

Emerging Evidence Alert

July 2019

This Emerging Evidence Alert includes the latest peer-reviewed articles, reports and evidence on a range of workplace health and safety, prevention, recovery at work and return to work topics. It presents a review of recent journal articles or relevant content related to the five Comcare themes of: enabling healthy and safe workplaces; enhancing employer capability; guiding and supporting mental health; fostering work participation; and the future of work.

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1. Level of Evidence – certain study designs are scientifically stronger at answering a question. The scoring hierarchy we provided is presented below

Level of Evidence	Description
Level 1	Evidence from a systematic review or meta-analysis of relevant studies.
Level 2	Evidence from a randomised controlled trial
Level 3	Evidence from a controlled intervention trial without randomisation (i.e. quasi-experimental).
Level 4	Evidence from a case-control or cohort study.
Level 5	Evidence from a single case study, a case series, or qualitative study.
Level 6	Evidence from opinion pieces, reports of expert committees and/or from literature reviews (scoping or narrative).

2. Relevance – research carried out in Australia or similar countries is most relevant to Australian readers

Level	Description
A	Study conducted in Australia or the study has been conducted outside Australia but confounders unlikely to affect relevance
B	Study conducted outside Australia and confounders likely to affect generalisability

Building a psychologically healthy and safe workplace

How can organisations build psychologically safe workplaces that help employees thrive and boost workplace engagement and productivity? Many employers have taken steps to address this issue with dedicated programs and resources that are driving positive outcomes.

Here are two resources that have recently been released from SafeWork NSW and the Black Dog Institute to give you an insight into how organisations are taking action.

SafeWork NSW has produced a two part video series to assist workplaces to understand their duties as outlined in the [SafeWork Australia guide](#).

[Video 1: Building a psychologically healthy and safe workplace – Part 1 Prevention](#)

[Video 2: Building a psychologically healthy and safe workplace – Part 2 Early Intervention](#)

The Black Dog Institute has developed an evidence-based [Workplace Mental Health Toolkit](#). This helps employees understand common mental health issues in the workplace and provides support strategies and resources.

The Institute has also developed a world-first online [training program](#) called *HeadCoach* that helps managers start wellbeing conversations with their employees. Findings from a [randomised controlled trial](#) evaluating the program, suggest it not only improved managers' capacity to respond to staff wellbeing, it also encouraged preventive behaviours to reduce known mental health risk factors present in the workplace.

Fostering Work Participation

Presenteeism & absenteeism

A Systematic Review of Infectious Illness Presenteeism: Prevalence, Reasons and Risk Factors

This review article explored the prevalence of, and reasons and risk factors for, presenteeism in relation to an infectious illness. The study found that self-reported reasons for presenteeism fell into three main themes: 1. Organisational factors, 2. Job characteristics and 3. Personal reasons. The review concluded that infectious illness presenteeism was common, and to address this, organisations should focus on promoting a positive working culture and developing sickness absence policies that reduce presenteeism.

Webster et al. 2019.

BMC Public Health, vol. 19, no. 1

Keywords: Presenteeism, Infectious Illness, Diseases, Prevalence, Risk Factors, Health, Influenza, Organisational, Behaviour

Evidence Level: 1A

Link: <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-019-7138-x>

Antecedent Factors Predicting Absenteeism and Presenteeism in Urban Area in Malaysia

This study explored antecedent factors predicting employees' absenteeism and presenteeism by income, physical and mental health among employees from 47 private companies located in urban Malaysia. The study found a combination of socioeconomic, physical and mental health factors predicted absenteeism and presenteeism. Issues such as having insufficient income leading to second jobs or working more hours which may affect sleep, leading to stress and poor physical health.

Wee et al. 2019.

