



Emerging Evidence Alert February 2019

This Emerging Evidence Alert supports Comcare's strategic focus of working with employees and employers to minimise the impact of harm in the workplace, improve recovery at and return to work, and promote the health benefits of work through good work design. It also provides the latest research evidence to support Comcare's Strategic Research and Innovation group's five areas of importance to Comcare's strategic direction.

- Enabling healthy and safe workplaces
- Enhancing employer capability
- Guiding and supporting mental health
- Fostering work participation
- Adapting to the future of work

The following topics support these areas of strategic importance.

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.

Emerging Evidence Topics

- [Absenteeism and presenteeism](#)
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BEHAVIOURAL ECONOMICS

This month's theme reflects the importance of Behavioural Economics in considering change. Behavioural economics studies the social, cognitive and emotional behaviour of individuals and institutions, and suggests that subtle changes to the way decisions are framed and conveyed can have big impacts on behaviour. Research and evidence in this field tell us that individuals are often more rational in economic theory than they are in the real world, and there is often a gap between what people intend to do and what they actually end up doing. This is why it is important to put real human behavioural at the centre of policy and program design.

The paper, [Applying behavioral economics insights at the workplace](#), used workplace interventions based on reminders, default nudges, implementation intentions and priming to help policymakers improve individual and societal welfare worldwide.

Behavioural insights draws on research into behavioural economics and psychology to influence choices in decision making. Evidence has shown that inexpensive improvements based on behavioural insights can increase efficiency within the public service and help people put their good intentions into action. Some of the methods suggested are: Nudge theory, system-thinking, and peripheral - and central-thinking models, [the theory of planned behaviour](#) and related models of rational decision-making motivated reasoning and cognition, and identity protection theories.

Further research into leadership and nudge theory are discussed in: [Crossing the chasm: Leadership nudges to help transition from strategy formulation to strategy implementation](#). The UK's [Behavioural Insights team](#) have worked on a number of successful projects and produced a range of materials and guidance that provides a useful reference. The forthcoming guides by the Centre for Behaviour Change UK to support teams in Local and National Government to apply the [Behaviour change wheel](#) will provide value.

In a joint project the [Behavioural Economics Team of the Australian Government](#) helped to get injured workers back to health and work more quickly by simplifying processes, using positive messaging and personal commitment techniques.

An example of [Training leaders to apply behavioral concepts to improve safety](#) shows that using behavioural technique was successful and the following article [The role of psychology in behavioral economics: The case of social preferences](#) discusses some of the questions underlying an understanding of the level of knowledge transfer between psychology and economics in the study of social preferences.

BEHAVIOURAL ECONOMICS

Title [Applying behavioral economics insights at the workplace](#).

Author/s Ilieva, Viktorija; Drakulevski, Ljubomir

Source *Journal of HRM*. 2018 21 2 40-48. 9p.

Abstract Behavioral economics insights are widely applied by policymakers worldwide, but the private sector seems to be still not fully embracing them. This opens up a new research field and there is a salient call among researchers and practitioners for accumulation of evidence-based nudge interventions at the workplace. This paper reviews studies that apply behavioral economics insights in an organizational setting. The reviewed workplace interventions are based on reminders, default nudges, implementation intentions and priming. There are important take-home messages for human resource practitioners from this relatively novel research stream which has already helped policymakers improve individual and societal welfare worldwide

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Title **Are financial incentives for lifestyle behavior change informed or inspired by behavioral economics? a mapping review.**

Author/s McGill, Bronwyn; O'Hara, Blythe J.; Bauman, Adrian; Grunseit, Anne C.; Phongsavan, Philayrath

Source *American journal of health promotion*. January 2019 33 1 131-141. 11p. DOI: 10.1177/0890117118770837

Abstract Objective: To identify the behavioral economics (BE) conceptual underpinnings of lifestyle financial incentive (FI) interventions.

Weblink Data Source: A mapping review of peer-reviewed literature was conducted by searching electronic databases.

Study Inclusion and Exclusion Criteria: Inclusion criteria were real-world FI interventions explicitly mentioning BE, targeting individuals, or populations with lifestyle-related behavioral outcomes. Exclusion criteria were hypothetical studies, health professional focus, clinically oriented interventions.

Data Extraction: Study characteristics were tabulated according to purpose, categorization of BE concepts and FI types, design, outcome measures, study quality, and findings.

Data Synthesis and Analysis: Financial incentives were categorized according to type and payment structure. Behavioral economics concepts explicitly used in the intervention design were grouped based on common patterns of thinking. The interplay between FI types, BE concepts, and outcome was assessed.

Results: Seventeen studies were identified from 1452 unique records. Analysis showed 76.5% (n = 13) of studies explicitly incorporated BE concepts. Six studies provided clear theoretical justification for the inclusion of BE. No pattern in the type of FI and BE concepts used was apparent.

Conclusions: Not all FI interventions claiming BE inclusion did so. For interventions that explicitly included BE, the degree to which this was portrayed and woven into the design varied. This review identified BE concepts common to FI interventions, a first step in providing emergent and pragmatic information to public health and health promotion program planners.

Title **The BehaviourWorks Method**

Author/s BehaviourWorks Australia

Source BehaviourWorks Australia 2019

Abstract BehaviourWorks Australia method is a tried and tested approach to behaviour change.

Weblink Consisting of three primary phases – Exploration, Deep dive and application – the method can be used in full, or in parts to gather evidence on the behaviour change approach that is most likely to work

Title **Behavioural change models: A summary of the different behavioural change models**

Source Department of the Prime Minister and Cabinet- NZ November 2018

Abstract A discussion of Nudge, system-thinking, and peripheral - and central-thinking models

Weblink The theory of planned behaviour and related models of rational decision-making
Motivated reasoning and cognition, and identity protection theories

Title **[Behavioural insights: public health: Collection](#)**

Source Public Health England

Abstract Public Health England (PHE) Behavioural Insights (PHEBI) is a team of behavioural scientists, including experts in behavioural economics, health psychology and evaluation, who work across PHE with local authorities and other relevant stakeholders to advise on policy and practice and apply and evaluate the evidence of behavioural science in public health.
Work by PHEBI focuses on:

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- applying behavioural science frameworks and evidence to policy and practice
- conducting research and evaluation projects
- building the behavioural science capability of the public health system

Title **Factors influencing the perception of website privacy trustworthiness and users' purchasing intentions: the behavioral economics perspective**

Author/s Frik, Alisa; Mittone, Luigi

Source *Journal of theoretical & applied electronic commerce research*. September 2019 14 3, p89-125. 37p. DOI: 10.4067/S0718-18762019000300107

Abstract In this study, we identified the factors that influence consumer purchasing intentions and their perceptions of the trustworthiness of the privacy-related practices of e-commerce websites. We produced a list of website attributes that represent these factors in a series of focus groups. Then we constructed and validated a research model from an online survey of 117 adult participants. We found that security, privacy (including awareness, information collection, and control), and reputation (including company background and consumer reviews) have a strong effect on trust and willingness to purchase, while website quality plays only a marginal role. Although the perception of trustworthiness and purchasing intention were positively correlated, in some cases participants were more willing to buy from a website that they judged as untrustworthy with regard to privacy. We investigated how behavioral biases and decision-making heuristics may explain the discrepancy between perception and behavioral intention. Finally, we determined which website attributes and individual characteristics impact customer's trust and willingness to buy.

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Title **Crossing the chasm: Leadership nudges to help transition from strategy formulation to strategy implementation.**

Author/s Tawse, Alex; Patrick, Vanessa M.; Vera, Dusya.

Source *Business horizons*. March 2019 62 2 249-257. 9p. DOI: 10.1016/j.bushor.2018.09.005

Abstract Top managers tend to focus on strategy formulation and planning but fail to embrace the problem-solving complexity of strategy implementation. This can lead to implementation failures that are reflected in misaligned organizations that seem to know where they want to go but cannot seem to get there. We posit that one reason for the ineffective transition from strategy formulation to strategy implementation is that planning is associated with a different set of thought processes and emotional experiences than is required for strategy implementation. We integrate research from management (strategy implementation and change management) with that from psychology (self-regulation and nudges) to identify the transition from strategic planning to implementation as a roadblock that prevents effective strategy implementation. We then present six leadership nudges that aid this transition. The first set of nudges are willpower-enhancing nudges that rely on increasing willpower to help

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transition from planning to implementation: Remove the distraction to plan, develop implementation intentions, and use verbal framing. The second set are desire-reducing nudges that work to decrease the desirability of planning and in so doing facilitate the transition to implementation: Highlight the end game, leverage a crisis, and celebrate small wins.

Title **Guide to using the behaviour change wheel in local and national government**

Source Centre for Behaviour Change UK January 2019

Abstract The Centre for Behaviour Change – in collaboration with Public Health England Behavioural Insights Team – are producing two guides to support teams in Local and National Government to apply the Behaviour Change Wheel.

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These brief guides will provide an accessible introduction to the use of the Behaviour Change Wheel (BCW) tailored to the types of issues facing National and Local Government. Each guide will be illustrated with examples demonstrating how to apply the different stages of the BCW to typical issues faced in each context.

Title **Improving people's health: applying behavioural and social sciences : Guidance**

Author/s Public Health England October 2018

Source Behavioural Insights : public health collection

Abstract A comprehensive and collaborative strategy to enable public health professionals to use behavioural and social sciences to improve health and wellbeing

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Title **The role of psychology in behavioral economics: The case of social preferences**

Author/s Lisciandra, Chiara

Source *Studies in history & philosophy of science Part A*. December 2018 72 11-21. 11p. DOI: 10.1016/j.shpsa.2018.01.010

Abstract Behavioral economics is a field of study that is often thought of as interdisciplinary, insofar as it uses psychological insights to inform economic models. Yet the level of conceptual and methodological exchange between the two disciplines is disputed in the literature. On the one hand, behavioral economic models are often presented as psychologically informed models of individual decision-making (Camerer & Loewenstein, 2003). On the other hand, these models have often been criticized for being merely more elaborated "as if" economic models (Berg & Gigerenzer, 2010). The aim of this paper is to contribute to this debate by looking at a central topic in behavioral economics: the case of social preferences. Have findings or research methods been exchanged between psychology and economics in this research area? Have scientists with different backgrounds "travelled" across domains, thus transferring their expertise from one discipline to another? By addressing these and related questions, this paper will assess the level of knowledge transfer between psychology and economics in the study of social preferences

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Title **Training leaders to apply behavioral concepts to improve safety**

Author/s Gravina, NE et al

Source *Safety science* February 2019 112 66-70 <https://doi.org/10.1016/j.ssci.2018.10.013>

Abstract Behavior-based safety (BBS) interventions have yielded positive results for safety, but recurring challenges, including lack of leadership support and perceptions of the approach blaming the worker, have been observed. A failure to properly educate leaders about the basic principles of behavior may be responsible for these challenges. A consultant workshop model has been shown to be a successful method for teaching leaders behavioral influence skills to positively impact performance in the workplace, but it has yet to be evaluated in a safety context. In this case study, a consultant workshop model was used to teach leaders at a chemical manufacturing plant basic concepts in behavioral science and project management as it relates to safety. Leaders each completed at least one project aimed at improving safety related behaviors or results while being coached. Prior to the onset of the intervention, the average number of injuries per year was 5.0 and the average total recordable rate per year was 2.0 per 100 full-time workers. After the intervention was implemented (fourth quarter of 2012–2017) the average number of injuries per year was 1.2 with an average yearly recordable rate of 0.53 per 100 full-time workers. Information about the workshop program, leader-led projects, and subsequent safety related results are discussed.

Title **The truth about behavioral change**

Source MITSloan management review Winter 2019

Abstract The latest thinking on social networks explains why new technologies and innovative behaviors really spread. It's not about "going viral."

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ABSENTEEISM AND PRESENTEEISM

Title **Impact of a structured weight management program on worker productivity**

Author/s Iyengar, J et al

Source *Journal of occupational and environmental medicine* February 2019 61 2 148-152

Abstract Objective: To determine the impact of an intensive behavioral weight management program on presenteeism and absenteeism in obese participants employed full-time.

Weblink Methods: Participants were recruited from the University of Michigan Weight Management program (WMP), a multidisciplinary lifestyle program targeting 15% body weight loss. Absenteeism and presenteeism were assessed using the World Health Organization Health and Work Performance Questionnaire (HPQ) at baseline and 6 months.

Results: One hundred forty-two participants, predominantly college-educated white-collar employees, were included in the study. After 6 months in the program, there was no significant change in absenteeism or presenteeism compared with baseline. There was a trend towards reduced absenteeism.

Conclusions: Participation in an intensive weight management program did not adversely

impact worker productive time. Conversely, our findings should be reassuring to employer groups and to employees with obesity concerned about time spent away from work.

