.

Future of work in Australia: preparing for tomorrow’s world

Focus on the states series, No. 6/18

Bankwest Curtin Economics Centre 2018

This report examines the way in which the organisation of work is changing – from workforces to workplaces – and the implications of these changes for Australia. With alternative forms of employment, freelancing, and the gig economy on the rise, the traditional notion of holding down a steady job or two for an entire career is receding fast.

Practice patterns of occupational medicine physicians in Canada.

Kraut, Allen et al

Archives of environmental & occupational health 2018 73 2 102-106. 5 https://doi.org/10.1080/19338244.2017.1299086

The objectives of this survey were to identify the practice patterns of Canadian physicians working in the field of occupational medicine and to determine whether the type of certification influences the nature of the work they perform in the field. An Internet-based survey was conducted in September 2015 of members of the Occupational and Environmental Medicine Association of Canada. Eighty-six Canadian-based occupational medicine physicians completed the survey (response rate 36%). These physicians performed a wide variety of tasks (12 ± 6), with few spending most of their time doing a single task. The most frequently performed tasks were fitness-to-work (78%) and return-to-work evaluations (78%). Specialty-trained physicians were more likely to be involved in teaching and research and less likely to be involved in a variety of ability-to-work evaluations.
Title: Work orientations, well-being and job content of self-employed and employed professionals
Author/s: Warr, Peter, Inceoglu, Ilke
Source: Work, employment and society April 2018 2 292-311
Abstract: Drawing on psychology-derived theories and methods, a questionnaire survey compared principal kinds of work orientation, job content and mental well-being between self-employed and organisationally employed professional workers. Self-employment was found to be particularly associated with energised well-being in the form of job engagement. The presence in self-employment of greater challenge, such as an enhanced requirement for personal innovation, accounted statistically for self-employed professionals’ greater job engagement, and self-employed professionals more strongly valued personal challenge than did professionals employed in an organisation. However, no between-role differences occurred in respect of supportive job features such as having a comfortable workplace. Differences in well-being, job content and work orientations were found primarily in comparison between self-employees and organisational non-managers. The study emphasises the need to distinguish conceptually and empirically between different forms of work orientation, job content and well-being, and points to the value of incorporating psychological thinking in some sociological research.

Title: Association between employment status and objectively measured physical activity and sedentary behavior—The Maastrict Study
Author/s: Pulakka, A et al
Abstract: Objective: To examine the association between employment status and physical activity and sedentary behavior. Methods: We included 2045 participants from The Maastrict Study, who used a thigh-worn accelerometer. We compared time spent sedentary, standing, stepping, and higher intensity physical activity between participants with different employment status (non-employed or low-, intermediate- or high-level occupation) with analysis of variance. Results: Participants in low-level occupations were less sedentary and standing and stepping more than those in other occupational categories and non-employed participants. Among the employed, the differences were mostly observed on weekdays, whereas the differences in sedentary time and standing between those in low-level occupations and non-employed participants were evident both on weekdays and weekend days. Conclusions: Those in low-level occupational category were less sedentary and more active than non-employed and those in other occupational categories, especially on weekdays.

Title: Experiences of internal and hybrid employee assistance program managers: factors associated with successful, at-risk, and eliminated programs
Author/s: Frey, JJ et al
Source: Journal of workplace behavioral health 2018 33 1 1-23
Abstract: Employee Assistance Programs (EAPs) originated as workplace-focused programs delivered largely by peer employees. Over the past 25 years, the once standard internal EAP has
largely been replaced by internal/external hybrid programs or outsourced EAP vendors. Many long-standing internal programs have been downsized or eliminated, along with their internal program manager positions. This qualitative study examined the organizational, leadership, and programmatic characteristics associated with the internal and internal/hybrid EAPs from the perspectives of EAP managers working in programs that have thrived and those that have depreciated. Twenty-four current and former internal or internal/hybrid EAP managers were interviewed using a semistructured interview schedule. Qualitative methods were used to identify patterns and themes within the data to describe the experience of internal and internal/hybrid EAP managers and the critical success and risk factors associated with their positions and programs. Five final themes, with 15 subthemes emerged from the data, suggesting that both individual and organizational characteristics of EAP internal and hybrid programs are important to the program's sustainability. These findings offer insights regarding best practices and critical success factors to EAP professionals, EAP purchasers, and the EAP industry.

Let's go out for a drink after work! the relation between leisure time spent with colleagues and employees' life satisfaction

Endrejat, Paul C.; Barthauer, Luisa; Kauffeld, Simone


Despite the tremendous research studying the factors that influence employees' well-being, the effect of what happens when leisure time is spent with colleagues remains yet unexamined. Building on the Conversation of Resource Theory, we propose that leisure time spent with colleagues could be understood as a resource, especially for those individuals who have few friends at their workplace. In a cross-sectional design, 136 university employees provided information about the number of friends they have at work, the amount of leisure time spent with befriended colleagues, and their life satisfaction. Results suggest that a larger network of friends at work is positively associated with life satisfaction. Furthermore, the effect of the number of friends at work on life satisfaction is moderated by the amount of leisure time spent with befriended colleagues. Employees who have few friends at work report more life satisfaction, if they spend more leisure time with befriended colleagues, whereas such an effect was not found for employees with a large friend network at work. These results are placed into the context of current discussions about work-life-blending.

The relationship between work organization and technology has been conceptualized in economic and sociological studies in a variety of ways, depending on the authors' ontological premises and use of terminology (e.g., Leonardi & Barley, 2010; Mackenzie & Wajcman, 1985). For one thing, many economic analyses have not even regarded work organization as an analytical entity in itself but rather as a subcategory under an umbrella category of 'technology'. In cases like this, the concept of technology has been used in the broad sense, also referring to human activities and know-how to do things. In many classical and modern sociological studies of work, the analytical distinction between work organization and technology has been of crucial importance, often based on a narrower concept of technology as a set of physical objects.
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<th>Title</th>
<th>Why resilient workers perform better: the roles of job satisfaction and work engagement</th>
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<tr>
<td>Author/s</td>
<td>Kašpárková, Ludmila</td>
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<tr>
<td>Abstract</td>
<td>Previous studies have confirmed correlations between resilience and job performance, but surprisingly little is known about the nature of this relationship. This study sheds light on the roles of two important positive dimensions of work-related well-being: job satisfaction and work engagement. Data were collected from 360 Czech workers in helping professions using an online survey. Levels of resilience and perceived job performance were indeed positively associated. Using structural equation modeling, the best-fitting model showed partial mediation by work engagement; conversely, job satisfaction was not found to be a mediator of this relationship. Additionally, the finding that job performance is related more strongly to work engagement than to job satisfaction contributes to the debate about the concurrent validity of job attitudes.</td>
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**PSYCHOSOCIAL ISSUES**