BMC Public Health, vol. 19

Keywords: Absenteeism, Presenteeism, Physical Health, Mental Health, Employees

Evidence Level: 4B

Link: <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-019-6860-8>

Work-Related Exposures and Sickness Absence Trajectories: A Nationally Representative Follow-up Study among Finnish Working-Aged People

This study explored the associations of 12 physical work exposures, individually and in combination, with sickness absence (SA) trajectories among an occupationally active Finnish population. The study found that sitting or use of keyboard >1 year was inversely associated with high SA. The odds of high SA was related to an increasing number of risk factors, and was highest for those with ≥ 4 physical workload factors. The authors concluded that organisations need to find ways to better maintain the work ability of those in physically loading work.

Lallukka et al. 2019.

International Journal of Environmental Research and Public Health, vol. 16, no. 12

Keywords: Sickness Absence, Work-Related Exposures, Finnish, Workload

Evidence Level: 4B

Link: <http://www.mdpi.com/resolver?pii=ijerph16122099>

Return to work

The Work of Return to Work. Challenges of Returning to Work When You Have Chronic Pain: A Meta-ethnography

This review article aimed to explore the obstacles to returning to work, as perceived by people with chronic non-malignant pain and as perceived by employers. The review found that for people

with chronic pain, and for their employers, navigating obstacles to return to work entails balancing the needs of (1) the person with chronic pain, (2) work colleagues and (3) the employing organisation. This requires substantial effort for a successful return to work.

Grant et al. 2019.

BMJ Open, vol. 9, no.6

Keywords: Chronic Pain, Return to Work, Pain, Managing, Workplace Adjustments, Employers

Evidence Level: 5A

Link: <http://bmjopen.bmj.com/cgi/pmidlookup?view=long&pmid=31227529>

International Classification of Functioning, Disability and Health in Vocational Rehabilitation: A Scoping Review of the State of the Field

This review outlined the existing evidence on operationalisation of the International Classification of Functioning, Disability and Health (ICF) within vocational rehabilitation (VR). The review found that the ICF framework was most often used for structuring or linking information of functioning, and the ICF was considered a useful tool to inform the VR professionals' assessment of functioning, however, more research within VR was needed to standardise and ease the use of the ICF.

Momsen et al. 2019.

Journal of Occupational Rehabilitation, vol. 29, no. 2

Keywords: Functioning, Disability, Health, Vocational rehabilitation

Evidence Level: 6A

Link: <https://link.springer.com/article/10.1007%2Fs10926-018-9788-4>

Single transitions and persistence of unemployment are associated with poor health outcomes

This study explored the associations of single transitions and persistence of unemployment with health during a recession, which began in 2008. The study found that single transitions into unemployment and persistent unemployment are associated with poor mental and general health, obesity, and to a lesser extent smoking. The authors concluded that re-employment was an important strategy to improve health of unemployed individuals.

Herber et al. 2019.

BMC Public Health, vol. 19

Keywords: Single Transitions, Unemployment, Poor Health Outcomes, Economic Recession,

Evidence Level: 4B

Link: <https://bmcpublikealth.biomedcentral.com/articles/10.1186/s12889-019-7059-8>

Employees Diagnosed with Cancer: Current Perspectives and Future Directions from an Employer's Point of View

This review explored the evidence associated with opportunities for the employer to enhance the work participation of employees with cancer. The review concluded that there was little known about which aspects of employer support had a positive impact on the ability of employees diagnosed with cancer to retain at work or RTW. There was also a lack of interventions and tools which support employers in their management of employees diagnosed with cancer.

Tamminga et al. 2019.

Journal of Occupational Rehabilitation, vol. 29, no. 2

Keywords: Cancer, Employees, Employers, Support, Workplace, Work retention, RTW

Evidence Level: 6A

Link: <https://doi.org/10.1007/s10926-018-9802-x>

What Employer Actions Are Considered Most Important for the Return to Work of Employees with Cancer? A Delphi Study Among Employees and Employers

This study explored what employer actions were considered most important for the RTW of employees with cancer, by employers and employees separately. Both the employer and employee panels reached consensus on the importance of 'emotional support', 'practical support', 'allow sufficient sick leave', 'plan return to work', 'adjust expectations', 'assess work ability', and 'show appreciation'. Employers also reached consensus on 'communicate' and 'treat normally', and employees on 'handle unpredictability'.