Title **Quicksan assesses risk of long-term sickness absence: a cross-sectional validation study**

Author/s Goorts, K et al

Source *Journal of occupational and environmental medicine* February 2019 61 2 e43-e50 doi: 10.1097/JOM.0000000000001512

Abstract Objective: Increasing long-term sickness absence in many countries asks for specific measures regarding return-to work.
Methods: The risk of long-term sickness absence was assessed using a questionnaire containing work-related, function-related, stressful life-events-related, and person-related factors. Additionally, workers' occupational health physician estimated the worker's chances for work resumption. Reliability, construct, and criterion validity of the questionnaire were measured.
Results: Two hundred seventy-six patients and 35 physicians participated in the study. The reliability was satisfying ($\alpha > 0.70$) for all scales, except for perfectionism ($\alpha = 0.62$). The results of the CFAs showed that the hypothesized factor models fitted the data well. Criterion validity tests showed that eight predictors significantly related to the estimation of the occupational physicians ($p < 0.05$).
Conclusions: The scales of the questionnaire are reliable and valid, and may be implemented to assess sick-listed workers at risk who might benefit from a rehabilitation program.

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Title **Randomized controlled trial of acceptance and commitment therapy and a workplace intervention for sickness absence due to mental disorders.**

Author/s Finnes, A., Ghaderi, A., Dahl, J., Nager, A., & Enebrink, P.

Source *Journal of occupational health psychology*, 2019 24 1 198-212
<http://dx.doi.org/10.1037/ocp0000097>

Abstract Mental disorders contribute to high rates of sickness absence (SA) and impaired work functioning. The aim of the present study was to evaluate the efficacy of 3 interventions targeting SA of workers. Participants (n = 352; 78.4% females) of working age with current employment, and SA due to depression, anxiety disorders, or exhaustion disorder, were recruited to the study and randomized to (a) acceptance and commitment therapy (ACT), (b) a workplace dialogue intervention (WDI), (c) a combination of ACT and WDI, or (d) treatment as usual (TAU). For SA days, there was a significant interaction effect for the follow-up period, in which ACT + WDI generated more SA compared with TAU. When diagnostic group was included as a moderator, participants with exhaustion disorder had less SA days in the WDI group compared with TAU. For symptoms of depression, anxiety, and stress-related ill health, there were significant interaction effects for ACT and ACT + WDI, when compared with TAU, from pre- to postmeasurement (small to moderate between-groups effect sizes). Within-group effect sizes pre- to postmeasurement (Cohen's d) ranged from .55 to 1.17 (ACT), .40 to .94 (WDI), .26 to 1.13 (ACT + WI), and -.06 to .70 (TAU). There were no differences between groups during follow-up for symptoms.

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AGEING WORKFORCE

- Title** **Changes in working life expectancy with disability in the Netherlands, 1992–2016**
- Author/s** [van der Noordt M](#), [van der Pas S](#), [van Tilburg TG](#), [van den Hout A](#), [Deeg DJH](#)
- Source** *Scandinavian journal of work & environmental health* [2019 45 1](#) 73-81 doi:10.5271/sjweh.3765
- Abstract** Objectives Like other western countries, the Netherlands has abolished early retirement schemes and is currently increasing the statutory retirement age. It is likely that also older workers with disabilities will be required to work longer. We examine the change in working life expectancy (WLE) with disability of older workers by comparing data from three periods: 1992–1996, 2002–2006 and 2012–2016.
- Weblink** [Methods](#) Data are from the Longitudinal Aging Study Amsterdam (LASA). Respondents aged 55–65 with a paid job at baseline were included (N=1074). Disability was measured using the Global Activity Limitations Indicator (GALI). First, a continuous-time three-state survival model was created. Second, WLE with and without disability were estimated using MSM and ELECT in R. The modifying effects of gender and educational level were examined.
- [Results](#) Among those initially in paid employment, total WLE increased over 20 years. For example at age 58, total WLE increased from 3.7 to 5.5 years. WLE with disability at age 58 increased from 0.8 to 1.5 years. There was no difference in WLE with disability between male and female workers or low- and highly educated workers.
- [Conclusions](#) Between the 1990s and the 2010s, subsequent generations of older workers with disabilities have extended their working lives. The findings emphasize the importance of workplace interventions that facilitate older workers with disabilities to maintain well-being and work ability. In addition, the question arises whether current exit routes out of the workforce are still adequate.

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ASBESTOSIS AND MESOTHELIOMA

- Title** **Non-occupational exposure to asbestos is the main cause of malignant mesothelioma in women in North Jutland, Denmark**
- Author/s** **Penou, V et al**
- Source** *Scandinavian journal of work & environmental health* [2019 45 1](#) 82-89 doi:10.5271/sjweh.3756
- Abstract** Objectives Diffuse malignant mesothelioma (MM) is mainly caused by asbestos inhalation. The malignancy is rare among women and studies of the prevalence and causative role of non-occupational asbestos exposure among women with MM are scarce. This observational study aimed to elucidate the asbestos exposure patterns among women with MM.
- Weblink** [Methods](#) All histological and cytological specimens from women diagnosed with MM between 1974–2015 at the Institute of Pathology, Aalborg University Hospital in Denmark, were re-evaluated. Occupational and habitation information were obtained from Danish registries and medical journals based on record linkage via the unique person ID. The number of MM cases in each parish in the region of North Jutland was determined and the incidence density in parishes was used to calculate the spatial relative risk (RR) of MM among women.
- [Results](#) Diagnosis of MM was confirmed in 91 women. Exposure types were classified as occupational (9%), domestic (10%), environmental (22%), combination of domestic and environmental (34%) and unknown (25%). Twenty continuous parishes formed a MM “hotspot” around the asbestos-consuming industries in the city of Aalborg. Of these, the maximum RR was found in a parish housing an asbestos factory [RR 10.5, 95% confidence interval (CI) 5.5–19.4, environmental exposure in particular RR 2.9, 95% CI 0.7–6.1].
- [Conclusion](#) Non-occupational asbestos exposure is the main cause of MM and may account for up to 66% of MM cases among women in North Jutland, Denmark.

BULLYING AND HARASSMENT

Title **Workplace bullying among employees in Germany: prevalence estimates and the role of the perpetrator**

Author/s Lange, S et al,

Source *International archives of occupational and environmental health* February 2019 92 2

Abstract Objectives: The aim of this study was to examine the prevalence of workplace bullying in Germany while also taking the perpetrator and severity level (measured by frequency) into account and considering the role of gender, age and socio-economic status.

Weblink Methods: We used data from a large representative sample ($N = 4143$) of employees in Germany subject to social security contributions. Self-reported bullying was assessed for different combinations of perpetrators (co-workers, superiors) and according to severity, i.e., being exposed at all and to severe bullying (at least weekly).

Results: Prevalence estimates varied from 2.9% for severe bullying by co-workers to 17.1% for overall bullying (i.e., without distinguishing by perpetrator, less severe bullying also included). Unskilled workers reported more bullying by both perpetrators than academics/managers. We also observed an age trend for severe bullying by superiors (i.e., bossing), with younger employees being more affected from bossing than elder. No gender differences were detected.

Conclusions: The findings indicate that it is crucial to consider type of perpetrator and severity of the behaviors when examining the prevalence of workplace bullying. The way bullying is defined and operationalized strongly contributes to the prevalence estimates. Differences between subgroups and associations or cause–effect relationships should be analyzed with these variations in mind.

Title **Workplace bullying across the globe: a cross-cultural comparison**

Author/s Salin, D et al

Source *Personnel review* 48 1 204-219 <https://doi.org/10.1108/PR-03-2017-0092>

Abstract Purpose: The purpose of this paper is to analyze cross-national and cross-cultural similarities and differences in perceptions and conceptualizations of workplace bullying among human resource professionals (HRPs). Particular emphasis was given to what kind of behaviors are considered as bullying in different countries and what criteria interviewees use to decide whether a particular behavior is bullying or not.

Weblink Design/methodology/approach: HRPs in 13 different countries/regions ($n=199$), spanning all continents and all GLOBE cultural clusters (House *et al.*, 2004), were interviewed and a qualitative content analysis was carried out.

Findings: Whereas interviewees across the different countries largely saw personal harassment and physical intimidation as bullying, work-related negative acts and social exclusion were construed very differently in the different countries. Repetition, negative effects on the target, intention to harm, and lack of a business case were decision criteria typically used by interviewees across the globe – other criteria varied by country.

Practical implications: The results help HRPs working in multinational organizations understand different perceptions of negative acts.

Originality/value: The findings point to the importance of cultural factors, such as

power distance and performance orientation, and other contextual factors, such as economy and legislation for understanding varying conceptualizations of bullying.

Title **Workplace bullying among employees in Germany: prevalence estimates and the role of the perpetrator**

Author/s Lange, S et al

Source *International archives of occupational and environmental health* 2019 92 237–247
<https://doi.org/10.1007/s00420-018-1366-8>

Abstract **Objectives** The aim of this study was to examine the prevalence of workplace bullying in Germany while also taking the perpetrator and severity level (measured by frequency) into account and considering the role of gender, age and socioeconomic status.
Methods We used data from a large representative sample ($N = 4143$) of employees in Germany subject to social security contributions. Self-reported bullying was assessed for different combinations of perpetrators (co-workers, superiors) and according to severity, i.e., being exposed at all and to severe bullying (at least weekly).
Results Prevalence estimates varied from 2.9% for severe bullying by co-workers to 17.1% for overall bullying (i.e., without distinguishing by perpetrator, less severe bullying also included). Unskilled workers reported more bullying by both perpetrators than academics/managers. We also observed an age trend for severe bullying by superiors (i.e., bossing), with younger employees being more affected from bossing than elder. No gender differences were detected.
Conclusions The findings indicate that it is crucial to consider type of perpetrator and severity of the behaviors when examining the prevalence of workplace bullying. The way bullying is defined and operationalized strongly contributes to the prevalence estimates. Differences between subgroups and associations or cause–effect relationships should be analysed with these variations in mind.

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CHRONIC HEALTH ISSUES

Title **Chronic disease management support in Australian workplaces-low base, rising need.**

Author/s Saunders, Carla; Brown, James J.; Carter, David J.; Lapkin, Sam.

Source *Health promotion journal of Australia*. Dec 2018 29 3 257-264. 8p DOI: 10.1002/hpja.11

Abstract **Issue Addressed:** This study investigates the current nature, levels and perceived need for workplace support among mature age Australian workers with chronic illness.
Methods: A cross-sectional population survey was conducted via a double opt-in panel sample of Australian workers aged 45 years and older with one or more of six major chronic diseases (diabetes and/or chronic heart, kidney, lung, mental health and/or musculoskeletal conditions).
Results: Three hundred and fourteen respondents reported being in the workforce and having at least one of the chronic conditions under investigation, of which almost one third reported having more than one of the conditions. The findings reveal a number of

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considerable gaps in Australian workplace support for employees 45 years and older with chronic illness, including workplace flexibility, supportive policies and co-worker support. Conclusions: This research adds to a scarce existing literature base on workplace support for workers with chronic illness in Australia. Future research is needed to identify opportunities for effective public policy and implementation of workplace interventions to better support this cohort. SO WHAT?: If timely progress is not made in this area, the projected increase in the aged population and scheduled public policy changes impacting retirement age will multiply potential adverse effects on the health of employees with chronic illness and Australia's labour market productivity

Title **Exploring assessment of medical students' competencies in pain medicine—A review**

Author/s Shiton, EE et al

Source PAIN reports: [January/February 2019 4 1 p e704](#) doi: 10.1097/PR9.0000000000000704

Abstract Objective: The aim of this review was to describe the literature regarding methods for assessing pain medicine competencies in medical students.

Weblink Method: PubMed, Medline, EMBASE, ERIC, and Google Scholar, and BEME data bases were searched for empirical studies primarily focusing on assessment of any domain of pain medicine competencies in medical students published between January 1997 and December 2016.

Results: A total of 41 studies met the inclusion criteria. Most assessments were performed for low-stakes summative purposes and did not reflect contemporary theories of assessment. Assessments were predominantly undertaken using written tests or clinical simulation methods. The most common pain medicine education topics assessed were pain pharmacology and the management of cancer and low-back pain. Most studies focussed on assessment of cognitive levels of learning as opposed to more challenging domains of demonstrating skills and attitudes or developing and implementing pain management plans. Conclusion: This review highlights the need for more robust assessment tools that effectively measure the abilities of medical students to integrate pain-related competencies into clinical practice. A Pain Medicine Assessment Framework has been developed to encourage systematic planning of pain medicine assessment at medical schools internationally and to promote continuous multidimensional assessments in a variety of clinical contexts based on well-defined pain medicine competencies.

Title **Role of diabetes management in occupational health: perceptions and practices of occupational and environmental medicine providers**

Author/s VanDam, Isaac; Dai, Jessica; Rosenman, Kenneth

Source *Journal of occupational and environmental medicine*. February 2019 61 2 115-119

Abstract Objective: Diabetes mellitus is a common and costly disease, affecting millions of working age adults in the United States. Although many risk factors for diabetes are well described and manageable, the management of diabetes in the occupational setting is not well defined.

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Methods: This study used a 17-item survey to explore the practices and perceptions of occupational medicine providers in Michigan on the management and prevention of diabetes in the workplace.

Results: Most providers utilize many strategies to manage diabetes. Nonetheless, results from the survey demonstrate variability in practices. Most providers indicate that specific guidelines for caring for workers with diabetes would be useful.

Conclusion: A specific guideline would help delineate the role of an occupational health provider in managing diabetes and support better outcomes for the many patients with diabetes who work.