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<th>Title</th>
<th>e-therapy in primary care mental health</th>
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<tr>
<td>Author/s</td>
<td>Orman, J O’Dea, B</td>
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<tr>
<td>Source</td>
<td><em>Australian journal of general practice</em> April 2018 4 4</td>
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<tr>
<td>Abstract</td>
<td>Background the Australian Government’s Fifth National Mental Health and Suicide Prevention Plan recommends a stepped care model of mental healthcare that focuses on matching the intensity of care to the severity of illness. General practitioners (GPs) need to learn more about low-intensity online interventions to better meet the needs of patients of lower severity. Objective This article provides GPs with information about low-intensity, evidence-based online resources developed in Australia and available for integration into the care of patients with mild-to-moderate mental health conditions. This article has an emphasis on new developments since 2015. Discussion The internet provides an opportunity to deliver effective mental health treatment to people who would otherwise not seek, or be able to reach, skilled help for their mental health conditions. High-quality, evidence-based cognitive behavioural therapy treatment programs are available to all Australians, at no or low cost. These options can be integrated into a stepped care model of mental healthcare, and provide GPs with an opportunity to help patients access treatment that suits their needs.</td>
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<th>Title</th>
<th>Chronic and episodic anger and gratitude toward the organization: relationships with organizational and supervisor supportiveness and extrarole behavior</th>
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<tr>
<td>Author/s</td>
<td>Ford, Michael Tet al</td>
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<td>Source</td>
<td><em>Journal of occupational health psychology</em> April 2018 23 2 175-187 13 DOI: 10.1037/ocp0000075</td>
</tr>
<tr>
<td>Abstract</td>
<td>Gratitude and anger represent 2 fundamental moral emotions in response to help or harm. Research suggests that individuals perceive organizations to have humanlike qualities and thus hold them responsible for helpful or harmful treatment. Given this line of reasoning, we hypothesized that workers direct gratitude toward their organizations in response to supportive treatment and anger toward their organizations in response to unsupportive treatment. Gratitude and anger, in turn, were expected to influence daily extrarole behavior. After developing short measures of organization-directed anger and gratitude in 2 pilot studies, we tested these hypotheses in a daily diary study of 54 workers providing 421 daily...</td>
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reports. Results indicate that perceived organizational support was related to chronic gratitude and anger, which is stable from day to day, and chronic gratitude was in turn related to chronic differences in organizational citizenship behavior. Episodic anger and gratitude, which vary daily, were related to daily supervisor interactional justice and helping behavior, respectively, and in turn predicted daily episodic variance in organizational citizenship and counterproductive work behavior. These findings suggest that the moral emotions of gratitude and anger toward the organization are indicators of employee affective well-being and play a mediating role in the effects of organizational and supervisor supportiveness on employee performance.

**Title**
Brooding as moderator of depressive symptoms after a work accident: a longitudinal study.

**Author/s**
Garcia, Felipe E et al

**Source**
Scandinavian journal of psychology April 2018 59 2 236-242 7 3 DOI: 10.1111/sjop.12433

**Abstract**
This study analyzes the relationship between having experienced a work accident and developing depressive symptoms six months later, considering the subjective severity of accidents, the use of both positive and negative religious coping strategies, and brooding as predictors variables. Fiftyseven women and 187 men were evaluated during the month following their accident (T1) and six months later (T2). The results show that after controlling for initial depressive symptoms, all predictors showed a statistically significant relationship with depression at six months, including the interaction between brooding and subjective severity of accident. Forty nine percent of resilient participants exhibited low symptoms at T1 and T2, 22% of recovered individuals showed high symptoms at T1 and low symptoms afterwards, 20% of depressive individuals had high symptoms at T1 and T2, and 8% exhibited high symptoms only at T2. High severity, brooding and religious coping at T1 differentiated those who exhibited stable symptoms from those who were resilient. Resilience was specifically predicted with a negative coefficient by the interaction of brooding with subjective severity of accident. We conclude that brooding is a variable that moderates the relationship between subjective severity of accident and the development and maintenance of depressive symptoms. Subjective severity of accident, brooding and negative religious coping are risk factors, while positive religious coping is not a sufficient protection factor.

**Title**
A concept of psychological work capacity demands: first evaluation in rehabilitation patients with and without mental disorders

**Author/s**
Muschalla, Beate

**Source**
Work 59 3 375-386 2018 DOI: 10.3233/WOR-182691

**Abstract**
Background: Work capacity demands are a concept to describe which psychological capacities are required in a job. Assessing psychological work capacity demands is of specific importance when mental health problems at work endanger work ability. Exploring psychological work capacity demands is the basis for mental hazard analysis or rehabilitative action, e.g. in terms of work adjustment.

Objective: This is the first study investigating psychological work capacity demands in rehabilitation patients with and without mental disorders.

Methods: A structured interview on psychological work capacity demands (Mini-ICF-Work; Muschalla, 2015; Linden et al., 2015) was done with 166 rehabilitation …patients of working age. All interviews were done by a state-licensed socio-medically trained psychotherapist. Inter-rater-reliability was assessed by determining agreement in independent co-rating in 65 interviews. For discriminant validity purposes, participants filled in the Short Questionnaire for Work Analysis (KFZA, Prümper et al., 1994).

Results: In different professional fields, different psychological work capacity demands were of importance. The Mini-ICF-Work capacity dimensions reflect different aspects than the KFZA. Patients with mental disorders were longer on sick leave and had worse work ability prognosis than patients without mental disorders, although both groups reported similar work capacity demands.
Conclusions: Psychological work demands – which are highly relevant for work ability prognosis and work adjustment processes – can be explored and differentiated in terms of psychological capacity demands.

**Title**

Measuring subjective well-being for policy purposes: the example of well-being indicators in the WHO “Health 2020” framework.

**Author/s**

Vik, Mari Hagtvedt; Carlquist, Erik

**Source**

Scandinavian journal of public health March 2018 46 2 279-286 8

**DOI:** 10.1177/1403494817724952

**Abstract**

Aims: This article discusses the rationale for measuring national well-being, and examines the use of subjectively oriented well-being measures in the context of public policy. Recent years have witnessed growing attention towards the concept and measurement of well-being, both within academic disciplines, intergovernmental organizations such as the World Health Organization (WHO) as well as in many governments across Europe, including the Nordic countries. Economic indicators have commonly been regarded as proxies of societal progress, but indicators of well-being have increasingly been applied in order to complement or replace these measures.

Methods: Well-being indicators of the WHO “Health 2020” framework are critically examined with particular attention given to the subjective aspects of well-being. Literature discussing the rationale for subjective indicators is reviewed. As a background, central theoretical and measurement perspectives on well-being are outlined, including hedonic, eudaimonic and objective list approaches. Results: The WHO refers to well-being in definitions of health and mental health, but has primarily reported on disease. The “Health 2020” framework marked a shift in this concern. One of the main targets of “Health 2020” concerns well-being, involving six core indicators. Only one indicator refers to well-being as subjective experience. Literature supports more extensive use of subjective indicators in combination with objective measures.

Conclusions: Although consensus on definitions and instruments is lacking, subjective and objective measures of national well-being may jointly contribute to a more comprehensive understanding of societal progress, as well as a broader conception of health. Further research is required, particularly with regard to eudaimonic indicators.

**Title**

The relationship between employee motivation and psychological health at work: a chicken-and-egg situation?

**Author/s**

Dagenasi-Desmarais, Vleclerc, J_S, Londei-Shorall, J

**Source**


**Abstract**

Although employee motivation and psychological health at work have been found to be related, it remains unclear whether motivation precedes psychological health or vice versa, and to which extent different manifestations of mental health relate to different forms of motivation at work. Using the self-determination theory and the bidimensional theory of psychological health, this complete panel design study tested the directionality of the relationship between motivation at work and psychological health at work, with a dedicated focus on the specific predictive patterns observed between 4 types of motivation at work and positive and negative indicators of psychological health at work. Eight hundred and five Canadian workers completed questionnaires at 2 times, separated by a 6-month interval. Structural equation modelling analyses indicated that only identified regulation and psychological well-being at work have a fully reciprocal relationship. Only psychological well-being at work was positively associated with the 3 most self-determined types of motivation at work 6 months later, and only identified regulation predicted psychological health at work after 6 months. External regulation was unrelated to all indicators of psychological health at work.
Weblink

Title Self-help for stress and burnout without therapist contact: an online randomised controlled trial
Author/s Hofer, PD et al

Abstract Interventions designed to reduce stress and burnout may be costly and access is limited. This study examined the effectiveness of a self-help book, using Acceptance and commitment therapy (ACT) to target stress and burnout in a randomised controlled online trial without any therapist contact. Participants were recruited through a newsletter of a health insurance company. Participants (N = 119) who reported at least moderate levels of stress were randomly assigned to an immediate intervention (n = 61) or a waitlist group (n = 58). Measures before and after the intervention assessed stress, burnout (primary outcomes), depression, well-being, emotion regulation (secondary outcomes) and ACT-specific constructs. Compared to the waitlist group, participants in the immediate intervention group reported lower stress and burnout and higher psychological flexibility at post-assessment. Effects between groups were large for stress (d = 0.9), moderate to large for burnout (d = 0.5–0.8) and large for psychological flexibility (d = 0.8). All primary and most secondary outcomes and ACT processes continued to improve in the 3-month follow-up period. Results suggest that an ACT self-help book without any therapist contact is effective in reducing stress and burnout for various occupations. Thus, it may provide a cost-effective public health intervention for reducing stress and burnout.