Greidanus et al. 2019.

Journal of Occupational Medicine, vol. 29, no. 2

Keywords: Return to work, Employees, Cancer, Employer actions, Support

Evidence Level: 6A

Link: <https://doi.org/10.1007/s10926-018-9800-z>

Work ability

Effect of Stress on the Work Ability of Aging American Workers: Mediating Effects of Health

This study examined how stress affects the work ability of an aging workforce, how health mediates this relationship, and how it was affected by social status. The study found that stress was inversely associated with work ability, with health a mediator between the two. The effects of stress and health on work ability decreased as social status increased. The authors concluded that to cope with the challenges of an aging workforces, future policy-makers should consider job resources and social status.

Yang et al. 2019.

International Journal of Environmental Research and Public Health vol. 16

Keywords: Stress, Work Ability, Workers, Ageing Workforce, Social Status, Health

Evidence Level: 4B

Link: <http://www.mdpi.com/resolver?pii=ijerph16132273>

Telemonitoring-supported Exercise Training, Metabolic Syndrome Severity, and Work Ability in Company Employees: A Randomised Controlled Trial

This study explored the effect of regular telemonitoring-supported physical activity on metabolic syndrome severity and work ability in company employees. The study found that a 6-month exercise-focused intervention using telemonitoring systems reduced metabolic syndrome severity. 11 adverse events were identified in the exercise group, with only one event (a twisted ankle) regarded as directly caused by the intervention. The authors concluded that a telemonitoring-supported physical activity program showed potential to reduce disease risk, while also improving mental health, work ability, and productivity-related outcomes for employees at high risk for cardiovascular and metabolic disease.

Haufe et al. 2019.

The Lancet, vol. 4, no. 7

Keywords: Exercise Training, Metabolic Syndrome, Work Ability, Employees, Telemonitoring, Cardiovascular, Metabolic Disease

Evidence Level: 2A

Link: [https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667\(19\)30075-1/fulltext](https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(19)30075-1/fulltext)

Shift work

Individual Metabolomic Signatures of Circadian Misalignment During Simulated Night Shifts in Humans

This study characterised the effects of night shifts on 24-h rhythms in the metabolome (the complete set of small-molecule chemicals found within a biological sample.) The study found that the majority of rhythmic metabolites were misaligned relative to the endogenous circadian system during the night shift condition, which could be a key mechanism in the increased prevalence of adverse metabolic health effects observed in shift workers. The individual response to the night shift protocol was found to be highly diverse.

Kervezee et al. 2019.

PLOS Biology, vol.17, no. 6

Keywords: Circadian, Shift Work, Night Shift, Metabolomic, Metabolic, Circadian Rhythm, Health

Evidence Level: 5A

Link: <https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000303>

The association between night shift work and nutrition patterns among nurses: a literature review

This systematic review explored the evidence for associations between night shift work and dietary habits among nurses. The review showed some poor nutritional habits among nurses working night shifts, with a consistent association of night work with higher coffee (caffeine) consumption, as well as lower alcohol, and fruit and vegetables consumption, more frequent snacks consumption, later time of the last meal, eating at night, meals irregularity, and a poorer diet quality among night shift nurses when compared to the reference.

Peplonska et al. 2019.

Medycyna Pracy, vol. 70, no. 3

Keywords: Night shift, Shift worker, Nutrition patterns, Nurses, Eating quality, Diet quality

Evidence Level: 6A

Link: <https://dx.doi.org/10.13075/mp.5893.00816>

A Hard Day's Night: Time Use in Shift Workers

This study explored the physical activity patterns in two groups of shift workers, and measured variations according to their shift schedules. The study found that as the occupational tasks for participants in one workplace involved physical activities, the findings do not support the conventional view that shift workers were more sedentary than those who only work during the day. The authors concluded that occupational tasks were more important determinant of physical activity patterns both on work and non-work days than varying shift patterns.