Title **Use of well-being in identification of members with future health risk factors and future diagnosed chronic disease**

Author/s Hamar, B et al

Source *Journal of occupational and environmental medicine*; February 2019 61 2 168–176 doi: 10.1097/JOM.0000000000001524

Abstract Objective: To evaluate if well-being is associated with the development of future health risks or incidence of new chronic disease.

Weblink Methods: A retrospective cohort study was employed using longitudinal well-being assessment survey data from participants of a Fortune 500 US company wellness program, claims based International Classification of Diseases, Ninth Revision diagnoses, and Cox proportional hazards models to assess associations between well-being and well-being change with future health risk and chronic disease incidence.

Results: Individuals who maintained high well-being and those who increased their level of well-being displayed a significantly decreased hazard of accruing new health risk and new chronic disease incidence; those whose well-being worsened over time showed significant increases in health risk and hazard of new chronic disease incidence.

Conclusions: Well-being levels and change over time are significantly associated with future development of health risk and disease incidence.

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DISABILITY

Title **Review of the National Disability Agreement: study report**

Author/s Productivity Commission

Source Productivity Commission Study report February 2019

Abstract The National Disability Agreement (NDA) is one of several nationally significant sector-wide agreements between the Australian and State and Territory Governments.

This study is a review of the NDA, and is the first of the Productivity Commission's reviews of the agreements. The report sets out our proposals for a new, reinvigorated NDA that would unify all elements of the national disability policy landscape. Ultimately, agreement and implementation of a new NDA is the responsibility of the Australian and State and Territory Governments.

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ERGONOMICS

Title **ACD as a framework for design of ergonomic workplaces**

Author/s Bligard, Lars-Ola Bertin, Cecilia

Source *Work* 2019 62 1 5-12 Special Section: Ergonomics in a Global World
DOI: 10.3233/WOR-182836

Abstract Background: Workplace Ergonomics and Human Factors (E/HF) remains as relevant and important as ever to respond to contemporary workplace design challenges. Therefore, E/HF expertise must be involved in early and appropriate phases of the workplace design process, in order to leverage user needs and requirements to constrain the proposed design solution. In this process, design decisions are made.
Objective: The aim of this article is to describe the use of a systems-theoretical framework as a guide in collaborative workplace design, focussing on planning and documenting which decisions and activities should involve E/HF expertise.
Methods: As this is a conceptual paper, its method is to synthesise a framework from a combination of design process methodology-, general systems theory- and sociotechnical systems literature.
Results: The framework organises the design decisions to be made into hierarchical abstraction levels and cross-cuts them into five perspectives from which the design problem can be viewed holistically.
Conclusions: The ACD³ framework is intended as an enabler of many types of design, including the design of work systems. It provides a framework that allows all stakeholders to converge around design decisions that ensure that the work system is optimised to human characteristics and the activity to be performed.

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Title **The impact of workplace ergonomics and neck-specific exercise versus ergonomics and health promotion interventions on office worker productivity: A cluster-randomized trial**

Author/s Pereira, M et al

Source *Scandinavian journal of work & environmental health* [2019 45 1](#) 42-52 doi:10.5271/sjweh.3760

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

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general population of office workers and sickness absenteeism for office workers with neck pain in the longer-term.

Title **Variation in upper extremity, neck and trunk postures when performing computer work at a sit-stand station**

Author/s Barbieri, DF et al

Source *Applied ergonomics* February 2019 75 120-128

Abstract

Highlights

- Neck, trunk and arm posture variability is larger when combining sitting and standing computer work than when sitting.
- For most workers, increased standing would lead to larger posture variability than in current computer work.
- However, for some workers, posture variability would decrease if standing time was extended.

Sit-stand tables are introduced in offices to increase variation in gross body posture, but the extent to which upper body posture variation is also affected has not previously been addressed. Neck, trunk, and upper arm postures (means and minute-to-minute variances) were determined during periods of sitting and standing from 24 office workers using sit-stand tables to perform computer work. Posture variability resulting from different temporal compositions of sitting and standing computer work was then predicted for the neck, trunk and upper arm by simulations. Postural variability during computer work could be increased up to three-fold when 20–60% of the work was performed standing (i.e. 40–80% performed sitting), compared to performing computer work only sitting. The exact composition of sit-stand proportions leading to maximum variability, as well as the potential size of the increase in variability, differed considerably between workers. Guidelines for sit-stand table use should note these large inter-individual differences.

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HEALTH AND WELLBEING

Title **Examining wellness programs over time: Predicting participation and workplace outcomes**

Author/s Ott-Holland, C. J., Shepherd, W. J., & Ryan, A. M.

Source *Journal of occupational health psychology* 2019 24 1 163-179
<http://dx.doi.org/10.1037/ocp0000096>

Abstract

Weblink

The return on investment of employer wellness programs has been heavily debated in recent years, yet existing research has failed to adequately assess the psychological factors that motivate program participation and how participation relates to organizationally relevant employee attitudes and behaviors. Using data over a 3-year period, we found beliefs about the value of employee wellness programs and perceived organizational support (POS) for wellness to be linked to wellness program participation through the mediation of intention to participate in the wellness program. Those with greater wellness participation were found to have higher performance ratings, higher job satisfaction, higher

intention to stay, and lower turnover. However, the effects for job satisfaction and intention to stay disappeared when controlling for prior levels of satisfaction and intention to stay in cross-lagged models. Implications for scholars and practitioners are discussed

Title **Fusing character strengths and mindfulness interventions: Benefits for job satisfaction and performance**

Author/s Pang, D., & Ruch, W

Source *Journal of occupational health psychology* 2019 24 1 150-162
<http://dx.doi.org/10.1037/ocp0000144>

Abstract
Weblink In recent years, both mindfulness and character strengths have started to garner interest in industrial and organizational psychology. The growing research interest in their effects on employee well-being and performance, individually, has strong practical implications for organizations. Given the interconnection of mindfulness and character strengths, the present study examined the effectiveness of training that combined the two practices regarding well-being and work-related outcomes, and it tested the potential mediators of the effects at work. A total of 63 participants from various job branches were randomly assigned to three conditions: (a) mindfulness-based strengths practice (MBSP), (b) mindfulness-based stress reduction (MBSR), and (c) wait-list control. Participants' applicability of character strengths at work, well-being, perceived stress, job satisfaction, and task performance (supervisor rating) were assessed before and after the intervention, and 1, 3, and 6 months afterward. A set of linear mixed-effects models was applied, modeling changes in participants' outcome variables over time. Potential mediators for the intervention effect of MBSP at work were tested using four criteria adapted from a previous study. Results showed the MBSR was effective for increasing well-being, reducing perceived stress, and increasing job satisfaction, whereas the MBSP was effective for increasing well-being, job satisfaction, and task performance. These findings suggest that mindfulness alone seems to function better when regarding well-being at work, while fusing character strengths on top of it seems to influence the participants, on a motivational level, and thus bolsters task performance

Title **Mindfulness on-the-go: Effects of a mindfulness meditation app on work stress and well-being.**

Author/s Bostock, S., Crosswell, A. D., Prather, A. A., & Steptoe, A.

Source *Journal of occupational health psychology* 2019 24 1 127-138
<http://dx.doi.org/10.1037/ocp0000118>

Abstract
Weblink We investigated whether a mindfulness meditation program delivered via a smartphone application could improve psychological well-being, reduce job strain, and reduce ambulatory blood pressure during the workday. Participants were 238 healthy employees from two large United Kingdom companies that were randomized to a mindfulness meditation practice app or a wait-list control condition. The app offered 45 prerecorded 10- to 20-min guided audio meditations. Participants were asked to complete one meditation per day. Psychosocial measures and blood pressure throughout one working day were measured at baseline and eight weeks later; a follow-up survey was also emailed to participants 16 weeks after the intervention start. Usage data showed that during the 8-week intervention period, participants randomized to the intervention completed an average of 17 meditation sessions (range 0–45 sessions). The intervention group reported

significant improvement in well-being, distress, job strain, and perceptions of workplace social support compared to the control group. In addition, the intervention group had a marginally significant decrease in self-measured workday systolic blood pressure from pre- to post-intervention. Sustained positive effects in the intervention group were found for well-being and job strain at the 16-week follow-up assessment. This trial suggests that short guided mindfulness meditations delivered via smartphone and practiced multiple times per week can improve outcomes related to work stress and well-being, with potentially lasting effects.

Title **Mindfulness training improves employee well-being: A randomized controlled trial**

Author/s Slutsky, J., Chin, B., Raye, J., & Creswell, J. D

Source *Journal of occupational health psychology* 2019 24 1 139-149.
<http://dx.doi.org/10.1037/ocp0000132>

Abstract Organizations are turning toward behavioral interventions with the aim of improving
Weblink employee well-being and job performance. Mindfulness training has been suggested as one type of intervention that can achieve these goals, but few active treatment randomized controlled trials have been conducted. We conducted a randomized controlled trial among employees of a midwestern marketing firm (n = 60) that compared the effects of 6-week mindfulness training program with that of a half-day mindfulness training seminar comparison program on employee well-being outcomes. Although both groups improved comparably on job productivity, the 6-week mindfulness training group had significantly greater improvement in attentional focus at work and decreases in work–life conflict, as well as a marginal improvement in job satisfaction compared with the half-day seminar comparison group. These findings suggest that although small doses of mindfulness training may be sufficient to foster increased perceptions of job productivity, longer term mindfulness training programs are needed to improve focus, job satisfaction, and a positive relationship to work

Title **Systematically reviewing remote e-workers' well-being at work: a multidimensional approach**

Author/s Charalampous, M Grant, CA Tramontano, C Michailidis, E

Source *European journal of work and organizational psychology* 2019 28 1 51-73 DOI:
10.1080/1359432X.2018.1541886

Abstract The practice of remote e-working, which involves work conducted at anyplace, anytime, using technology, is on the increase. The aim of this systematic literature review is to gain a deeper understanding of the association between remote e-working, within knowledge workers, and the five dimensions of well-being at work: affective, cognitive, social, professional, and psychosomatic. Sixty-three studies employing quantitative, qualitative and mixed-method designs have been included in the review. Findings indicate that we know more about remote e-workers' affective state and their social and professional life than we know about their cognitive functioning and psychosomatic conditions. Whilst the research indicates a positive focus there are some negative aspects of this way of working which are highlighted within this review; such as social and professional isolation, and perceived threats in professional advancement. This review may be of great importance for academics,

to continue the theoretical advancement of research into remote e-working, and practitioners, to implement and manage remote e-working attitudes and policies more effectively.

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HEALTH PROMOTION

Title	Evaluation of a workshop to address drugs and alcohol in the workplace
Author/s	Roche, Ann et al
Source	<i>International journal of workplace health management</i> 201912 1 2-14 https://doi.org/10.1108/IJWHM-05-2018-0064
Abstract	Purpose: Risky alcohol and other drug (AOD) use is ubiquitous in some workplace cultures, and is associated with considerable risks to health, safety and productivity. A workplace drug and alcohol first aid program was developed to support supervisors and managers to recognize and respond appropriately to AOD problems, increase knowledge of AOD and reduce the stigma associated with AOD. The purpose of this paper is to undertake an evaluation to assess the program's efficacy.
Weblink	Design/methodology/approach: A self-report survey was administered to program participants before (T1), immediately after (T2) and three months following program completion (T3). Changes in alcohol/drug-related knowledge, role adequacy, motivation and personal views were examined using repeated measures ANOVA. Findings: A total of 109 participants took part in the program, with only 26 completing scores at all three time points. Mean scores increased significantly ($p < 0.05$) between T1 and T2 for knowledge (12.7–16.0), role adequacy (11.8–17.4), motivation (9.7–10.4) and personal views (9.0–9.6). Significant improvements were maintained at T3 for knowledge (15.1) and role adequacy (17.3). Practical implications: Drug and alcohol first aid programs offer a potentially valuable initiative to improve the knowledge, skills and understanding of managers and supervisors in tackling workplace AOD risks, associated stigma and improving help seeking. Originality/value: Workplace programs for managers can facilitate organization-wide responses to the reduction of AOD-related problems, increase implementation of appropriate policy and interventions, minimize associated harms and stigma and reduce negative imposts on productivity and profit

Title	Worksite physical activity intervention and somatic symptoms burden: The role of coworker support for basic psychological needs and autonomous motivation.
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Author/s Pedersen, C., Halvari, H., & Olafsen, A. H.
Source *Journal of occupational health psychology* 2019, 24 1 55-65
<http://dx.doi.org/10.1037/ocp0000131>

Abstract Suffering from somatic symptoms can seriously hamper one's quality of life and ability to function, causing lost work productivity, sickness absence, and extensive medical utilization. Physical activity (PA) has demonstrated promising results related to mild to moderate cases of somatic symptoms. The present study explored whether a worksite health promotion intervention was able to increase PA and cardiorespiratory fitness, and to reduce somatic symptoms and sickness absence. The intervention was designed based on the tenets of Self-determination theory. A pre–post cluster randomized controlled trial was conducted with 202 industrial workers in a Norwegian logistics company. Results from repeated measures, multivariate analysis of variance, revealed an overall intervention effect and significant change between groups related to somatic symptoms in favor of the intervention group, albeit no significant change in sickness absence. We applied structural equations modeling to test a model of health behavioral change, which posited that increased support for PA from coworkers and autonomous motivation for PA predicted changes in PA, cardiorespiratory fitness, and somatic symptoms. The results underline the effectiveness of including coworker social support in health promotion programs aimed to increase PA and reduce somatic symptoms.