Title Depressive symptomatology, presenteeism productivity, and quality of life: a moderated mediation model
Author/s Lopes, SL et al
Source Journal of occupational and environmental medicine April 2018 60 4 301–308 doi: 10.1097/JOM.0000000000001253

Abstract In this study, we intend to test if presenteeism productivity influences the relationship between depressive symptoms and quality of life and also if this relation is conditional upon levels of information processing speed. Data were collected from 231 participants who completed a neuropsychological test and self-reported measures. Results revealed a significant indirect effect and a significant moderation effect. The association between depressive symptoms and presenteeism productivity was moderated by information processing speed only in their medium and high levels. Our findings suggest that individuals with higher levels of processing speed may have more difficulty in focusing on work without being distracted by health problems. The present investigation has made a significant contribution to the existing literature about cognitive function and productivity in workers with depressive symptomatology and its effects on their quality of life.

Title The effects of confrontation and avoidance coping in response to workplace incivility
Author/s Hershcovis, M. Sandy
Source Journal of occupational health psychology April 2018 23 2 163-174 12 DOI: 10.1037/ocp0000078
Weblink

Interactive effects of work psychosocial factors on participation in workplace wellness programs

Ghesmaty Sangachin, Mahboobeh; Cavuoto, Lora A.


This study explored concurrent effects of six work psychosocial factors on current participation and the self-reported likelihood of future participation in workplace wellness programs using a cross-sectional survey, an ad hoc focus group, and structured interviews. Classification and regression tree analysis was used to analyze survey responses from 343 employees (194 nonparticipants, 95 participants, and 54 engaged participants). A thematic analysis of focus group (<i>n</i> = 7) and interview (<i>n</i> = 5) narratives was also undertaken. In combination with high work control, high superior support was associated with an engaged participant profile. Job demand was the third important variable with low and very high levels associated with participation. With regard to high likelihood of future participation, among respondents with age older than 50, high predictability of occupational activities and control were identified as a significant factor, and among others, high superior support and control. The analysis of narratives revealed peer relations and flexible working hours to be positively linked to participation and general job stress was identified as having a bidirectional relationship. Employees stated that stress led them to take advantage of these programs as a source of relief and that their availability/participation has contributed to lowering their stress. These findings inform practitioners about the importance of addressing poor psychosocial factors as a participation barrier and having a holistic approach to employee well-being.

Weblink

Psychosocial working conditions among high-skilled workers: a latent transition analysis.

Bujacz, Aleksandra et al

Journal of occupational health psychology April 2018 23 2 223-236 14 DOI: 10.1037/ocp0000087

Theories of psychosocial working conditions assume an interaction of different work environment characteristics. Most studies detail various aspects of such interactions, while fewer investigate the comprehensive patterns of interrelated variables. This exploratory study distinguishes patterns of psychosocial working conditions, describes their characteristics, and investigates their change over 6 years. The working conditions of 1,744 high-skilled workers in Sweden, of a representative sample of the working population, were empirically classified into 4 distinct patterns: (a) the Supporting pattern with a very low workload, very low time pressure, medium learning opportunities, high creativity requirements, and very high autonomy; (b) the Constraining pattern with a very low workload, very low time pressure, low
Weblink learning opportunities, medium creativity requirements, and very low autonomy; (c) the Demandning pattern with a high workload, high time pressure, medium learning opportunities, high creativity requirements, and very low autonomy; and (d) the Challenging pattern with a high workload, high time pressure, very high learning opportunities, very high creativity requirements, and very high autonomy. Importantly, these patterns were associated with significant differences in worker well-being. From an individual perspective, working conditions most often changed from patterns with a high workload and time pressure to patterns with lower levels of these demands. Over time, the prevalence of the Constraining pattern increased while that of the Challenging pattern decreased. To conclude, a person-centered approach broadens the understanding of the complex interplay between psychosocial working conditions and their longitudinal change, which can improve the tailoring of occupational health interventions.

Title Tailoring psychosocial risk assessment in the oil and gas industry by exploring specific and common psychosocial risks
Author/s Vestly, Bergh.Li
Source Safety and health at work March 2018 9 1 63-70 https://doi.org/10.1016/j.shaw.2017.05.001
Abstract Background Psychosocial risk management [Psychosocial Risk Management Approach (PRIMA)] has, through the years, been applied in several organizations in various industries and countries globally. PRIMA principles have also been translated into international frameworks, such as PRIMA-EF (European framework) and the World Health Organization Healthy Workplace Framework. Over the past 10 years, an oil and gas company has put efforts into adopting and implementing international frameworks and standards for psychosocial risk management. More specifically, the company uses a PRIMA. Methods This study explores available quantitative and qualitative risk data collected through the PRIMA method over the past 8 years in order to explore specific and common psychosocial risks in the petroleum industry. Results The analyses showed a significant correlation between job resources and symptoms of work-related stress, there was a significant correlation between job demands and symptoms of work-related stress, and there were differences in psychosocial risk factors and symptoms of work-related stress onshore and offshore. The study also offers recommendations on how the results can further be utilized in building a robust system for managing psychosocial risks in the industry. Conclusion The results from the analyses have provided meaningful and important information about the company-specific psychosocial risk factors and their impact on health and well-being.

Title Acceptance and barriers to access of occupational e-mental health: cross-sectional findings from a health-risk population of employees
Author/s Hennemann, S et al
Source International archives of occupational and environmental health April 2018 91 3 305-316 DOI:10.1007/s00420-017-1280-5
Abstract Purpose Occupational e-mental-health (OEMH) may extend existing instruments for preservation or restoration of health and work ability. As a key precondition to efficient implementation, this study examined acceptance and person-centered barriers to potential uptake of OEMH for work-related distress in employees with an elevated risk of early retirement. Methods Within the framework of the “Third German Sociomedical Panel of Employees”, 1829 employees with prior sickness absence payments filled out a self-administered questionnaire. Participants had a mean age of 49.93 years (SD = 4.06), 6.2% indicated prior
Weblink

use of eHealth interventions. Potential predictors of acceptance of OEMH were examined based on the “Unified Theory of Acceptance and Use of Technology” (UTAUT) extended by work ability, mental health, eHealth literacy and demographic characteristics. Results 89.1% \((n = 1579)\) showed low to moderate acceptance \((M = 2.20, SD = 1.05, \text{range 1–5})\). A path analysis revealed significant, positive direct effects of UTAUT predictors on acceptance (performance expectancy: \(0.48, SE = 0.02, p < 0.001\); effort expectancy: \(0.20, SE = 0.02, p < 0.001\); social influence: \(0.28, SE = 0.02, p < 0.001\)). Online time and frequency of online health information search were further positive direct predictors of acceptance. Model fit was good \(\chi^2(7) = 12.91, p = 0.07, \text{RMSEA} = 0.02, \text{CFI} = 1.00, \text{TLI} = 0.99, \text{SRMR} = 0.01\).