Kolbe-Alexander et al. 2019.

BMC Public Health, vol. 19

Keywords: Shift Workers, Physical Activity, Employees, Occupational Tasks, Day-Shift, Night-Shift

Evidence Level: 3A

Link: <https://bmcpublikealth.biomedcentral.com/articles/10.1186/s12889-019-6766-5>

Working hours

The Effect of Long Working Hours and Overtime on Occupational Health: A Meta-Analysis of Evidence from 1998 to 2018

This meta-analysis examined the effects of long working hours on health or occupational health since 1997. The review showed that long working hours adversely affected the occupational

health of workers. The authors concluded that management on safeguarding the occupational health of workers working long hours should be reinforced.

Wong et al. 2019.

International Journal of Environmental Research and Public Health, vol. 16, no. 12

Keywords: Occupational Health, Long Working Hours, Overtime, Psychological Health, Mental Health, Health Behaviours, Related Health, Nonspecific Health

Evidence Level: 1A

Link: <http://www.mdpi.com/resolver?pii=ijerph16122102>

Perceptions of the Impact of Non-standard Work Schedules on Health in Australian Graduates: An Exploratory Study

This study explored if recent Australian graduates in various non-standard workhour schedules perceived that their work schedule negatively impacted their health. The study found that significantly more of those who were engaged in non-standard work schedules or worked beyond contracted hours perceived their working arrangements as having an impact on their health. The authors concluded that workers' perceptions of the impact of work hours on health, particularly when workers may be experiencing good global health but be at risk for negative health outcomes in future was important.

Crowther et al. 2019.

Industrial Health vol. 8

Keywords: Non-standard Work Schedule, Negative Health Outcomes, Australian Graduates, Health, Perceptions

Evidence Level: 4A

Link: https://www.jstage.jst.go.jp/article/indhealth/advpub/0/advpub_2019-0036/article

Sick leave

Impact of Job Adjustment, Pain Location and Exercise on Sick Leave Due to Lumbopelvic Pain in Pregnancy: A Longitudinal Study

This study explored factors associated with sick leave due to lumbopelvic pain (LPP) in pregnancy. The study found that facilitating early job adjustments might keep more pregnant women in employment and that pain locations in pelvic area, disability, lower education and being sick listed due to LPP in mid pregnancy were important risk factors for sick leave in late pregnancy. Allocation to an exercise group tended to reduce the risk of sick leave in late pregnancy

Stafne et al. 2019.

Scandinavian Journal of Primary Health Care, vol. 37, no. 2

Keywords: Job adjustment, Pain location, Exercise, Sick leave, Pregnancy, Lumbopelvic pain

Evidence Level: 4A

Link: <http://www.tandfonline.com/doi/full/10.1080/02813432.2019.1608058>

Enhancing Employer Capability

Wellness programs

The Association between Organisational Justice and Psychological Well-Being by Regular Exercise in Korean Employees

Office workers sit for most of the workday, which has been linked to physical and mental ill-health and premature death. This study explored barriers and facilitators to reducing sitting in office workers who received an intervention prototype (the 'ReSiT [Reducing Sitting Time] Study'). The

program involved a sit-stand workstation and tailored advice to enhance motivation, capability and opportunity to replace sitting with standing. The authors concluded that it was important to understand workers' mental representations of their work, and the social functions of sitting and standing in the workplace.

Park et al. 2019.