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MANAGEMENT AND LEADERSHIP

Title **The effect of multiple negative, neutral, and positive organizational changes**

Author/s Cullen-Lester, KL Webster, BD Edwards, BD Braddy

Source *European journal of work and organizational psychology* 2019 28 1 124-135, DOI: 10.1080/1359432X.2018.1544896

Abstract Organizational change research has largely concluded that employees appraise changes in their workplace negatively and thus respond negatively to greater amounts of change. However, whether this conclusion is warranted remains unclear because previous research has examined single workplace changes in isolation or asked employees to make a global assessment of the changing nature of their workplace. Researchers have not had the means to capture the number of changes employees experience or their appraisals of the many different changes occurring in their workplace. In this study, we developed and validated the Quantity of Change Scale (QCS) to provide a more nuanced understanding of employees' appraisals of their changing workplace. We found that the negative changes employees experience disproportionately influenced their reactions to the changing work environment. However, we also demonstrated that contrary to popular belief, employees appraised fewer changes as negative than as positive or neutral. Together these findings provide new insight into why assessments of employees' general reactions to workplace change tend to be negative. We discuss the theoretical and practical implications of our empirical examination of employees' appraisals of the many changes in their workplace.

Title **From first impressions to selection decisions: The role of dispositional cognitive motivations in the employment interview**

Author/s Florea, L Valcea, S Hamdani, M Riaz Dougherty, TW

Source *Personnel review* 2019 48 1 249-272 <https://doi.org/10.1108/PR-11-2017-0345>

Abstract Purpose: The purpose of this paper is to investigate how individual interviewers' dispositional cognitive motivations may influence interview interactions and outcomes. More specifically, this study explores the influence of the need for cognition, need for cognitive closure, and accountability on the relationship between first impressions and selection decisions.

Design/methodology/approach: In total, 41 graduate students were assigned the role of interviewers and were tasked to interview 331 undergraduate students at a large Midwestern university. The selection interview was designed to recruit qualified undergraduate students to the MBA program of the university.

Findings: First impressions significantly influenced selection decisions, but did not influence interviewers' behaviors. Moreover, multilevel analyses reveal that interviewers' need for cognition and accountability moderate the relationship between first impression and selection decisions, albeit in different direction. Need for cognition strengthens, whereas accountability weakens the relationship between first impression and selection decision.

Research limitations/implications: A potential interviewer bias is apparent, where interviewers high on need for cognition tend to weight first impressions more in the decision process. However, this bias was not directly observable, since interviewers' behaviors during the interview were not affected by first impressions.

Originality/value: The present study goes beyond previous research on first impressions in the employment interview, finding that dispositional differences account for the tendency to weigh first impressions in the selection decision.

Title **How leaders are navigating the Fourth industrial revolution**

Author/s Renjen, Punit

Source *Deloitte Review* 2019 24 38

Abstract Deloitte's latest survey identifies companies successfully implementing industry 4.0 technologies, but many leaders remain less prepared than they think they are.

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MUSCULOSKELETAL ISSUES

Title **Musculoskeletal disorders and mental ill health WHEC report 2018 – 1**

Source HSE Workplace Health Expert Committee

Abstract Since mental ill-health and musculoskeletal pain often coincide in affected individuals, the Health and Safety Executive asked the Workplace Health Expert Committee (WHEC) to consider whether preventive policies should give consideration to tackling these problems

jointly rather than separately. For example, could tackling mental ill-health at work prevent some work-associated musculoskeletal ill-health and would tackling work-associated musculoskeletal problems prevent or lessen some episodes of mental ill-health? If so, to what extent, in which groups, and by what means?

This report summarises information on the matter identified by the WHEC, together with the invited comments of eight international experts in musculoskeletal research, some with a special interest in the psychosocial aspects of musculoskeletal ill-health. Evidence was found that these common and sometimes disabling conditions co-exist more often than expected simply by chance and that they can predict one another. In principle, interventions to solve one problem might be expected to help the other, and in the therapeutic context there is trial evidence for this – treatment of one of the two conditions can help relieve symptoms of the other. However, in the occupational context, there appears to be little or no empirical evidence that workplace

interventions targeted at one condition will benefit the other. Various recommendations are made regarding research needs, awareness, and information gathering.

[Weblink](#)

Title **The relationship of pain on the upper extremity functions and quality of life in patients with carpal tunnel syndrome**

Author/s Tanriverdi, M Hosbay, Z Candan Algun, Z

Source *Journal of back and musculoskeletal rehabilitation*, 2019 32 1 71-76, 2019 DOI: 10.3233/BMR-171097

Abstract Background and objectives: The aim of study was researching the relationship of pain in patients with carpal tunnel syndrome on Quality of Life (QoL) and upper limb functionality. **Weblink** Methods: Demographical and physical measurements were performed by a physiotherapist. Pain levels were measured by Visual Analog Scale at rest, on motion and in fatigue, and the patients' results were recorded. Functionality levels were evaluated by 'Boston Carpal Tunnel Syndrome Questionnaire' and QoL by 'Short Form 12' (SF-12). Patients had 10 sessions of the physiotherapy and rehabilitation program. Assessments were repeated 1 month later.

Results: The mean age 49.97 ± 11.15 years of 28 patients were included. While pre- and post-treatment between pain and functionality evaluation found a significant relationship ($p < 0.05$); there was no significant relationship in QoL (SF-12 $p > 0.05$).

Conclusions: As a result while we found statistical differences between pain and symptomatic status; there were no statistical differences between functionality, daily living activities and QoL. Appropriate rehabilitation programs should be taken into consideration to help patients obtain functionality, daily living activities and QoL.

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OCCUPATIONAL ISSUES

Title **Does paid vacation leave protect against depression among working Americans? A national longitudinal fixed effects analysis**

Author/s Kim, D

Source *Scandinavian journal of work & environmental health* [2019 45 1](#) 22-32
doi:10.5271/sjweh.3751

Abstract

Objectives The United States is the only advanced economy globally that does not guarantee its workers paid vacation leave. Although empirical studies have linked paid vacation leave to happiness and stress, no study has investigated the association between paid vacation leave and depression. Using a nationally-representative longitudinal sample of 3380 working men and women aged 45–52 years from the National Longitudinal Survey of Youth 1979, this study explored whether paid vacation leave may protect against depression.

Methods Multivariate linear and logistic regression models were employed to estimate the impacts of the number of annual paid vacation days of leave measured at age 40 on depression measured using the 7-item Center for Epidemiologic Studies Depression Scale short form (CES-D-SF) scale at age 50. Models were adjusted for demographic and socioeconomic factors, physical health, weekly hours, and individual fixed effects.

Results For every ten additional days of paid vacation leave, the odds of depression in women was 29% lower [odds ratio (OR) 0.71, 95% confidence interval (CI) 0.55–0.92, $P=0.01$]; there was no association in men. Linear regression models showed no association in either men or women. For every 10 days of paid leave, the odds of depression were 36% lower in White women and 38% lower in women with ≥ 2 children.

Conclusions This study provides the first evidence on the linkage between paid vacation leave and depression, and supports a protective effect in White women with ≥ 2 children. Should this association be truly causal, and assuming a uniform effect across all ages in working adult women, the results from this study would suggest that a hypothetical increase in the average number of days of paid vacation leave of 10 days could avoid an estimated 568 442 cases of depression in women each year and lead to a cost savings of US\$2.94 billion annually. Policies that mandate paid vacation leave may have marked positive impacts on the population health and economic burden of depression among working women in the USA

[Weblink](#)

Title

The effects of sedentary behaviour interventions on work-related productivity and performance outcomes in real and simulated office work: A systematic review

Author/s

Wuyou, S et al

Source

Applied ergonomics February 2019 75 27-73 <https://doi.org/10.1016/j.apergo.2018.09.002>

Abstract

Highlights

Weblink

- Occupational sedentary interventions do not appear to impact work performance.
- Standing interventions do not appear to impact work performance/productivity.
- Walking and cycling interventions may negatively affect some productivity outcomes.

This review examined the impact of environmental, behavioral, and combined interventions to reduce occupational sedentary behaviour on work performance and productivity outcomes. Productivity outcomes were defined as variables assessing work-related tasks (e.g., typing, mouse), whereas performance outcomes were categorized as any variables assessing cognition that did not mimic work-related tasks. Nine databases were searched for articles published up to January 2018. Sixty-three studies were identified that met the inclusion criteria: 45 examined a productivity outcome (i.e., typing, mouse, work-related tasks, and absenteeism), 38 examined a performance outcome (i.e., memory, reading comprehension, mathematics, executive function, creativity, psychomotor function, and psychobiological factors), and 30 examined a self-reported productivity/performance outcome (i.e., presenteeism or other self-reported outcome). Overall, standing interventions do not appear to impact productivity/performance outcomes, whereas walking and cycling interventions demonstrate mixed null/negative associations for productivity outcomes. Hence, standing interventions to reduce occupational sedentary behaviour could be implemented without negatively impacting productivity/performance outcomes.

Title Longitudinal associations between organizational change, work-unit social capital, and employee exit from the work unit among public healthcare workers: a mediation analysis

Author/s [Jensen JH](#), [Flachs EM](#), [Skakon J](#), [Rod NH](#), [Bonde JP](#)

Source *Scandinavian journal of work & environmental health* [2019 45 1](#) 53-62 doi:10.5271/sjweh.3766

Abstract Objectives Organizational changes are associated with higher rates of subsequent employee exit from the workplace, but the mediating role of social capital is unknown. We examined the associations between organizational changes and subsequent employee exit from the work unit and mediation through social capital.
Methods Throughout 2013, 14 059 healthcare employees worked in the Capital Region of Denmark. Data on work-unit changes (yes/no) from July–December 2013 were collected via a survey distributed to all managers (merger, split-up, relocation, change of management, employee layoff, budget cuts). Eight employee-reported items assessing social capital were aggregated into work-unit measures (quartiles: low-high). Data on employee exit from the work unit in 2014 were obtained from company registries.
Results We found a somewhat higher rate of employee exit from the work unit after changes versus no changes [hazard ratio (HR) 1.10, 95% confidence interval (CI) 1.01–1.19] and an inverse dose–response relationship between social capital and employee-exit rates (low versus high: HR 1.65, 95% CI 1.46–1.86). We also showed a higher risk of low social capital in work units exposed to changes [low versus high: odds ratio (OR) 2.04, 95% CI 1.86–2.23]. Accounting for potential mediation through social capital seemed slightly to reduce the association between changes and employee-exit rates (HR 1.07, 95% CI 0.98–1.16 versus HR 1.10).
Conclusions Work-unit organizational changes prospectively predict lower work-unit social capital, and lower social capital is associated with higher employee-exit rates. Detection of weak indications of mediation through social capital, if any, were limited by inconsistent associations between changes and employee exit from the work unit.

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Title Motivating the workforce: beyond the ‘two-factor’ model

Author/s Shannon, E A

Source *Australian health review* 43(1) 98-102 <https://doi.org/10.1071/AH16279>

Abstract Objective The aim of the present study was to understand the factors motivating health and human services professionals in the workplace, thus adding to the body of knowledge associated with employee motivation.
Methods Brainstorming research was performed on frontline and emerging managers in Tasmanian public sector organisations. Coding categories were inductively developed from the data, then deductively analysed using Herzberg’s two-factor model.
Results Communication was the most significant factor affecting staff motivation. When described as ‘good’, it was open, honest, appropriate and timely. Emotional factors, including a sense of being respected and valued, were also highly regarded. Material resources, such as budgets, staffing and physical amenities, were the third most cited factor affecting workforce motivation.
Conclusions Contrary to most previous research, the present study found that some factors – like communication or resources – could be a source of satisfaction and dissatisfaction, depending on whether they supported the individual and the team. The research method chosen in the present study differed from most using the two-factor model in that it did not use closed survey questions. The breadth of these results reflects the ability to provide a more nuanced response.

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What is known about the topic? Professionals working in health and human services have a high degree of authority and autonomy. Increasing staff motivation has the potential to positively influence organisational and individual outcomes.

What does this paper add? This paper provides greater insight into factors increasing staff motivation. It also suggests methodological improvements for studies using the two-factor model.

What are the implications for practitioners? The insights into staff motivation may be used by employers to improve outcomes and increase workforce satisfaction.

Title **Silence the noise: Insights into operating, regulating, working, and playing**

Source Deloitte Review 2019 24

Abstract This issue seeks to cut through the noise, providing fresh insight into big challenges and critical issues we've been examining through our comprehensive understanding of the Fourth Industrial Revolution, the Future of Mobility, The Future of work, and human capital

[Weblink](#)

Title **A systematic review on occupational hazards, injuries and diseases among police officers worldwide: Policy implications for the South African Police Service**

Author/s Mona, GG Chimbari, MJ Hongoro, C

Source *Journal of occupational medicine and toxicology*, 2019 14 1 1

Abstract Background: Occupational hazards, injuries and diseases are a major concern among police officers, including in Sub-Saharan Africa. However, there is limited locally relevant literature for guiding policy for the South African Police Service (SAPS). The purpose of this review was to describe the occupational hazards, injuries and diseases affecting police officers worldwide, in order to benchmark policy implications for the SAPS.