Conclusions Attitudes towards OEMH are rather disadvantageous in the studied risk group. Implementation of OEMH, therefore, requires a-priori education including promotion of awareness, favorable attitudes regarding efficacy and usability in a collaborative approach.

Title Cognitive work hardening for return to work following depression: an intervention study

Author/s Wisenthal, A et al

Source Canadian journal of occupational therapy 2018 85 1 DOI:10.1177/0008417417733275

Abstract Background. Work absences due to depression are prevalent; however, few interventions exist to address the return-to-work challenges following a depressive episode. Purpose. This mixed-methods study aimed to (a) evaluate the effectiveness of cognitive work hardening in preparing people with depression to return to work and (b) identify key elements of the intervention. Method. A single group \((n = 21)\) pretest-posttest study design was used incorporating self-report measures (Work Ability Index, Multidimensional Assessment of Fatigue, Beck Depression Inventory II) with interviews at intervention completion and at 3-month follow-up. Descriptive statistics, paired-samples t test, and content analysis were used to analyze the data. Findings. Work ability, fatigue, and depression severity significantly improved postintervention. Participants identified structure, work simulations, realism of simulated work environment, support, and education as key intervention elements. Implications. Findings underscore an occupationally focused return-to-work intervention for people recovering from depression with potential for wider adoption and future research.

Title Trajectories of job demands and control: risk for subsequent symptoms of major depression in the nationally representative Swedish Longitudinal Occupational Survey of Health (SLOSH)

Author/s Ahlin, JK et al

Source International archives of occupational and environmental health April 2018 91 3 DOI:10.1007/s00420-017-1277-0

Abstract Purpose: Depression is a global health concern. High job demands, low job control, and the combination (high strain) are associated with depression. However, few longitudinal studies have investigated changed or repeated exposure to demands and control related to depression. We investigated how trajectories of exposure to job demands and control jointly influence subsequent depression. Methods We included 7949 subjects from the Swedish Longitudinal Occupational Survey of Health, who completed questionnaires of perceived job demands and control, and depressive symptoms from 2006 to 2014. None of them were depressed between 2006 and 2012. Univariate and joint group-based trajectory models identified groups with similar development of demands and control across 2006–2012. Logistic regression estimated the risk for symptoms of major depression in 2014 according to joint trajectory groups. Results The joint trajectory model included seven groups, all with fairly stable levels of demands and control over time. Subjects in the high strain and active (high demands and high control) trajectories were significantly more likely to have subsequent major depressive
symptoms compared to those having low strain, controlling for demographic covariates (OR 2.15; 95% CI 1.24–3.74 and OR 2.04; 95% CI 1.23–3.40, respectively). The associations did not remain statistically significant after adjusting for previous depressive symptoms in addition to demographic covariates.

Conclusions The results indicate that the levels of job demands and control were relatively unchanged across 6 years and suggest that long-term exposure to a high strain or active job may be associated with increased risk for subsequent depression.
nominated ‘RTW planning/Suitable duties programs’ (40.5%; 42.9%; 80%).

Conclusions: Stakeholders perceived similar barriers for RTW but recommended different strategies. Stakeholders appeared to be more proficient in identifying barriers than recommending strategies. Future research should focus on tools to both identify RTW barriers and direct intervention.

RETURN TO WORK

Title Supporting return to work through appropriate certification: a systematic approach for Australian primary care
Author/s Papagoras, Harry et al
Source Australian health review 2018 42 2 164-167 4 DOI: 10.1071/AH16247
Abstract Primary care practitioners play a critical role in supporting return to work (RTW) and minimising the detrimental physical and psychosocial sequelae of unnecessary and prolonged work absence in injured and ill workers. Accurate and consistent certification of capacity is an essential component of this role that has been scrutinised recently given the identified variation in certification practices between and within professions. This Perspective outlines the importance of correct certification of capacity for injured workers and provides a RTW flowchart to support systematised and appropriate certification. The flowchart is aimed at primary care practitioners (e.g. general practitioners or physiotherapists). The flow chart was developed at the Transport Accident Commission and WorkSafe Victoria as a guide for Australian primary care practitioners when certifying capacity. A more systematised approach to certification coupled with professional education and support may reduce variations and inaccuracies in certification, improve RTW rates and reduce the increasing burden of disease related to workplace injuries.

Title Identifying return-to-work trajectories using sequence analysis in a cohort of workers with work-related musculoskeletal disorders
Author/s McLeod, CB et al
Source Scand j work environ health 2018 44 2 147-155 doi:10.5271/sjweh.3701
Abstract Objectives This study aimed to identify return-to-work (RTW) trajectories among workers with work-related musculoskeletal disorders (MSD) and examine the associations between different MSD and these RTW trajectories.
Methods We used administrative workers’ compensation data to identify accepted MSD lost-time claims with an injury date between 2010–2012 in British Columbia, Canada. Cox regression analyses were used to investigate differences in time to RTW between MSD. Validated day-to-day calendar measures of four RTW states (sickness absence, modified RTW, RTW, and non-RTW) were grouped into RTW trajectories spanning a one-year period using sequence analysis. RTW trajectories were clustered using decision rules that identified a shared trajectory structure. Poisson regression with robust standard errors was used to estimate relative risk ratios (RR) with 95% confidence intervals (CI) between MSD and RTW trajectory clusters.
Results In a cohort of 81 062 claims, 2132 unique RTW trajectories were identified and clustered into nine RTW trajectory clusters. Half of the workers sustainably returned to work within one month. Workers with back strains were most likely to have trajectories characterized by early sustained RTW, while workers with fractures or dislocations were more likely to have prolonged sickness absence trajectories (RR 4.9–9.9) or non-RTW trajectories (RR 1.4–7.6).
Conclusion This is the first study that has characterized different types of RTW trajectories of workers with MSD using sequence analysis. The application of sequence analysis and the
identification of RTW trajectories yielded a number of key insights not found using conventional cox regression analysis.

**Abstract**

**Background:** Many people who are blind or visually impaired face difficulties with transportation due to their inability to drive. Accordingly, transportation is widely considered a barrier to employment for people who are blind or visually impaired, and transportation self-efficacy is a factor that may minimize the impact of this barrier.

**Objective:** The aim of this study was to examine transportation self-efficacy and its association with employment among working-age adults with visual impairments who were non-drivers.

**Method:** This study included data from 327 people who participated in a national transportation survey of individuals with visual impairments. A multiple logistic regression analysis was conducted to predict full-time employment based on transportation self-efficacy and other factors.

**Results:** Factors predicting full-time employment included census region, severity of vision loss, and years of education. Interaction effects indicated that odds of employment generally increased as transportation self-efficacy increased; however, the effect of self-efficacy was dependent upon age and age at onset of visual impairment.

**Conclusions:** Transportation self-efficacy was an important predictor of employment, particularly for younger people and for those who experienced significant vision loss more recently. Vocational rehabilitation counselors and other service providers can provide support to consumers to increase their transportation self-efficacy.
encourage the hiring of people who are blind or visually impaired. Going beyond initial contacts to developing relationships is important.