International Journal of Environmental Research and Public Health, vol. 16, no. 12

Keywords: Psychological Well-being, Regular Exercise, Employees, Korean, Organisational Justice, Mental Health

Evidence Level: 4B

Link: <http://www.mdpi.com/resolver?pii=ijerph16122223>

Improvements in Psychological and Occupational Well-being Following a Brief Yoga-Based Program for Education Professionals

This study explored changes in psychological and occupational well-being in education professionals who attended a yoga-based program. The study found that participants showed improvements in perceived stress, mindfulness, empowerment, positive affect, negative affect, self-compassion, total work engagement, vigor, sleep quality, resilience, satisfaction with life, as well as exhaustion and professional efficacy which are dimensions of burnout. The authors concluded that yoga-based program improved psychological and occupational well-being in education professionals.

Trent et al. 2019.

Global Advances in Health and Medicine, vol. 8

Keywords: Yoga, Yoga-based Program, Education Professionals, Occupational Well-being, Psychological Well-being, Empowerment, Positive

Evidence Level: 4A

Link: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6563397/>

Nature-Based Interventions for Improving Health and Wellbeing: The Purpose, the People and the Outcomes

This study surveyed experts from seven countries to identify the different forms that nature-based health interventions (NBIs) take, the potential health outcomes and the target beneficiaries. The study found 27 NBIs, aiming to prevent illness, promote wellbeing and treat specific physical, mental or social health and wellbeing conditions. These interventions included those that change the environment in which people live, work, learn, recreate or heal, and those that change behavior. The experts also reported that a range of factors (including socioeconomic variation) influence the extent to which NBIs succeed.

Shanahan et al. 2019.

Sports, vol. 7, no. 6

Keywords: Nature-Based Interventions, Health, Wellbeing, Behavioral Change, Social Health

Evidence Level: 6A

Link: <https://www.mdpi.com/2075-4663/7/6/141>

Opportunities for Employers to Support Physical Activity Through Policy

This paper provides a definition for worksite policy and discuss how policy approaches can support employers' efforts to promote physical activity. The paper reports on how confusion exists about how to define workplace policies as many worksites implement programs, benefit designs, and environmental strategies and describe these as policies. The authors describe worksite physical activity policies that employers can adopt and implement.

Ablah et al. 2019.

Preventing Chronic Disease vol. 16

Keywords: Employers, Physical Activity, Workplace Culture, Policy

Evidence Level: 6A

Link: https://www.cdc.gov/pcd/issues/2019/19_0075.htm

Health Promotion and Prevention in Occupational Health Systems in Europe

This study explored the differences in OHS systems that the European Economic Area countries use for prophylactic activities focused on diseases of affluence and how the OHS are used for health promotion actions. The study found that OHS professionals were well placed to perform actions directed at health promotion and prophylactics of a wide range of diseases - not only occupational/work-related, but also non-communicable, particularly life-style-related diseases of affluence.

Sakowski et al. 2019.

International Journal of Occupational and Environmental Medicine, vol. 32, no. 3

Keywords: Health promotion, Prevention, Occupational health, Prophylactics, Occupational medicine services

Evidence Level: 5B

Link: <http://ijomeh.eu/Health-promotion-and-prevention-in-occupational-health-systems-in-Europe,97178,0,2.html>

Organisational issues

Motivating Change: A Grounded Theory of How to Achieve Large-scale, Sustained Change, Co-created with Improvement Organisations Across the UK

This paper presents learning from experienced improvement organisations on the conditions necessary to facilitate and sustain improvement at scale. The authors concluded that the theory of Motivating Change which suggests that synergy between staff's perceived need and desire for improvement, and the extrinsic motivators for change facilitate effective change, and is a useful explanation and guide for workers involved in change work that capitalises on front-line expertise.

Breckenridge et al. 2019.

BMJ Open, vol. 8, no.2

Keywords: Change, Healthcare, Front-line Staff, Organisations, United Kingdom

Evidence Level: 5A

Link: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6568165/>

I Hear You, but Do I Understand? The Relationship of a Shared Professional Language with Quality of Care and Job Satisfaction

This study examined if a shared language in a healthcare team is associated with better relational coordination, higher quality of care as well as job satisfaction of the staff. The study found that shared language was positively related to perceived quality of care and job satisfaction. Moreover, the study found evidence for a mediation of these relationships by relational coordination and psychological safety. The findings have implications for other types of interprofessional teams.