Methods: We conducted a systematic review of studies using Google Scholar, PubMed and Scopus.

Results: A total of 36 studies were included in this review. Six revealed that police officers' exposure to accident hazards may lead to acute or chronic injuries such as sprains, fractures or even fatalities. These hazards may occur during driving, patrol or riot control. There were two studies, which confirmed physical hazards such as noise induced hearing loss (NIHL), due to exposure to high levels of noise. Three studies on chemical hazards revealed that exposure to high concentrations of carbon dioxide and general air pollution was associated with cancer, while physical exposure to other chemical substances was linked to dermatitis. Four studies on biological hazards demonstrated potential exposure to blood borne diseases from needle stick injuries (NSIs) or cuts from contaminated objects. One study on ergonomic hazards showed that musculoskeletal disorders can result from driving long distances and lifting heavy objects. There were 15 studies that indicated psychological hazards such as post-traumatic stress disorder (PTSD) as well as stress. Moreover, four studies were conducted on organizational hazards including burnout, negative workplace exposure and other factors.

Conclusions: This review outlined the global impact of occupational hazards, injuries and diseases in the police force. It served as a benchmark for understanding the policy implications for South Africa, where there is paucity of studies on occupational health and safety.

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PSYCHOSOCIAL ISSUES

Title **Awareness into action: a holistic approach to cultivating mentally healthy workplaces in Australia**

Source Allianz January 2019

Abstract With this understanding comes the big question: how best to create a mentally healthy workplace? In this report, we seek to show that a mentally healthy workplace can only be achieved when it is a business priority. We do this by bringing together key research findings and other expert resources to put forward a holistic approach to help employers transform awareness into action that promotes positive mental health in Australia's workplace

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Title **Building thriving workplaces: Guidelines and actions**

Source Superfriend 2019

Abstract *Building Thriving Teams* contains the latest workplace mental health findings and advice, and is packed with simple actions and ideas to apply. The guidelines also incorporate feedback from hundreds of users of our earlier edition *Promoting Positive Mental Health in the Workplace: Guidelines for Organisations*. These guidelines include: Practical information on applying the five evidence-based 'domains'— Leadership, Connectedness, Policy, Capability, and Culture – which are essential for creating thriving workplaces

[Weblink](#) The business case for investing in your workplace's mental health
Simple action ideas for you to apply

Title **Does Introducing public funding for allied health psychotherapy lead to reductions in private insurance claims? lessons for Canada from the Australian Experience**

Author/s Diminic, S et al

Source *Canadian journal of psychiatry* January 2019 64 1 68-76
<https://doi.org/10.1177/0706743718784941>

Abstract Objective: Provincial and territorial governments are considering how best to improve access to psychotherapy from the current patchwork of programmes. To achieve the best value for money, new funding needs to reach a wider population rather than simply replacing services funded through insurance benefits. We considered lessons for Canada from the relative uptake of private insurance and public funding for allied health psychotherapy in Australia.

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Method: We analysed published administrative claims data from 2003–2004 to 2014–2015 on Australian privately insured psychologist services, publicly insured psychotherapy under the 'Better Access' initiative, and public grant funding for psychotherapy through the 'Access to Allied Psychological Services' programme. Utilisation was compared to the prevalence of mental disorders and treatment rates in the 2007 National Survey of Mental Health and Wellbeing.

Results: The introduction of public funding for psychotherapy led to a 52.1% reduction in private insurance claims. Costs per session were more than double under private insurance and likely contributed to individuals with private coverage choosing to instead access public programmes. However, despite substantial community unmet need, we estimate just 0.4% of the population made private insurance claims in the 2006–2007 period. By contrast, from its introduction, growth in the utilisation of Better Access quickly dwarfed other

programmes and led to significantly increased community access to treatment. Conclusions: Although insurance in Canada is sponsored by employers, psychology claims also appear surprisingly low, and unmet need similarly high. Careful consideration will be needed in designing publicly funded psychotherapy programmes to prepare for the high demand while minimizing reductions in private insurance claims.

Title **Effectiveness and application of an online leadership intervention to promote mental health and reduce depression-related stigma in organizations.**

Author/s Shann, C., Martin, A., Chester, A., & Ruddock, S

Source *Journal of occupational health psychology*, 2019 24 1, 20-35.
<http://dx.doi.org/10.1037/ocp0000110>

Abstract Addressing the stigma of mental illness and its effect in the workplace is a contemporary issue in occupational health. The role of leaders is a vital but relatively unexplored dimension of this phenomenon. This study examined the effectiveness and application of an online intervention to reduce depression-related stigma in organizational leaders. A randomized controlled, "in the field" study was conducted with 196 leaders. Participants completed an online survey and were randomly assigned to either the experimental or wait-list control group. One week later, participants in the experimental group were given access to a brief online workplace mental health intervention and asked to complete a postsurvey, whereas the control group had to only complete the online postsurvey. Six months later, participants completed a follow-up online survey. Results revealed significant reductions in behavioral and affective depression-related stigma scores among leaders who completed the intervention, compared with the control group. These reductions were similar at 6 months. The factors that enabled or hindered training transfer from the intervention were examined through semistructured interviews with 16 of the participating leaders. Results showed that positive attitudes and high levels of knowledge are not sufficient to ensure leaders apply intervention learning in their work environments. Factors including the nature of the work environment, the collective readiness and capability of the organization to address these issues, the attitudes of others at work, and the broader political context affected the application of learning from the intervention

Title **Men's work, women's work and suicide: a retrospective mortality study in Australia**

Author/s Milner, A King, T

Source *Australian and New Zealand journal of public health* February 2019 43 1 27 -32
<https://doi.org/10.1111/1753-6405.12859>

Abstract Objectives: This research sought to investigate the influence of being a in male-dominated occupation on suicide.
Methods: A population-level retrospective mortality study was conducted over the period 2001 to 2015. Data from the Australian Census and the National Coronial Information System were combined. Negative binomial regression was used to assess the relationship between occupational gender ratio and suicide rates, controlling for age, socioeconomic status and year of death. Probabilistic sensitivity analysis accounted for unmeasured confounding due to common mental disorders.
Results: Males in male-dominated occupations had a rate ratio (RR) of 7.50 (95%CI 6.07 to

9.25) compared to males in female-dominated occupations. Females in male-dominated occupations had a RR of 0.13 (95%CI 0.07 to 0.26) compared to females in female-dominated occupations. Results for males were maintained after adjusting for common mental disorders. There was evidence of interaction on both additive and multiplicative scales.

Conclusions: The gendered context of an occupation influences suicide, with varying risks for women and men. More research is needed to understand the mechanisms of this relationship.

Implications for public health: These results suggest the need for targeted suicide prevention activities in male-dominated occupational groups.

[Weblink](#)

Title **Mental Health Commission of Canada – A practical toolkit to help employers build an inclusive workforce, 2019**

Author/s Mental Health Commission of Canada

Source Mental Health Commission of Canada 2019

Abstract This toolkit is meant to help human resources (HR) professionals and those with HR, wellness and diversity responsibilities increase accessibility and inclusiveness and address the needs of workers living with mental illness. Because recruitment, retention, and support policies and practices affect everyone, the toolkit draws on the insights of workers with experience of mental illness as well as their co-workers and managers. It is also informed by A Clear Business Case for Hiring Aspiring Workers, a multidisciplinary study from the Mental Health Commission of Canada.

[Weblink](#)

Title **Mental health service utilization in depressed Canadian Armed Forces personnel**

Author/s Theriault, FL et al

Source *Canadian journal of psychiatry* January 2019 64 1 59-67
<https://doi.org/10.1177/0706743718787792>

Abstract Major depression is prevalent, impactful, and treatable in military populations, but not all depressed personnel seek professional care in a given year. Care-seeking patterns (including the use of primary vs. specialty care) and factors associated with the likelihood of mental health service utilization in depressed military personnel are poorly understood. Methods: Our sample included 520 Regular Force respondents to the 2013 Canadian Forces Mental Health Survey. All study participants had past-year major depression. Subjects reported whether they had spoken about their mental health with at least one health professional in the past 12 months. We used multivariate Poisson regression to explore factors associated with past-year mental health service use. Results: Three-quarters of Canadian military personnel with past-year depression had sought mental health care in the previous 12 months. Among care-seeking personnel, 70% had seen a psychologist or psychiatrist, while 5% had exclusively received care from a primary care physician. Belief in the effectiveness of mental health care was the factor most strongly associated with care seeking. Female gender, functional impairments, and psychiatric comorbidities were also associated with care seeking. Surprisingly, stigma perceptions had no independent association with care seeking. Conclusions: The proportion of depressed Canadian Armed Forces personnel who seek professional care and who access specialty mental health care is higher than in most other populations. However, an important minority of patients are not accessing health services.

Efforts to further increase mental health service utilization in the Canadian military should continue to target beliefs about the effectiveness of mental health care.

Title **Mental illness, drinking, and the social division and structure of labor in the United States: 2003-2015**

Author/s Prins, Seth, J et al

Source *American journal of industrial medicine* February 2019 62 2 131-144
<https://doi.org/10.1002/ajim.22935>

Abstract Background: We draw on a relational theoretical perspective to investigate how the social division and structure of labor are associated with serious and moderate mental illness and binge and heavy drinking.

Weblink Methods: The Panel Study of Income Dynamics and the Occupational Information Network were linked to explore how occupation, the productivity-to-pay gap, unemployment, the gendered division of domestic labor, and factor-analytic and theory-derived dimensions of work are related to mental illness and drinking outcomes.

Results: Occupations involving manual labor and customer interaction, entertainment, sales, or other service-oriented labor were associated with increased odds of mental illness and drinking outcomes. Looking for work, more hours of housework, and a higher productivity-to-pay gap were associated with increased odds of mental illness. Physical/risky work was associated with binge and heavy drinking and serious mental illness; technical/craft work and automation were associated with binge drinking. Work characterized by higher authority, autonomy, and expertise was associated with lower odds of mental illness and drinking outcomes.

Conclusions: Situating work-related risk factors within their material context can help us better understand them as determinants of mental illness and identify appropriate targets for social change.

Title **Occupational medicine: Special issue: Mental health and work January 2019 69 1**

Source *Occupational medicine: Special issue: Mental health and work* January 2019 69 1

Abstract This special issue includes a range of articles that refer to mental health issues in the workplace.

[Weblink](#)

Title **Promoting health and physical capacity during productive work: the Goldilocks Principle: Discussion paper**

Author/s Holtermann, A Mathiassen, SE Straker, L

Source *Scandinavian journal of work, environment & health* 2019 45 1 90-97 doi:10.5271/sjweh.3754

Abstract Objectives In spite of preventive efforts, organizations and employees face several challenges related to working life and occupational health, such as a substantial

Weblink prevalence of musculoskeletal disorders, social inequality in health and physical capacity, multi-morbidity, an obesity epidemic and an aging workforce. We argue that a new approach to occupational ergonomics and health is required, going beyond prevention of harm caused by work. We propose the "Goldilocks Principle" for how productive work can be designed to promote health and physical capacity. Methods Physical (in)activity profoundly influences health and physical capacity, with effects depending on the extent and temporal structure of the (in)activity. Like the porridge, chair and bed that needed to be "just right" for Goldilocks in the The Three Bears fairytale, physical activity during productive work needs to be "just right" for promoting rather than deteriorating health and capacity. In many jobs, physical activity is, however, either too much/high/frequent or too little/low/infrequent to give positive biomechanical and cardiometabolic stimuli. Results This paper presents the rationale, concept, development, application and prospects of the Goldilocks Principle for how productive work can be designed to promote health and physical capacity. Conclusions We envision a great potential to promote health and physical capacity by designing productive work according to the Goldilocks Principle, thus leading to benefits with respect to the current challenges related to working life and occupational health for society, organizations and employees.

Title **A review of the economic impact of mental illness**

Author/s Doran, CM Kinchin, I

Source *Australian health review* 43(1) 43-48 <https://doi.org/10.1071/AH16115>

Abstract Objective To examine the impact and cost associated with mental illness. Methods A rapid review of the literature from Australia, New Zealand, UK and Canada was undertaken. The review included literature pertaining to the cost-of-illness and impact of mental illness as well as any modelling studies. Included studies were categorised according to impact on education, labour force engagement, earlier retirement or welfare dependency. The well-accepted Drummond 10-point economic appraisal checklist was used to assess the quality of the studies. Results A total of 45 methodologically diverse studies were included. The studies highlight the significant burden mental illness places on all facets of society, including individuals, families, workplaces and the wider economy. Mental illness results in a greater chance of leaving school early, a lower probability of gaining full-time employment and a reduced quality of life. Research from Canada suggests that the total economic costs associated with mental illness will increase six-fold over the next 30 years with costs likely to exceed A\$2.8 trillion (based on 2015 Australian dollars). Conclusions Mental illness is associated with a high economic burden. Further research is required to develop a better understanding of the trajectory and burden of mental illness so that resources can be directed towards cost-effective interventions. What is known about the topic? Although mental illness continues to be one of the leading contributors to the burden of disease, there is limited information on the

economic impact that mental illness imposes on individuals, families, workplaces and the wider economy.