**Weblink**

**Title**  
Vocational rehabilitation and self-employment of people with disabilities: factors of successful outcomes

**Source**  
*Journal of vocational rehabilitation* 48 2 269-283 2018 DOI: 10.3233/JVR-180937

**Abstract**  
Background: Many people with disabilities gain and retain paid employment through vocational rehabilitation (VR) services. Some empirical research has indicated that self-employment can be a viable employment option for people with disabilities. Objective: We examined factors of successful self-employment of people with disabilities who had received vocational rehabilitation (VR) services across a recent five-year span. Methods: We analyzed extant federal VR data from 2008 to 2012 from the Rehabilitation Services Administration using a special type of Structural Equation Modeling (SEM) technique known as the Multiple Indicators Multiple Causes (MIMIC) modeling to conduct validation and invariance testing. … Results: The national model produced reasonable fit, but there was some regional misfit in the invariance models. These results were similar to those from another similar study that used MIMIC modeling on earlier federal VR data from the RSA. Conclusions: The generalizability of the MIMIC models in this study is limited; no causal inferences were or should be drawn. Using these results, further research should examine modification indices and test alternative MIMIC models of VR self-employment. Implications of this study for VR and policymakers and recommendations include changes to service provision for clients and greater flexibility in supporting self-employment based on individualization.

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**RETURN TO TOP**

**WORK ABILITY**

**Title**  
Workplace interventions to improve work ability: a systematic review and meta-analysis of their effectiveness

**Author/s**  
Oakman, J et al

**Source**  
*Scandinavian journal of work & environmental health* 2018 44 2 134-146 doi:10.5271/sjweh.3685

**Abstract**  
Objective: Extended working lives due to an ageing population will necessitate the maintenance of work ability across the life course. This systematic review aimed to analyze whether workplace interventions positively impact work ability. Methods: We searched Medline, PsycINFO, CINAHL and Embase databases using relevant terms. Work-based interventions were those focused on individuals, the workplace, or multilevel (combination). Work ability – measured using the work ability index (WAI) or the single-item work ability score (WAS) – was the outcome measure. Grading of Recommendations Assessment, Development & Evaluation (GRADE) criteria was used to assess evidence quality, and impact statements were developed to synthesize the results. Meta-analysis was undertaken where appropriate. Results: We reviewed 17 randomized control trials (comprising 22 articles). Multilevel interventions (N=5) included changes to work arrangements and liaisons with supervisors, whilst individual-focused interventions (N=12) involved behavior change or exercise programs. We identified only evidence of a moderate quality for either individual or multilevel interventions aiming to improve work ability. The meta-analysis of 13 studies found a small positive significant effect for interventions on work ability [overall pooled mean 0.12, 95%
confidence interval (CI) 0.03–0.21] with no heterogeneity for the effect size (Chi$^2$=11.28, $P=0.51$; $I^2=0\%$).

Conclusions The meta-analysis showed a small positive effect, suggesting that workplace interventions might improve work ability. However, the quality of the evidence base was only moderate, precluding any firm conclusion. Further high quality studies are require to establish the role of interventions on work ability.

**WORK HEALTH AND SAFETY**

**Title**

Identifying and characterising the physical demands for an Australian specialist policing unit

**Author/s**

Silk, Aaron et al

**Source**

*Applied ergonomics* April 2018 68 197-203 7 [https://doi.org/10.1016/j.apergo.2017.11.012](https://doi.org/10.1016/j.apergo.2017.11.012)

**Abstract**

Many police organisations incorporate specialist policing roles where incumbents are tasked with providing operational response capabilities above and beyond the general duties policing role. The current research utilised subjective job task analysis methods to identify and characterise the physically demanding, frequently occurring, and operationally important tasks, as well as the dominant fitness component for each task, inherent to specialist policing roles in an Australian policing organisation. This was achieved through engagement with subject matter experts and online survey responses from specialist police incumbents. In total, 11 criterion tasks were identified, which covered a range of physical capacities including muscular strength, muscular endurance, and aerobic power. The most physically demanding tasks included those with an arrest component, requiring high muscular strength and power capacities. Having identified the criterion tasks, three operational scenarios were constructed, which incorporated each of the 11 tasks in different operational contexts. The criterion tasks and composite scenarios will allow practitioners within specialised police units to develop evidence-based strategies, including physical selection procedures and physical training programs, specific to the demands of their work.

**Title**

The Low-event task subjective situation awareness (LETSSA) technique: development and evaluation of a new subjective measure of situation awareness

**Author/s**

Rose, Janette; Bearman, Chris; Dorrian, Jillian

**Source**


**Abstract**

Situation awareness (SA) is an important component of an individual's ability to function in a complex environment. As such, it is essential to have effective measures of an individual's SA. The most widely used subjective measure of SA is the Situation Awareness Rating Technique [SART]. However, SART has been criticised for not predicting performance or objective SA, and being highly correlated with workload. This paper describes the development and testing of a new subjective measure of SA, the Low-Event Task Subjective Situation Awareness (LETSSA) measure. To evaluate LETSSA a train simulator study was conducted with 23 novice and 26 expert freight train drivers. LETSSA was able to detect differences in manipulated SA and was comparable to an established objective SA measure (SAGAT). LETSSA was significantly associated with performance but not significantly associated with workload. While further validation is required, LETSSA shows promise as an effective subjective measure of SA.

**Title**

Too hot to carry on? disinclination to persist at a task in a warm office environment
**Syndicaus, M Wiese, M BS van Treeck, C**

**Ergonomics** April 2018 61 4 476-481 https://doi.org/10.1080/00140139.2017.1353141

**Abstract**
We investigated the effect of an elevated ambient temperature on performance in a persistence task. The task involved the coding of incorrect symbols and participants were free to decide how long to spend performing this task. Applying a between-subject design, we tested 125 students in an office-like environment in one of the three temperature conditions. The comfort condition (Predicted Mean Vote [PMV] = 0.01) featured an average air temperature of 24 °C. The elevated ambient temperature condition was 28 °C (PMV = 1.17). Condition three employed an airstream of approximately 0.8 m/s, intended to compensate for performance decrements at the elevated air temperature (28 °C, PMV = 0.13), according to Fanger’s thermal comfort equation. Participants in the warm condition were significantly less persistent compared with participants in the control and compensation conditions. As predicted by the thermal comfort equation, the airstream seemed to compensate for the higher temperature. Participants’ persistence in the compensation and comfort conditions did not differ.

**Practitioner Summary:** A laboratory experiment involving a simulated office environment and three ambient temperature conditions (24 °C, 28 °C and 28 °C plus airstream) showed that persistence at a task is significantly impaired at 28 °C. An airstream of 0.8 m/s at 28 °C compensated for the disinclination to persist with the task.

**Back to the future: what do accident causation models tell us about accident prediction?**

**Grant, Eryn**

**Safety science** April 2018 104 99-109 11 DOI: 10.1016/j.ssci.2017.12.018

**Abstract**
The prediction of accidents, or systems failure, should be driven by an appropriate accident causation model. Whilst various models exist, none is yet universally accepted, but elements of different models are. The paper presents the findings from a review of the most frequently cited systems based accident causation models to extract a common set of systems thinking tenets that could support the prediction of accidents. The review uses the term “systems thinking tenet” to describe a set of principle beliefs about accidents causation found in models proposed by Jens Rasmussen, Erik Hollnagel, Charles Perrow, Nancy Leveson and Sidney Dekker. Twenty-seven common systems thinking tenets were identified. To evaluate and synthesise the tenets, a workshop was conducted with subject matter experts in accident analysis, accident causation, and systems thinking. The evaluation revealed that, to support accident prediction, the tenets required both safe and unsafe properties to capture the influences underpinning systematic weaknesses. The review also shows that, despite the diversity in the models there is considerable agreement regarding the core tenets of system safety and accident causation. It is recommended that future research involves applying and testing the tenets for the extent to which they can predict accidents in complex systems.