Stühlinger et al. 2019.

Frontiers of Psychology, vol. 10

Keywords: Job Satisfaction, Communication, Quality of Care, Shared Language, Healthcare Workers, Switzerland, Interprofessional

Evidence Level: 4B

Link: <https://www.frontiersin.org/articles/10.3389/fpsyg.2019.01310/full>

Reducing Disparities for Women and Minority Business in Public Contracting Work: A Call for Social Virtuosity

This paper calls for the concept of virtuosity to be highly placed on the business and management research agendas. The study reports on a critical participatory action research (CPAR) project to address gender and racial disparities in local government contracting opportunities, developed in collaboration with several community, women and minority-serving and legal partners. The authors describe this work in the context of social virtuosity and discuss the implications for future research and public policy.

Murrell et al. 2019.

Frontiers of Psychology, vol. 10

Keywords: Disparities, Women, Minority, Discrimination, Social, Business

Evidence Level: 5A

Link: <https://www.frontiersin.org/articles/10.3389/fpsyg.2019.01264/full>

Development of Job Demands, Decision Authority and Social Support in Industries with Different Gender Composition - Sweden, 1991-2013

This study explored the development of job demands, decision authority and social support within and between industries with different gender composition in Sweden between 1991 and 2013. The study found that the reported low decision authority was higher in education and health and social care and probability of having high job demands were higher, during the whole study period, for both genders. The authors concluded that there has been a negative development of job demands and decision authority in the female-dominated industries education and health and social care in Sweden, whereas social support has developed more negatively for women in health and social care and in labour intensive services.

Cerdas et al. 2019.

BMC Public Health, vol. 19, no. 1

Keywords: Job Demands, Decision Authority, Social Support, Gender Composition, Sweden, Health

Evidence Level: 4B

Link: <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-019-6917-8>

The Future of Work

Technology

Prediction of Computer Vision Syndrome in Health Personnel by Means of Genetic Algorithms and Binary Regression Trees

The use of computers for a prolonged time may have negative effects on vision, leading to a greater risk of Computer Vision Syndrome (CVS). This study evaluated the ocular and visual symptoms related to CVS, and the factors associated with CVS, with the help of an algorithm model. The current study found a high prevalence of CVS in healthcare workers, which was associated with a longer duration of occupation and higher daily computer usage.

Arttime Rios et al. 2019.

Sensors, vol. 19, no. 22

Keywords: Computer Vision Syndrome, Health Personnel, Genetic Algorithms, Binary Regression Trees, Electronic, Vision, Computer Usage

Evidence Level: 4B

Link: <http://www.mdpi.com/resolver?pii=s19122800>

Design Considerations for Low-level Risk Personal Protective Clothing: A Review

This systematic review looked at use of personal protective clothing (PPC) and heat stress, with a focus on working conditions of high temperature and humidity. The review found that fiber type, textile material construction and treatment need to be considered alongside garment fit and construction to design functional PPC providing wearers with adequate protection and comfort. This review provides directions for further research in low-level risk PPC.

Watson et al. 2019.

Industrial health, vol. 57, no. 3

Keywords: Personal protective clothing, PPC, Design, Industrial workwear

Evidence Level: 1A

Link: https://www.jstage.ist.go.jp/article/indhealth/57/3/57_2018-0040/article

Guiding and Supporting Mental Health

Web based interventions

Participant Engagement in and Perspectives on a Web-Based Mindfulness Intervention for 9-1-1 Telecommunicators: Multimethod Study

This study assessed engagement in a Web-based mindfulness-based interventions (MBIs) designed for 9-1-1 telecommunicators. The study found that no individual participant characteristics were associated with the level of engagement, and that participant engagement did vary by the call center. The authors concluded that efforts to improve intervention engagement should focus on organisational-level factors rather than individual participant characteristics.