What does this paper add? This review provides a summary of the economic impact and cost of mental illness. The included literature highlights the significant burden mental illness places on individuals, families, workplaces, society and the economy in general. The review identified several areas for improvement. For example, only limited information is available on the impact of attention deficit hyperactivity disorder, anxiety, cognitive function, conduct disorder, eating disorder and psychological distress. There was also a dearth of evidence on the intangible elements of pain and suffering of people and their families with depressive disorders. More research is required to better understand the full extent of the impact of mental illness and strategies that may be implemented to minimise this harm.

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What are the implications for practitioners? Knowing the current and future impact of mental illness highlights the imperative to develop an effective policy response.

Title **Sick leave and work-related accidents of social workers in Germany: an analysis of routine data**

Author/s Wirth, T., Wendeler, D., Dulon, M. et al.

Source International archives of occupational & environmental health February 2019 92 2 175-184
<https://doi.org/10.1007/s00420-018-1370-z>

Abstract **Purpose:** The study aimed to explore the prevalence of sick leave and the risk of work-related accidents among German social workers and to describe causes and time trends in sick leave and accident claims.
Methods: A retrospective analysis of routine data was carried out. Aggregated sick leave data of 195,100 social workers from four health insurance funds and 3037 accident claims of social workers from an accident insurance institution were analysed. Causes of accidents were examined by statistics of the German Social Accident Insurance (DGUV). Sick leave rates per 100 insured person-years were calculated. Relative risks (RR) of accidents were calculated in a multivariate analysis for three occupational groups (social workers and therapists, caregivers in sheltered workshops and teachers in residential institutions) and compared to other health and welfare service workers.
Results: Mental disorders caused about one-fifth of the sick leave days of social workers. Sick leave due to mental disorders slightly increased in 2015 compared to 2012 (+ 3% and + 18%). Among the three subgroups of social workers, caregivers in sheltered workshops (RR 1.30; 95% CI 1.14–1.49) and teachers in residential institutions (RR 1.41; 95% CI 1.17–1.70) were at an increased risk of accidents at the workplace. Accidents were mostly caused by slipping (30%) and by violence (22%).
Conclusions: This study confirms that sick leave of social workers is frequently caused by mental disorders. Future studies could further examine differences between practice fields, long-term effects of work hazards and effective workplace interventions.

[Weblink](#)

Title **A systematic review and meta-analysis of workplace mindfulness training randomized controlled trials.**

Author/s Bartlett, L., Martin, A., Neil, A. L., Memish, K., Otahal, P., Kilpatrick, M., & Sanderson, K.

Source

Journal of occupational health psychology 2019 24 1 108-126
<http://dx.doi.org/10.1037/ocp0000146>

Abstract**Weblink**

This meta-analytic review responds to promises in the research literature and public domain about the benefits of workplace mindfulness training. It synthesizes randomized controlled trial evidence from workplace-delivered training for changes in mindfulness, stress, mental health, well-being, and work performance outcomes. Going beyond extant reviews, this article explores the influence of variability in workforce and intervention characteristics for reducing perceived stress. Meta-effect estimates (Hedge's g) were computed using data from 23 studies. Results indicate beneficial effects following training for mindfulness ($g = 0.45$, $p < .001$) and stress ($g = 0.56$, $p < .001$), anxiety ($g = 0.62$, $p < .001$) and psychological distress ($g = 0.69$, $p < .001$), and for well-being ($g = 0.46$, $p = .002$) and sleep ($g = 0.26$, $p = .003$). No conclusions could be drawn from pooled data for burnout due to ambivalence in results, for depression due to publication bias, or for work performance due to insufficient data. The potential for integrating the construct of mindfulness within job demands-resources, coping, and prevention theories of work stress is considered in relation to the results. Limitations to study designs and reporting are addressed, and recommendations to advance research in this field are made.

Title

With a little help from my boss: The impact of workplace mental health training on leader behaviors and employee resource utilization.

Author/s

Dimoff, JK Kelloway, EK

Source

Journal of occupational health psychology February 2019 24-1 4-19
<http://dx.doi.org/10.1037/ocp0000140>

Abstract**Weblink**

Mental health problems are among the costliest issues facing organizations in the developed world. In response to the mounting burdens surrounding poor employee mental health, many organizations have introduced mental health promotion programs and resources (e.g., employee assistance programs). Despite the rise in available options, very few employees use these resources to their full potential. Using a wait-list control design with random assignment, we evaluate the impact of a leader-focused mental health training on employees' ($N = 82$; 51.25% response rate) resource use and leaders' ($N = 37$; 56.92% response rate) communication about mental health and mental health resources. Based on other-report data from employees, leaders who received training shared more information about mental health and mental health resources, were more supportive of employees' mental health issues, and actively encouraged employees to use available resources. Employees whose leaders attended the training also reported increased willingness to seek out and use available resources. For leaders who attend training and complete three waves of data collection, results suggest that a 3-hr mental health training may lead to significant behavioral change up to 3 months posttraining.

Title

Health and safety statistics: Key figures for Great Britain (2017/18)

Source

Health and Safety Executive (HSE)

Abstract

Key figures for Great Britain (2017/18)
1.4 million working people suffering from a work-related illness
2,595 mesothelioma deaths due to past asbestos exposures (2016)
144 workers killed at work
555,000 injuries occurred at work according to the Labour Force Survey
71,062 injuries to employees reported under RIDDOR

[Weblink](#) 30.7 million working days lost due to work-related illness and workplace injury
£15 billion estimated

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PUBLIC SERVICE

Title **Canada: workspace overhaul for PS**

Source PSNews 28 January 2019

Abstract The Canadian Federal Government is considering a new kind of workspace for Public Servants, potentially giving them a third option besides commuting and working from home.... Co-working spaces have seen a recent rise in popularity, giving self-employed or remote workers a location outside their homes to visit to get work done. They are typically open-concept spaces that include much of what an office would offer, such as printers, scanners and Wi-Fi.

[Weblink](#)

Title **A digital strategy for Canada: the current challenge**

Author/s Wolfe, David A

Source Institute for Research on Public Policy Insight January 2019 25

Abstract Canada's future competitiveness and growth prospects are inextricably linked to our ability to seize the opportunities created by the rapidly evolving digital economy. Ottawa's innovation agenda should be extended to pursue a broader digital policy strategy focused on three main goals: (1) promoting the rapid adoption and diffusion of digital technologies across all sectors of the economy; (2) assisting companies that have demonstrated commercial potential to grow to a global scale; and (3) promoting the creation of businesses capable of developing disruptive technologies. Ultimately, given the pace of change and the complexity of the challenges involved, the most effective way for governments to respond is through continuous innovation in their policy and regulatory frameworks.

[Weblink](#)

Title **Skills at speed: why Canada's public service should grow its interchange program to build skills and networks. A 'Canada Next: 12 ways to get ahead of disruption' report**

Author/s Turnbull, Lori

Source Public

Abstract The public sector should expand its interchange program with the private sector in order to diversify its employees' networks and skill sets and, in so doing, help the public service face employment challenges and disruptive technologies.

Weblink The public service is at present too insular and isolated from the rest of the economy and from labour markets. This prevents well-educated, smart, dedicated, ambitious public servants from acquiring and developing critical skills, such as strategic thinking and planning, tactical management (in particular, project management), and subject-matter expertise.... Public servants need to acquire up-to-date competencies in the areas of data analytics, cybersecurity, infrastructure planning, ethics and privacy, and other sectors that are proving essential to navigating future

Title **Moving on: the costs of high staff turnover in the civil service**

Author/s Sasse, T Norris, E

Source Institute for Government January 2019

Abstract Civil servants in the UK change roles more quickly than their equivalents in other countries or private sector organisations. This rapid movement of staff around Whitehall is deeply ingrained in Whitehall's workforce model. It has been criticised for more than 50 years. But in the last two decades it has accelerated, with the opening up of the internal jobs market with few controls on movement, and the imposition of a pay freeze and cap, meaning that most staff have to change roles to get a promotion and a pay rise. This report argues that the current workforce model is unfit for the challenges the civil service faces. The civil service needs to replace it with a system which values specialists as well as generalists; and rewards those who stay in post, build experience and see through projects, as well as those who move through a wide range of roles.

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TECHNOLOGY

Title **Ten predictions for 2019: Our ten trends, tech breakthroughs and social movements for the year ahead**

Author/s Hannon, Celia

Source **nesta**

Abstract This year's predictions cover technologies and trends that would once be dismissed as science fiction but are now set to tip over into mainstream acceptance. Key questions running through this year's predictions are who stands to benefit or lose out from these innovations and whether it is possible to redirect their paths, before they become the 'new normal'.

[Weblink](#)

Title **A decade of health information technology usability challenges and the path forward: Viewpoint**

Author/s Ratwani, RM Reuder, J Singh, H

Source JAMA February 2019 doi:10.1001/jama.2019.0161

Abstract The 2009 Health Information Technology for Economic and Clinical Health (HITECH) Act successfully promoted the adoption of health information technology (HIT), specifically electronic health records (EHRs). The majority of US hospitals and ambulatory clinicians have adopted an EHR and some benefits, such as easier access to patient information and the ability to more easily order certain medications, laboratory tests, and diagnostic tests, have materialized. However, usability—defined as the extent to which technology can be used efficiently, effectively, and satisfactorily—remains suboptimal.¹ Usability challenges in the last decade have had unintended consequences. Poor EHR usability contributes to errors that are associated with patient harm.² It also results in clinicians spending extra time using the EHR, contributing to clinician frustration, which, in turn, has been reported to jeopardize patient safety

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WORK HEALTH AND SAFETY

Title **The activities of occupational health and safety specialists in a high-risk industry**

Author/s Guennoc, F et al

Source *Safety science* February 2019 112 71-80 <https://doi.org/10.1016/j.ssci.2018.10.004>

Abstract

Highlights

- OHS specialists are considered as key actors for managing safety.
- A lack of knowledge about activities related to [industrial safety](#) is identified.
- OHS specialists deal with a wide variety of constraints.
- OHS specialist's activities are [relational](#), fragmented and interrupted.
- The influence of OHS specialists on operators in shift teams is limited.

A review of the literature shows a lack of knowledge regarding the profession of occupational health and safety (OHS) specialists, especially those responsible for industrial safety. Yet, they are central risk management players in high-risk companies.

The aim of this article is to contribute to increasing the knowledge about the OHS profession through empirical data regarding their activities. The study is based upon immersion, lasting several months, within the environment of a safety department of a pharmaceutical chemical substances production site. Firstly, we conducted a study of the general context of the site in order to understand the framework within which the OHS specialists operate. Then, the activities carried out by two OHS specialists were investigated using general and systematic observations. Results concern the contents of the OHS specialists' activities and their specific features. We show that OHS specialists deal with a large number of topics and theirs are primarily relational activities, characterised by task interruptions and fragmentation.

Title **Causal factors and connections in construction accidents**

Author/s Winge, S

Source *Safety science* February 2019 112 130-141
<https://doi.org/10.1016/j.ssci.2018.10.015>

Abstract

Weblink

Highlights

- Using the ConAC framework, 1.039 causal factors were identified in 176 construction accidents.
- Factors most identified were worker actions, risk management and immediate supervision.
- Worker actions is the outcome of many other causal factors.
- Immediate supervision is a key causal factor connecting management and worker actions.
- Risk management is a key causal factor and strongly connected to immediate supervision and worker actions.

The aim of this study was to add to the relatively sparse literature on accident causality in the construction industry by identifying frequent causal factors and connections between causal factors. Using the Construction Accident Causation (ConAC) framework, 176 relatively severe construction accidents investigated by the Labour Inspection Authority in 2015 were analysed. The seven factors most identified were (in rank order): (1) worker actions, (2) risk management, (3) immediate supervision, (4) usability of materials or equipment, (5) local hazards, (6) worker capabilities, and (7) project management. A set theoretic approach was used to identify causal connections between causal factors. Risk management, immediate supervision and worker actions were found to be key causal factors and strongly connected. The analyses identified seven causal factors consistently connected to worker actions, for example immediate supervision and local hazards. Immediate supervision was found to be strongly connected to both worker actions and risk management, underlining the importance of the supervisor controlling unsafe conditions/acts and planning the work to reduce risk. Strong connections were also found between risk management and immediate supervision, and between risk management and worker actions. Risk management and immediate supervision is to a large degree about planning and risk control at different levels, underlining the importance of risk being addressed at different levels and by different actors in construction projects.

Title **Estimating the population prevalence of traditional and novel occupational exposures in Federal Region X**

Author/s Doubleday, A et al

Source *American journal of industrial medicine* February 2019 622 111-122
<https://doi.org/10.1002/ajim.22931>

Abstract **Objective:** Federal Region X is an administrative region in the northwestern United States comprised of the states of Alaska (AK), Idaho (ID), Oregon (OR), and Washington (WA). Quantifying the number of workers in this region exposed to harmful circumstances in the workplace, and projected changes over time will help to inform priorities for occupational health training, risk reduction, and research. **Methods:** State data for WA, ID, OR, and AK were used to estimate number of workers by occupation, in 2014 and 2024. These data were merged with a Canadian job-exposure matrix (CANJEM) which characterizes chemical exposures, and O*NET, which ranks occupations with particular physical, ergonomic, and psychosocial exposures. **Results:** Of the exposures considered, psychosocial and ergonomic exposures were the most prevalent among the regional workforce, though traditional chemical exposures are still common and increasing. **Conclusions:** Exposure surveillance will inform prioritization of risk reduction strategies, ultimately leading to a decrease in occupational injury and illness. Findings from this analysis will help to prioritize occupational health training and research in the region.