**Comorbidity of airway inflammatory diseases in chemical and building-related intolerance**

**Cleeson, A-S et al**

**Journal of occupational and environmental medicine** April 2018 60 4 295–300 doi: 10.1097/JOM.0000000000001249

**Abstract**
Objectives: This study investigated comorbidity in chemical intolerance (CI) and building-related intolerance (BRI) with (i) chronic sinusitis, chronic obstructive pulmonary disease, allergic and nonallergic asthma and allergic rhinitis, and (ii) airway inflammatory symptoms. Methods: Data from two population-based questionnaire surveys, the Västerbotten and Österbotten Environmental Health Studies, were used. The participants were categorized as CI or BRI and referents, and binary logistic regression analysis was applied.
Results: Prevalence rates for the case groups were 7.2% to 40.0% for diseases and 24.3% to 68.9% for symptoms, whereas adjusted odds ratios (ORs) were 3.4 to 26.1 for diseases and 3.3 to 17.0 for symptoms, all being significantly higher than unity. Prevalence rates and ORs were in general higher in BRI than in CI.

Conclusion: Inflammatory airway diseases and symptoms are associated with CI and BRI, which encourages further research regarding underlying mechanisms and treatments.
**Title**

3-(Bromomethyl)-2-chloro-4-(methylsulfonyl)-benzoic acid: a new cause of sensitiser induced occupational asthma, rhinitis and urticaria

**Author/s** Suojalehto, H et al

**Source** Occupational & environmental medicine April 2018 75 4 http://dx.doi.org/10.1136/oemed-2017-104505

**Abstract**

Objectives 3-(Bromomethyl)-2-chloro-4-(methylsulfonyl)-benzoic acid (BCMBA) has not previously been identified as a respiratory sensitiser. We detected two cases who presented respiratory and urticaria symptoms related to BCMBA and had positive skin prick tests to the agent. Subsequently, we conducted outbreak investigations at the BCMBA-producing factory and performed clinical examinations to confirm occupational diseases.

Methods The outbreak investigations included observations of work processes, assessment of exposure, a medical survey with a questionnaire and skin prick tests with 0.5% BCMBA water solution on 85 exposed workers and 9 unexposed workers. We used specific inhalation or nasal challenge and open skin application test to investigate BCMBA-related occupational asthma, rhinitis and contact urticaria.

Results We identified nine workers with respiratory and/or skin symptoms and positive skin prick tests to BCMBA in a chemical factory. A survey among chemical factory workers indicated a BCMBA-related sensitisation rate of 8% among all exposed workers; the rate was highest (25%) among production workers in the production hall. Sensitisation was detected only in workers with the estimated highest exposure levels. Six cases of occupational asthma, rhinitis and/or contact urticaria caused by BCMBA were confirmed with challenge tests.

Asthma-provoking doses in specific inhalation challenges were very low (0.03% or 0.3% BCMBA in lactose).

Conclusions We identified a new low molecular weight agent causing occupational asthma, rhinitis and contact urticaria. A typical clinical picture of allergic diseases and positive skin prick tests suggest underlying IgE-mediated disease mechanisms. Stringent exposure control measures are needed in order to prevent BCMBA-related diseases.

**Weblink**

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**Title**


**Author/s** Kullberg, C

**Source** International archives of occupational and environmental health April 2018 91 3 285-291 DOI:10.1007/s00420-017-1276-1

**Abstract**

Objectives Previous studies on firefighters indicate an increased risk of cancer although findings regarding which cancer sites are in excess have been inconsistent. The aim of this study was to investigate the cancer incidence among Swedish firefighters.

Methods This updated cohort study included 1080 men who worked at least 1 year as a firefighter in the city of Stockholm, Sweden during 1931–1983. First-time diagnoses of cancer were identified through the Swedish Cancer Registry from 1958 until 2012. Employment as a firefighter was determined from the annual fire station enrolment records. Standardized incidence ratios were calculated using the Stockholm population as reference.

Results Firefighters in Stockholm had a low overall risk of cancer (SIR = 0.81 95% CI 0.71–0.91). However, firefighters were at an increased risk of stomach cancer (SIR = 1.89 95% CI 1.25–2.75). Firefighters had significantly low risks for prostate cancer (SIR = 0.68 95% CI 0.52–0.87) and malignant melanoma of the skin (SIR = 0.30 95% CI 0.06–0.88). There was a statistically significant trend of increasing overall risk of cancer with increasing employment duration, although there was still no excess of cancer overall in any of the categories of employment duration.

Conclusion Stockholm firefighters had an increased risk of stomach cancer but a low overall
risk of cancer. The trend of increasing overall risk of cancer with increasing employment duration could potentially be related to the carcinogenic exposures at work.

Title Hearing loss among older construction workers: updated analyses
Author/s Dement, J et al
Source American journal of industrial medicine April 2018 61 4 326-335 DOI:10.1002/ajim.22827

Abstract Background A prior study of this construction worker population found significant noise-associated hearing loss. This follow-up study included a much larger study population and consideration of additional risk factors. Methods Data included audiometry, clinical chemistry, personal history, and work history. Qualitative exposure metrics for noise and solvents were developed. Analyses compared construction workers to an internal reference group with lower exposures and an external worker population with low noise exposure. Results Among participants (n = 19 127) an overall prevalence of hearing loss of 58% was observed, with significantly increased prevalence across all construction trades. Construction workers had significantly increased risk of hearing loss compared to reference populations, with increasing risk by work duration. Noise exposure, solvent exposure, hypertension, and smoking were significant risk factors in multivariate models. Conclusions Results support a causal relationship between construction trades work and hearing loss. Prevention should focus on reducing exposure to noise, solvents, and cigarette smoke.

Title A system dynamic view of a behavior-based safety program in the construction industry
Author/s Guo, Brian H.W.; Goh, Yang Miang; Le Xin Wong, Karen
Source Safety science April 2018104 202-215 14 https://doi.org/10.1016/j.ssci.2018.01.014

Abstract Behavior-based safety (BBS) has received significant attention in the construction industry during the past decades. Ample evidence suggests that BBS is an effective accident prevention strategy. Past BBS literature is dominated by successful case studies, while unsuccessful cases and cases with mixed effectiveness in reducing unsafe behavior are limited. This paper reports a BBS program designed and implemented in the Singapore construction industry. The BBS program was aimed at reducing unsafe behavior in nine categories: lifting operations, excavation, working at height, work platform & access, manual handling, hot work (welding/gas cutting), plant & equipment, traffic management, and personal protective equipment (PPE). It consists of traditional BBS elements such as baseline observations, feedback, goal setting, and interventions. In contrast to other successful applications, the BBS program produced mixed results of safety behavior over 36 weeks. This paper adopts a system dynamics view to explain the mixed effectiveness. Causal loop diagrams were developed to capture behavior change mechanisms underpinned by reinforcement theory and goal setting theory, as well as dynamic effects of contextual and cognitive factors. It is concluded that the mixed effectiveness can be attributed to three main issues: dynamics of goal commitment, punishment, and monetary incentive. This paper adds to the body of knowledge of behavior safety program in terms of theoretical basis and implementation. By reviewing the BBS program holistically and reflecting upon the details of the case study, this paper offers lessons and reference for future design and implementation of BBS program in the construction industry.