Title **Finding causation in occupational fatalities: A latent class analysis**

Author/s Farina, E et al

Source *American journal of industrial medicine* February 2019 62 2 123-130
<https://doi.org/10.1002/ajim.22936>

Abstract Background: The method “Learning by mistakes” was developed in Italy to conduct occupational injury investigations and to collect information on the genesis of injuries. The aim is to analyze data classified with this method in order to identify patterns among the factors contributing to injury dynamics.

Weblink Methods: Data regarding 673 factors, corresponding to 354 occupational fatalities that occurred in the Piedmont region (north-west of Italy) during 2005-2014 were considered. Latent Class Analysis (LCA) was applied to find patterns among these factors. Results: The eight-class model was selected. Most of the factors fell in the class “Fall from height or vehicle rollover due to incorrect practice” (40.56%) while the remaining factors were heterogeneously distributed in the other classes. Conclusions: All the classes found allow for a logical interpretation. Systematic use of LCA could aid in uncovering new, unexpected patterns of factors not otherwise detectable by analysis of the single fatal accident.

Title **Health and safety statistics: Key figures for Great Britain (2017/18)**

Source Health and Safety Executive (HSE)

Abstract Key figures for Great Britain (2017/18)
1.4 million working people suffering from a work-related illness
2,595 mesothelioma deaths due to past asbestos exposures (2016)
144 workers killed at work
555,000 injuries occurred at work according to the Labour Force Survey
71,062 injuries to employees reported under RIDDOR
30.7 million working days lost due to work-related illness and workplace injury
£15 billion estimated

[Weblink](#)

Title **The Holistic Risk Analysis and Modelling (HoRAM) method**

Author/s Columbo, Simone

Source *Safety science* February 2019 112 18-37 <https://doi.org/10.1016/j.ssci.2018.09.018>

Abstract

Highlights

- Systemic and systematic risk analysis and modelling.
- Logic-based Artificial Intelligence to face increasing complexity of systems.
- Risk Curve, Risk Spectrum (new), and Critical Functions List as practical tools.
- Systemic and systematic verification of the efficacy of solutions to reduce risks.
- Risk-based decision making as evolution of the opportunity-based approach.

Making decisions in complex systems and for complex phenomena is a challenging task to accomplish. As complexity and uncertainty increase, the use of scenarios to exploring that uncertainty becomes essential to support decision makers. Yet, the increasing complexity of and interrelatedness amongst systems/phenomena is imposing to the risk analysis world a paradigm shift from traditional, “paper and pencil” approaches toward simulation-based approaches, not least because the cognitive demand required to envisage all the possible alternatives the system/phenomenon might unfold is too high to manage for the human mind. The paper presents how the Holistic Risk Analysis and Modelling (HoRAM) method allows, on the one hand, to holistically account for the Human, the Technological and

the Organisational (HTO) elements of the system/phenomenon being analysed and, on the other hand, thanks to the use of artificial logic, to create complete partitions of sizes that are unthinkable to achieve with traditional, paper and pencil methods. The paper also explains how the method allows to systemically and systematically account for the consequences scenarios might generate, thus allowing to include in the decision both the possibility of the unwanted outcomes and the associated effort needed to make them less likely or less severe. Finally, it explains how the scenarios can be managed at different level of abstraction to deriving the well-known risk curve, the newly defined risk spectrum, and the critical functions list, which are all necessary tools to better discriminating which alternative to pursue and where exactly investing the (always limited and scarce) resources to reduce the risk.

Title **An illusion of objectivity in workplace investigation: The cause analysis chart and consistency, accuracy, and bias in judgments**

Author/s McLean, CL et al

Source *Journal of safety research* February 2019 68 139-148
<https://doi.org/10.1016/j.jsr.2018.12.008>

Abstract

Highlights

- Investigators who used a substandard conditions/actions checklist were less accurate than those who used an open-ended form.
- The CA Chart biased both undergraduate and professional investigators to allocate more responsibility to the worker.
- Irrelevant contextual information about safety biased both undergraduates' and professionals' judgements of event cause.
- Similar to the open-ended form, the CA Chart did not mitigate the effect of bias on judgements.
- Our findings illustrate the value of empirically vetting trusted investigation protocols.

Introduction: Investigation tools used in occupational health and safety events need to support evidence-based judgments, especially when employed within biasing contexts, yet these tools are rarely empirically vetted. A common workplace investigation tool, dubbed for this study the "Cause Analysis (CA) Chart," is a checklist on which investigators select substandard actions and conditions that apparently contributed to a workplace event. This research tests whether the CA Chart supports quality investigative judgments.

Method: Professional and undergraduate participants engaged in a simulated industrial investigation exercise after receiving a file with information indicating that either a worker had an unsafe history, equipment had an unsafe history, or neither had a history of unsafe behavior (control). Participants then navigated an evidence database and used either the CA Chart or an open-ended form to make judgments about event cause.

Results: The use of the CA Chart negatively affected participants' information seeking and judgments. Participants using the CA Chart were less accurate in identifying the causes of the incident and were biased to report that the worker was more causal for the event. Professionals who used the CA Chart explored fewer pieces of evidence than those in the open-ended condition. Moreover, neither the open-

ended form nor the structured CA Chart mitigated the biasing effects of historical information about safety on participants' judgments.

Conclusion: Use of the CA Chart resulted in judgments about event cause that were less accurate and also biased towards worker responsibility. The CA Chart was not an effective debiasing tool.

Practical application: Our results have implications for occupational health and safety given the popular nature of checklist tools like the CA Chart in workplace investigation. This study contributes to the literature stating that we need to be scientific in the development of investigative tools and methods.

[Weblink](#)

Title **Injury facts- Work: the complete reference sources for safety statistics**

Source National Safety Council: US

Abstract The number of preventable work deaths stabilized in 2017, totaling 4,414, after three consecutive years of increases. In addition to preventable fatal work injuries, 733 homicides and suicides occurred in the workplace in 2017. These intentional injuries are not included in the preventable-injury estimates.

Preventable work deaths increased less than 0.5% from 2016 to 2017, following a 5% increase in 2016, a 1% increase in 2015, and a 6% increase in 2014. The preventable death rate of 3.1 per 100,000 workers was unchanged from 2016 to 2017.

Work-related medically consulted injuries totaled 4.5 million in 2017, and total work injury costs were estimated at \$161.5 billion. Costs include wage and productivity losses, medical expenses, administrative expenses, motor vehicle property damage, and employer costs.

[Weblink](#)

Title **OHSAS 18001 certification and work accidents: Shedding Light on the connection**

Author/s Heras-Saizarbitoria et al

Source *Journal of safety research* February 2019 68 33-40

<https://doi.org/10.1016/j.jsr.2018.11.003>

Abstract

Highlights

Weblink

- The implications of OHSAS 18001 for Safety outcomes have been under-researched.
- The article analyzes the link between OHSAS 18001 and working accidents.
- 5147 Spanish firms with and without OHSAS 18001 certification are analyzed.
- OHSAS 18001 certification is not related with better safety performance.
- Higher propensity for certification in sectors with more accidents is evidenced.

Introduction: The implications of OHSAS 18001 for substantive Occupational Health and Safety outcomes such, as a reduction in work accidents, have been under-researched in the scholarly literature. The impact of this standard on other aspects of performance, such as **profitability** and productivity, has attracted more attention.

Method: This article aims to fill this gap by shedding light on the relationship between OHSAS 18001 certification and the rates of minor, serious, and fatal accidents per employee at work experienced in certified and non-certified companies.

Results: Based on an analysis of a sample of 5,147 Spanish firms, the findings show that OHSAS 18001 certification is only loosely related with better occupational health and **safety performance** measured in terms of rate of accidents at work. A propensity for OHSAS 18001 certification to be found in **economic sectors** of activity with worse occupational health and

safety outcomes in terms of rate of work-related accidents is identified. There is evidence of a *negative* selection-effect of the main international management standard for occupational health and safety. **Potential distortions** and biases that may be related to these and other findings in the scholarly literature are analyzed. Managerial implications of the main findings, implications for policy makers, and avenues for future research are discussed.

Title **Safety training transfer: The roles of coworkers, supervisors, safety professionals, and felt responsibility.**

Author/s Freitas, A. C., Silva, S. A., & Santos, C. M

Source *Journal of occupational health psychology* 2019 24 1 92-107
<http://dx.doi.org/10.1037/ocp0000125>

Abstract The aim of this study is to identify the influence of social dimensions of the work environment and the employees' felt responsibility on the transfer of safety training. We tested a model in which responses and reactions from safety players such as coworkers, supervisors, and safety professionals are positively related to the transfer of training (TT), through the mediating effect of the employees' felt responsibility and the moderating influence of supervisor support and sanctions. A two-time data collection was implemented among blue-collar employees, all low qualified, from four city councils who attended a fundamental safety training program delivered by in-house safety trainers, all safety professionals ($n = 203$). Data analysis revealed that (a) supervisors' safety responses, coworkers' safety responses, and safety professionals' reactions positively influenced the TT, an effect (b) mediated by employees' felt responsibility and (c) moderated by supervisor sanctions, but not by supervisor support. The results suggest that high sanctions enhance the positive effect of high self-responsibility on TT, and, importantly, aggravate the negative effect of low self-responsibility on TT. This is the first study to empirically test both the influence of felt responsibility and the safety professionals' reactions in the transfer process. Research should continue to examine the former construct's influence on the transfer process including, for example, its effect on supervisor support, and the latter as a safety-related social dimension variable of the work environment

Weblink

Title **Sedentary work and health WHEC report 2018 – 2**

Author/ HSE Workplace Health Expert Committee

Source <https://webcommunities.hse.gov.uk/connect.ti/WHEC/viewdocument?docid=685957&showFullinfo=Y>

Abstract The relationships between sedentary work and health are complex and the epidemiological research that explores these relationships is subject to significant methodological challenges and, in particular, obtaining valid measures of exposure to sedentary work behaviours, establishing behaviours away from the workplace and considering the potential for reverse causation. The health outcomes found to be of particular interest include all-cause mortality (females), cancer (females) and type 2 diabetes. Further research is needed on all of these to better estimate their significance. Whilst there is little contemporary evidence that occupational sitting is associated with an increase in musculoskeletal symptoms, such problems are reported in young workers/ adolescents and should be a focus of attention, especially as this demographic will form the future workforce. As some demographic groups appear to be at greater risk of adverse health outcomes, workplace intervention strategies may seek to prioritise these groups. Attempts to reduce exposure to sedentary work in the workplace have been shown to have small but demonstrable impacts on behaviour but only when the interventions are appropriately designed.

The nature of sedentary lifestyles/work and of physical activity needs further research. Currently, while physical activity in leisure time is generally seen to be beneficial for health, some physically active occupations have been associated with poorer health. This needs to be clarified to prevent confusion for both employers and employees

Title **The psychological contract: A missing link between safety climate and safety behaviour on construction sites**

Author/s Newaz, MT et al

Source *Safety science* February 2019 112 9-17 <https://doi.org/10.1016/j.ssci.2018.10.002>

Abstract

Weblink

Highlights

Adding value to management research for improving safety on construction sites. Use of a psychological contract of safety model to influence safety behaviour. Structural Equation Modelling to validate psychological contract of safety model. Empirical data collected from a mega construction project. Relationships examined between safety climate factors and psychological contact.

The relationship between safety climate and safety behaviour is well established in construction, however, the way safety plans and actions of top management translate to the workforce is still unclear. Considering the influence of supervisors' behaviour on workers' safety behaviour and conceptualizing safety through the lens of the 'Psychological Contract' (PC), it is argued that 'Psychological Contract of Safety' (PCS), could be a vital factor to explain how workers attach meaning to supervisor behaviour at construction sites and prioritise safety issues. Previous research suggests that (1): safety climate is based on perception of workers regarding safety and (2): PCS is based on perceived mutual obligations between workers and supervisors. As a result, if PCS or mutual obligations between workers and supervisors are fulfilled, then safety behaviour of the workers will be positively influenced. A model depicting the PCS as an alternative intervention in understanding how safety climate factors influence workers' safety behaviour is presented. Using Structural Equation Modelling (SEM) the model of the PCS is validated. The model explains how construction safety is influenced by the mutual safety obligations between supervisor and workers.

Title **Summary of recommendations from the National Institute for Occupational Safety and Health Fire Fighter Fatality Investigation and Prevention Program, 2006–2014**

Author/s Hard, DL et al

Source *Journal of safety research* February 2019 68 21-25 <https://doi.org/10.1016/j.jsr.2018.10.013>

Abstract

Highlights

- The NIOSH FFFIPP conducts independent investigations of selected fire fighter deaths. |
- Investigations from 2006 to 2014 were selected for this study and compared to investigations from 1998 to 2005.
- There were 10 major recommendation categories.