Title New and emerging risks of chemical carcinogens: detection and prevention
Author/s Palmen, NGM Lenderink, AF Godderis, L
Cancer is a major cause of death worldwide and there are many efforts to tackle it. Occupational cancer is a cancer caused fully or partially by exposure to a cancer-causing agent at work. It has been estimated that 8% of all cancers are caused by exposure to carcinogens in the workplace. Using the cancer incidence numbers in the EU-27, this means that there are about 122000 new cancer cases in the EU each year caused by occupational exposure [1]. This number is very likely to be an underestimate because of the long latency of cancer, and difficulties in establishing a causal relationship between occupational exposure and cancer. On the other hand, millions of EU workers are currently exposed to thousands of (process generated) substances and mixtures for which a detailed risk assessment of their carcinogenic properties is not available [2,3]. Occupational cancer can be prevented by limiting exposure to zero. Since limiting exposure will reduce the number of cases in the long run, it is worth focusing on this by timely understanding the risks and developing measures to control them. In the European Environment Agency report Late Lessons From Early Warnings [4], a selection of occupational, public health and environmental emerging risks were evaluated. One of their main conclusions was that there is a lack of institutional and other mechanisms to respond to early warning signals. The report shows that by ignoring early warnings by businesses, and manufacturing doubt about the science supporting such warnings, costs are transferred to society. Reducing the delay between early warnings and actions is one of their main recommendations.

Safety leadership: what does it take to be world class in safety?
Groover, D Spigener, J
Work + health April 2018

Despite years of research on the topic, there is no single answer to what defines a world-class safety organization. However, after 50 years of combined experience in consulting on safety to some of the largest, more admired, most profitable and most “safety serious” organizations in the world, we have identified four principles – or pillars – that we believe define world-class safety.

Healthcare providers’ experience with the management of mental health conditions in the context of Workers’ Compensation
Schnitzler, L Kosny, A Lifshen, M
Work 59 3 449–462 2018 DOI: 10.3233/WOR-182695

Background: Little is known about how healthcare providers (HCPs) in Canada manage mental health claims and the return to work (RTW) of injured workers

Objective: To examine HCPs’ experience and challenges on the treatment of mental health conditions (MHCs) in the context of Workers’ Compensation (WC) processes and their involvement in RTW.

Methods: Ninety-seven interviews with HCPs (general practitioners, n = 59; allied HCPs, n = 19; specialists, n = 19) were conducted in British Columbia, Manitoba, Ontario and Newfoundland. A thematic content analysis was used to analyze interviews.

Results: HCPs reported that while RTW is extolled … at virtually all costs by WC boards, they did not always see it as beneficial. Most HCPs were convinced that successful recovery and RTW depend on being aware of how mental and physical health is intertwined and treating both issues. Organizational barriers within WC processes and adversarial relationships between injured workers (IWs) and WC boards made it difficult for HCPs to adequately treat
patients and facilitate RTW. Dealing with IWs’ MHCs and their emotional distress due to ‘going through WC systems’ was challenging.

Conclusions: WC boards must identify how policies can be modified to mitigate compensation processes and RTW for WC claimants with MHC.

WORK STRESS

Title Participatory work place intervention for stress prevention in primary health care. a randomized controlled trial.

Author/s Arapovic-Johansson, Bozana et al

Source European journal of work & organizational psychology April 2018 27 2 219-234 16

Abstract The aim of this study is to explore whether a participatory, organizational intervention can reduce work-related risk factors, and thereby prevent stress-related ill health. We build on the job demand-control and effort-reward imbalance models of stress. It is a two-armed randomized trial, with one primary health care unit receiving the intervention and a two-unit control group. Validated questionnaires for the assessment of psychosocial work environment and health were administered, at the baseline and at 6 and 12-month follow up. The primary outcome was job strain. Secondary outcomes were effort-reward imbalance, exhaustion, sleep, and recovery. Group-level objective data on workload and data about relevant processes during the study were continuously collected. The changes in the intervention group regarding job strain, effort-reward imbalance, exhaustion, sleep and recovery were not statistically different from changes in the control group. For the non-exhausted employees though, reward was significantly higher at follow up compared to baseline, but only in the intervention group. An important piece of information is that the objective workload was statistically significantly higher in the intervention group throughout the study. Not all the components of the intervention were implemented as intended. Context and process information, such as objective data and implementation fidelity are necessary for a valid interpretation of the results

Title Do resources buffer the prospective association of psychosocial work stress with depression? longitudinal evidence from ageing workers

Author/s Lunau, T et al

Source Scandinavian journal of work & environmental health 2018 44 2 183-191 DOI:10.5271/sjweh.3694

Abstract Objectives There is now convincing evidence that psychosocial work stressors are linked to depression. Few studies, however, have tested if individual resources can buffer the longitudinal effects of psychosocial work stressors on depressive symptoms. This study investigates how two types of resources (internal and external resources) affect the association between psychosocial work stressors and depressive symptoms. Methods Data were obtained from the US Health and Retirement Study, with baseline information on psychosocial work stressors (job strain and effort–reward imbalance (ERI)) and on internal ("high mastery" and "low constraints") and external resources ("private social support") among initially healthy workers. This information was linked to elevated depressive symptoms two years later. The sample includes 5473 observations and we report relative risks (RR) and effect modification on the additive and multiplicative scale. Results Psychosocial stressors and low resources (internal and external) were both independently related to depressive symptoms. Individuals with both, psychosocial stressors and low resources, had the highest risk of developing elevated depressive symptoms (eg, RRJobStrain-LowMastery 3.32, 95% CI 2.49–4.42; RRJobStrain-LowMastery 2.89, 95% CI 2.18–
Weblink

3.84). Yet, based on interaction analyses, only social support from friends buffered the association between work stressors and depressive symptoms.

Conclusions Our findings have demonstrated that psychosocial stressors at work are related to mental health, and that in most cases this relationship holds true both for people with high and low resources. Therefore, there is no clear indication that internal or external resources buffer the association between psychosocial work stressors and depressive symptoms.

Title A health economic outcome evaluation of an internet-based mobile-supported stress management intervention for employees
Abstract Objective This study aimed to estimate and evaluate the cost-effectiveness and cost-benefit of a guided internet- and mobile-supported occupational stress-management intervention (iSMI) for employees from the employer’s perspective alongside a randomized controlled trial. Methods A sample of 264 employees with elevated symptoms of perceived stress (Perceived Stress Scale, PSS-10 ≥22) was randomly assigned either to the iSMI or a waitlist control (WLC) group with unrestricted access to treatment as usual. The iSMI consisted of seven sessions of problem-solving and emotion-regulation techniques and one booster session. Self-report data on symptoms of perceived stress and economic data were assessed at baseline, and at six months following randomization. A cost-benefit analysis (CBA) and a cost-effectiveness analysis (CEA) with symptom-free status as the main outcome from the employer’s perspective was carried out. Statistical uncertainty was estimated using bootstrapping (N=5000) Results The CBA yielded a net-benefit of EUR181 [95% confidence interval (CI) -6043–1042] per participant within the first six months following randomization. CEA showed that at a willingness-to-pay ceiling of EUR0, EUR1000, EUR2000 for one additional symptom free employee yielded a 67%, 90%, and 98% probability, respectively, of the intervention being cost-effective compared to the WLC. Conclusion The iSMI was cost-effective when compared to WLC and even lead to cost savings within the first six months after randomization. Offering stress-management interventions can present good value for money in occupational healthcare

Title Illegitimate tasks reach into afterwork hours: a multilevel
Author/s Sonnentag, Sabine; Lischetzke, Tanja.
Source Journal of occupational health psychology April 2018 23 2 248-261 14 DOI: 10.1037/ocp0000077
Abstract This study examines illegitimate tasks as a specific type of job stressors. Illegitimate tasks comprise unreasonable and unnecessary tasks and refer to inappropriate task assignments that go beyond an employee’s role requirements. Building on the stressor-detachment model, we hypothesized that illegitimate tasks experienced during the day predict high negative affect and low self-esteem at the end of the workday, which in turn should predict poor psychological detachment from work during evening hours, resulting in sustained high levels of negative affect and low self-esteem at bedtime. Over the course of 1 workweek, 137 employees completed daily surveys at the end of the workday and at bedtime (total of 567 days). Multilevel path modeling revealed a distinct pattern of findings at the day and the person level. At the day level, unnecessary tasks predicted high negative affect and low self-esteem at the end of the workday, with low self-esteem predicting a further increase in negative affect and a decrease in self-esteem over evening hours. At the between-person level, unreasonable tasks were related to high negative affect and low self-esteem at the end of the workday, with negative affect being related to poor psychological detachment from work. Overall, the findings demonstrate that illegitimate tasks are associated
with unfavorable states at the end of the workday and are indirectly related to poor psychological detachment from work, undermining recovery from the stressful events experienced at work.