- Medical recommendations between 2006 and 2014 compared to those of 1998 and 2005 added “medical clearance for duty”.
- Traumatic injury recommendations for 2006–2014 had a major change with “training” being a leading FFFIPP recommendation.
- Fire fighters can utilize the recommendations offered to prevent additional fire fighter fatalities.

Introduction: The NIOSH Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) conducts independent investigations of selected fire fighter line-of-duty deaths (LODD) and offers recommendations to prevent similar deaths. The purpose of the current study was to provide information on more recent FFFIPP recommendations and to determine if recommendations have changed over time.

Methods: Fatality investigations completed from 2006 to 2014 were selected for this study with recommendations being assigned into twelve major categories when possible. The most frequently occurring recommendations were then rank ordered overall and then by medical and traumatic fire fighter LODD.

Results: There were 1,067 total recommendations made in the published fire fighter investigative reports for both medical and trauma-related fire fighter fatalities for the period 2006–2014. Of these, 784 (73%) could be placed within one of the 12 categories noted previously. The top 10 recommendation categories overall were: 1. Medical screening, 2. Fitness and wellness program, 3. Training, 4. Medical clearance, 5. Standard Operating Procedures/Standard Operating Guidelines (SOPs/SOGs), 6. Incident command, 7. Strategy and tactics, 8. Communications, 9. Personal protective equipment and 10. Staffing. Conclusions: The leading recommendations from the NIOSH FFFIPP medical investigations between 2006 and 2014 did not change compared to those made between 1998 and 2005, with the exception of the addition of “medical clearance for duty”. There were changes for the traumatic injury leading recommendations for 2006–2014, with the major change being “training”, which was the leading FFFIPP recommendation for traumatic injuries for this time period.

Practical applications: The intent of the FFFIPP is to influence fire departments and fire fighters to critically assess and evaluate situations/circumstances similar to those identified by NIOSH investigations and implement the recommendations offered to prevent additional fire fighter fatalities.

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Title **A systematic review of the safety climate intervention literature: Past trends and future directions.**

Author/s Lee, J., Huang, Y.-h., Cheung, J. H., Chen, Z., & Shaw, W. S

Source *Journal of occupational health psychology* 2019 24 1 66-91.
<http://dx.doi.org/10.1037/ocp0000113>

Abstract Safety climate represents the meaningfulness of safety and how safety is valued in an organization. The contributions of safety climate to organizational safety have been well documented. There is a dearth of empirical research, however, on specific safety climate interventions and their effectiveness. The present study aims at examining the trend of safety climate interventions and offering compiled information for designing and implementing evidence-based safety climate interventions. Our literature search yielded 384 titles that were inspected by three examiners. Using a stepwise process that allowed for assessment of interobserver agreement, 19 full articles were selected and reviewed. Results showed that 10 out of the 19 articles (52.6%) were based on a quasi-experimental pre- and postintervention design, whereas 42.1% (n = 8) studies were based on a mixed-design approach (including

both between- and within-subject design). All interventions in these 19 studies involved either safety-/health-related communication or education/training. Improvement of safety leadership was also a common component of safety climate interventions. According to the socio-technical systems classification of intervention strategies, all studies were categorized as interventions focusing on improving organizational and managerial structure as well as the personnel subsystem; four of them also aimed at improving technological aspects of work, and five of them aimed at improving the physical work subsystem. In general, a vast majority of the studies (89.5%, n = 17) showed a statistically significant improvement in safety climate across their organizations postintervention

Title **Temporary safety. Regulating working conditions in temporary agency work**

Author/s Strauss-Raats, Pille

Source *Safety science* February 2019 112 213-222
<https://doi.org/10.1016/j.ssci.2018.10.020>

Abstract

Weblink

Highlights

- Unique comparative case study design examining regulatory effect on OHS in TAW.
- Tests PDR model on workplace level practices within contrasting regulatory contexts.
- Discusses implications for occupational health and safety regulation and practice.

This comparative case study investigates how regulatory frameworks of temporary agency work shape occupational health and safety at workplace level. Research is framed by Pressures-Disorganization-Regulatory Failure (PDR) model explaining workplace level occupational health and safety outcomes through economical, work organizational and regulatory factors. Two cases of using temporary agency work in manufacturing are compared within one multinational company in two contrasting EU regulatory regimes: Sweden and Poland. Workplace level practices relating to occupational health and safety of temporary agency work are explored through empirical evidence from interviews, documents and on-site observations. Results illustrate how workplace level practices that impact health and safety are overwhelmingly shaped by economic pressures and suggests a hierarchical relationship between the factors of PDR model, with economic pressures and work disorganization moderating the effect of regulatory failure.

Title **Using a psychological contract of safety to predict safety climate on construction sites**

Author/s Newaz, MT et al

Source *Journal of safety research* February 2019 68 9-19
<https://doi.org/10.1016/j.jsr.2018.10.012>

Abstract

Highlights

- Managers must ensure mutual safety obligations between supervisor and workers are fulfilled.
- The research acts as a management intervention to modify behavior to improve safety outcomes.
- Psychological contract of safety is demonstrated with an emphasis on mutual

safety obligations.

- If importance is given to social exchange, organizations will have positive safety outcomes.

Introduction: The fact that safety climate impacts safety behavior and delivers better safety outcomes is well established in construction. However, the way workers safety perception is inclined and developed is still unclear.

Method: In this research, the influence of supervisors' developing safety climate and its impact on workers' safety behavior and their conceptualization of safety is explored through the lens of the 'Psychological Contract' (PC). More specifically, it is argued that 'Psychological Contract of Safety' (PCS) is a vital factor in explaining how workers attach meaning to a supervisor behavior. Extant research suggests: (a) safety climate is based on the perception of workers regarding safety; and (b) PCS is based on perceived mutual obligations between workers and supervisors. As a result, this research argues that if PCS or mutual obligations between workers and supervisors are fulfilled, then safety climate of the workers will be positively influenced. A model is presented depicting PCS as an alternative intervention in understanding how safety climate could be influenced and predicted by the level of fulfillment of mutual safety obligations. Using Structural Equation Modeling (SEM) the model of the PCS is validated with data collected from a mega-construction project in Australia.

Results: The results suggest that to have a positive and strong safety climate, top-level managers must ensure that mutual safety obligations between supervisor and workers are fulfilled. This enables the PCS to be introduced as a new 'predictor' of safety climate.

Practical applications: The novel outcome of the research could be considered as a management intervention to modify supervisors' behavior to produce better safety outcomes.

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Title	What does safety commitment mean to leaders? A multi-method investigation
Author/s	Fruhen, LS et al
Source	<i>Journal of safety research</i> February 2019 68 203-214 https://doi.org/10.1016/j.jsr.2018.12.011
Abstract	Introduction: Perceived management safety commitment as an aspect of safety climate or culture is a key influence on safety outcomes in organizations. What is unclear is how perceptions of management commitment are created by leaders.
Weblink	Method: To address this gap in the literature, we position safety commitment as a leadership construct viewed from the perspectives of the leaders who experience and demonstrate it. In this paper, an established multidimensional commitment framework is applied to leaders' safety commitment (consisting of affective, normative, and calculative commitment). Via an exploratory sequential mixed methods design combining interviews (n = 40) and surveys (n = 89), we investigate the applicability of this theoretical conceptualization to safety commitment. Results: The results indicate the multiple dimensions captured leaders' safety commitment well, safety commitment can be demonstrated via a range of behaviors, and the dimensions' association with behavioral demonstrations aligned with those of other types of commitment reported in the literature. Only affective safety commitment was consistently associated with demonstrations of safety

commitment. The link between high levels of affective and normative safety commitment and demonstrations was more pronounced when participants perceived their company's safety climate more positively. *Conclusions:* Adopting a focus on leaders' experience of safety commitment offers opportunities for new research into the way in which safety commitment perceptions are shaped by leaders. Practical application: The findings can support leaders' reflection about their personal mindset around safety and support them in fostering strong safety climates and cultures. It further encourages organizations in creating work environments that in particular foster affective and normative safety commitments in leaders.

Title

Work-related injury and illness among older truck drivers in Australia: A population based, retrospective cohort study

Author/s

Source ^{Newnam, S et al}
Safety science February 2019 112 189-195
<https://doi.org/10.1016/j.ssci.2018.10.028>

Abstract

Weblink

Highlights

- Older drivers are susceptible to functional decline in sensory, cognitive and physical abilities.
- This study explores the landscape of work-related injury and disease in the Australian transportation industry.
- Claim data from the National Dataset for Compensation-based Statistics in Australia are analysed.
- The results identify insight into the unique challenges facing older truck drivers.

The professional truck driver population is aging in Australia and internationally. However, there is currently a gap in knowledge related to the morbidity of workers in the transport industry. Understanding the health and wellbeing of workers employed in the transport industry should be a priority to ensure the appropriate allocation of resources to prevention and rehabilitation efforts. This study explored the landscape of work-related injury and disease in the Australian transport industry, by measuring injury and illness resulting in time loss in truck drivers by age group. The study used a population based, retrospective cohort study based on claim data collected from the National Dataset for Compensation-based Statistics in Australia. Analysis on a total of 120,742 accepted workers' compensation claims was performed to characterize the distribution of workers' compensation claims by four time periods (2004–2006, 2007–2009, 2010–2012, and 2013–2015), age groups, and jurisdictions. Three key findings were identified: the relative risk of workers' compensation claims increased with age; older truck drivers (i.e., 65 years and over) did not have significantly higher rates of musculoskeletal injury (MSK) or fracture injuries, and; older truck drivers had a significantly larger proportion of neurological injury compared to younger age groups. The findings of this research support the need for context sensitive, multi-domain, interventions targeted at older truck drivers in order to both prevent work-related injury and disease and reduce the burden of disability once an injury or disease has occurred.

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WORKERS' COMPENSATION

- Title** **Heatwave and work-related injuries and illnesses in Adelaide, Australia: a case-crossover analysis using the Excess Heat Factor (EHF) as a universal heatwave index**
- Author/s** Blesson M. et al
- Source** *International archives of occupational and environmental health* February 2019 92 2 263-272 <https://doi.org/10.1007/s00420-018-1376-6>
- Abstract** **Purpose:** Heatwaves, or extended periods of extreme heat, are predicted to increase in frequency, intensity and duration with climate change, but their impact on occupational injury has not been extensively studied. We examined the relationship between heatwaves of varying severity and work-related injuries and illnesses. We used a newly proposed metric of heatwave severity, the Excess Heat Factor (EHF), which accounts for local climate characteristics and acclimatization and compared it with heatwaves defined by daily maximum temperature.
- Methods:** Work-related injuries and illnesses were identified from two administrative data sources: workers' compensation claims and work-related ambulance call-outs for the years 2003–2013 in Adelaide, Australia. The EHF metrics were obtained from the Australian Bureau of Meteorology. A time-stratified case-crossover regression model was used to examine associations between heatwaves of three levels of severity, workers' compensation claims, and work-related ambulance call-outs.
- Results:** There was an increase in work-related ambulance call-outs and compensation claims during low and moderately severe heatwaves as defined using the EHF, and a non-significant decline during high-severity heatwaves. Positive associations were observed during moderate heatwaves in compensation claims made by new workers (RR 1.31, 95% CI 1.10–1.55), workers in medium-sized enterprises (RR 1.15, 95% CI 1.01–1.30), indoor industries (RR 1.09, 95% CI 1.01–1.17), males (RR 1.13, 95% CI 1.03–1.23) and laborers (RR 1.21, 95% CI 1.04–1.39).
- Conclusions:** Workers should adopt appropriate precautions during moderately severe heatwaves, when the risks of work-related injuries and illnesses are increased. Workplace policies and guidelines need to consider the health and safety of workers during heatwaves with relevant prevention and adaptation measures.

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WORKPLACE VIOLENCE

- Title** **Long-term adverse health outcomes of physical workplace violence: a 7-year population-based follow-up study**
- Author/s** Friis, K Pihl-Thingvad, J Breinholt Larsen, F Christiansen, J Lasgaard, M
- Source** *European journal of work and organizational psychology* 2019 28 1 101-109 DOI: 10.1080/1359432X.2018.1548437
- Abstract** The aim of the present study was to analyse whether physical workplace violence increases the risk of long-term adverse health outcomes (i.e., high number of visits to the general practitioner, outpatient treatment, hospital admittance, antidepressant use, and/or having a mental disorder). The study was based on representative survey data from 2006 and 2010 (entitled "How are you?") merged

with register data for a 7-year follow-up period ($N = 30,812$). To examine if physical workplace violence was a predictor of adverse health outcomes, logistic regression models were conducted for the total follow-up period and for each follow-up year with the different outcome measures as the dependent variables. In the follow-up period, individuals who were exposed to physical workplace violence had a higher number of visits to the general practitioner, had more often received outpatient treatment, and had more often been admitted to hospital than their non-exposed counterparts. Moreover, exposed individuals had higher odds of using antidepressants in the last three follow-up years than did non-exposed individuals. The findings call for heightened attention to securing preventive as well as rehabilitative strategies to help victims of physical workplace violence with the aim of avoiding adverse long-term health consequences.

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