**Title**
Job support, coping, and control: assessment of simultaneous impacts within the occupational stress process

**Author/s**
Brough, Paula; Drummond, Suzie; Biggs, Amanda.

**Source**
*Journal of occupational health psychology* April 2018 23 2 188-197 10 DOI: 10.1037/ocp0000074

**Abstract**
The assessment of occupational stress is marred by an overwhelming adoption of simplistic research designs that generally fail to represent the complex reality of the occupational stress process. Informed by the theoretical tenants of both the transactional stress model and the job-demands-control-support model, this paper presents a rare simultaneous assessment of how two types of job demands (cognitive and emotional) are both moderated by job control and social support and mediated by coping for the prediction of work engagement and psychological strain over time. Self-report surveys were administered twice over 12 months to a sample of police-service workers and moderated mediation analyses were conducted on the matched sample of N = 2,481 respondents. The results offer support for the process of occupational stress by demonstrating how both accommodation and avoidance coping mediate the job-demands-outcome relationship over time. The results also demonstrate that this stress-coping-strain process is simultaneously moderated by job support or job control. We found it interesting that this research also demonstrated that the estimation of work engagement was not unduly influenced by the type of job demands these police employees were exposed to.

**Title**
Psychosocial job stressors and suicidality: a meta-analysis and systematic review

**Author/s**
Milner, A et al

**Source**
*Occupational & environmental medicine* April 2018 75 4 http://dx.doi.org/10.1136/oemed-2017-104531

**Abstract**
Objectives Job stressors are known determinants of common mental disorders. Over the past 10 years, there has been evidence that job stressors may also be risk factors for suicidality. The current paper sought to examine this topic through the first comprehensive systematic review and meta-analysis of the literature to date.

Methods We used a three-tier search strategy of seven electronic databases. Studies were included if they reported on a job stressor or job-related stress as an exposure and suicide ideation, self-harm, suicide attempt or suicide as an outcome. Two researchers independently screened articles. All extracted effect estimates were converted to log-transformed ORs.

Results There were 22 studies that were included in meta-analysis. Overall, exposure to job stressors was associated with elevated risk of suicide ideation and behaviours. The OR for suicide ideation (14 studies) ranged from 1.45 (95% CI 1.01 to 2.08) for poor supervisor and colleague support to 1.91 (95% CI 1.22 to 2.99) for job insecurity. For suicide (six studies), exposure to lower supervisor and collegial support produced an OR of 1.16 (95% CI 0.98 to 1.38), while low job control resulted in an OR of 1.23 (95% CI 1.00 to 1.50). There were only two studies that examined suicide attempt, both of which suggested an adverse effect of exposure to job stressors.

Conclusions This study provides some evidence that job stressors may be related to suicidal outcomes. However, as most studies in the area were cross-sectional and observational in design, there is a need for longitudinal research to assess the robustness of observed associations.
Title: Psychosocial job stressors and suicidality: can stress at work lead to suicide?

Author/s: Virtanen, M

Source: Occupational & environmental medicine April 2018 75 4 commentary

Abstract: Approximately 800,000 people die due to suicide every year and the number of suicide attempts is more than 20 times higher. This leads to millions of people to be affected or experience suicide bereavement every year. In young people aged 15–29 years, suicide is the second leading cause of death. Suicide occurs throughout the lifespan; suicide accounted for 1.4% of all deaths worldwide, making it the 17th leading cause of death in 2015. Suicide accounts for the largest share of the intentional injury burden in developed countries and it is projected to become an even greater contributor to the global burden of disease.

Preventable risk factors of suicide include mental disorders, such as mood, impulse control and substance use disorders, as well as psychological factors such as feelings of hopelessness, anhedonia and impulsiveness. Stressful events, such as family and romantic conflicts, legal problems and job loss often precede suicidal behaviour, and persistent stress among some occupations, for example, physicians, military personnel and police officers, has been suggested to contribute to increased risk of suicide in those occupations.

Title: Should you switch off or stay engaged? the consequences of thinking about work on the trajectory of psychological well-being over time

Author/s: Firoozabadi, Abbas; Uitdewilligen, Sjir; Zijlstra, Fred R. H.

Source: Journal of occupational health psychology April 2018 23 2 278-288 11 DOI: 10.1037/ocp0000068

Abstract: This study examined how 2 different ways of being mentally engaged with work-related issues during evenings (affective rumination and problem-solving pondering) cause changes in psychological well-being over a 1-year period. We conducted a 3-wave longitudinal study with a time lag of 6 months between each wave. At the first measurement moment, participants filled out a survey over 5 consecutive working days assessing work-related affective rumination and problem-solving pondering during evenings. Exhaustion and health complaints were assessed at the first measurement moment as well as after 6 and 12 months. The 3 waves of data obtained from a total of 123 participants with full-time and primarily mentally demanding jobs were analyzed using latent growth curve modeling (LGM). The results showed that affective rumination is a significant predictor of increase in exhaustion over time. Problem-solving pondering was not found to be a significant predictor of change in psychological well-being over time. These findings demonstrate that work-related rumination during evenings may lead to health problems over time depending on the type of rumination. It suggests that unlike affective rumination, problem-solving pondering during evenings has no influence on psychological well-being over time.

Title: Validating the demand control support questionnaire among white-collar employees in Switzerland and the United States

Author/s: Mauss, Daniel et al

Source: Journal of occupational medicine & toxicology February 2018 13 1-1. 1 4 DOI: 10.1186/s12995-018

Abstract: Background: The Demand Control Support Questionnaire (DCSQ) is an established self-reported tool to measure a stressful work environment. Validated German and English versions are however currently missing. The aim of this study was therefore to evaluate the psychometric properties of German and English versions of the DCSQ among white-collar
employees in Switzerland and the US. Methods: This cross-sectional study was carried out on 499 employees in Switzerland and 411 in the US, respectively. The 17-item DCSQ with three scales assessed psychosocial stress at work (psychological demands, decision latitude, and social support at work). Depressive symptoms were measured by the 2-item Patient Health Questionnaire. Cronbach’s α and item-total correlations tested the scale reliability (internal consistency). Construct validity of the questionnaire was examined using exploratory factor analysis (EFA). Logistic regressions estimated associations of each scale and job strain with depressive symptoms (criterion validity). Results: In both samples, all DCSQ scales presented satisfactory internal consistency (Cronbach’s α ≥ 0.72; item-total correlations ≥ 0.33), and EFA showed the 17 items loading on three factors, which is in line with the theoretically assumed structure of the DCSQ construct. Moreover, all three scales as well as high job strain were significantly associated with depressive symptoms. The associations were stronger in the US sample. Conclusions: The German and the English versions of the DCSQ seem to be reliable and valid instruments to measure psychosocial stress based on the job demand-control-support model in the workplace of white-collar employees in Switzerland and the US.