Kerr et al. 2019.

Journal of Medical Internet Research, vol. 21, no. 6

Keywords: Mindfulness, Telecommunicators, Stress, Engagement, Intervention, Trauma

Evidence Level: 5A

Link: <https://www.jmir.org/2019/6/e13449/>

The Development of 'Make One Small Change': An e-health Intervention for the Workplace Developed Using the Person-Based Approach

This study describes the application of a person-based approach (PBA) to the development of an online behavior change system for lifestyle habits focused on resilience, movement, eating and sleep. The study found that using the PBA, which was developed specifically to improve digital interventions, resulted in a workplace intervention embedded with in-depth user input. The authors concluded that using a rigorous methodology can drive the creation of an effective digital health intervention that uniquely allows for refinement at each stage.

Howarth et al. 2019.

Digital Health, vol. 5

Keywords: Digital Health, Intervention, Employee, Wellbeing, Person-Based Approach

Evidence Level: 5A

Link: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6546946/>

Effectiveness of Occupational e-mental Health Interventions: A Systematic Review and Meta-analysis of Randomised Controlled Trials

This systematic review explored the effectiveness of occupational e-mental health interventions aimed at stress, depression, anxiety, burnout, insomnia, mindfulness, well-being, and alcohol misuse and their potential treatment moderators. The review found that occupational e-mental health interventions were associated with significant health improvements.

Phillips et al. 2019.

Scandinavian Journal of Work, Environment & Health vol 11

Keywords: e-mental Health, Interventions, Occupational, Stress, Depression, Anxiety, Burnout, Mindfulness, Well-being

Evidence Level: 1A

Link: http://www.sjweh.fi/show_abstract.php?abstract_id=3839

Mental health

Trauma in the Newsroom: Social Support, Post-traumatic Stress and Post-traumatic Growth Among Journalists Working with Terror

Journalists who cover traumatic events are at risk of developing post-traumatic stress disorder (PTSD). This study investigated the relationship between three subtypes of workplace social support (perceived support, received support, received recognition), and post-traumatic stress symptoms (PTSS) or post-traumatic growth (PTG) in journalists who have covered a large terror attack. The study found that journalists with more PTSS participated in organised support such as debriefing activities in the aftermath of the event. Journalists who received more recognition experienced more PTG, but neither perceived nor received support were significantly associated with PTG.

Idås et al. 2019.

European Journal of Psychotraumatology, vol.10, no.1

Keywords: Post-traumatic Stress, Pre-traumatic Stress, Social Support, Journalists, Trauma, Terror

Evidence Level: 4B

Link: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6566646/>

Positive Effects of a Short-Term Dog-Assisted Intervention for Soldiers with Post-traumatic Stress Disorder - A Pilot Study

This study explored the use of animal-assisted interventions (AAI) to support traditional therapies. A group of soldiers with PTSD received dog-assisted interventions whilst a control group of soldiers with PTSD received standard treatment only. The study showed greater improvement in work and social adjustment in the intervention group. On the other parameters, differences between control and intervention group were not significant. The authors concluded that with a longer treatment period the positive effects and trends might become more distinct.

Beetz et al. 2019.

Frontiers in Veterinary Science, vol. 6

Keywords: Dog-Assisted Intervention, Post-traumatic Stress Disorder, PTSD, Military, Trauma Therapy

Evidence Level: 3B

Link: <https://dx.doi.org/10.3389/fvets.2019.00170>

Gut feeling: Randomised Controlled Trials of Probiotics for the Treatment of Clinical Depression: Systematic Review and Meta-analysis

An observed bidirectional gut-brain communication has raised interest in the role of gut microbiota, with some research suggesting a role for probiotics in reducing stress and anxiety and alleviating low mood. This systematic review looked at the evidence associated with use of probiotics in patients with depression. The review concluded that there was limited evidence for the efficacy of probiotics in depression, however, there may be some benefits when administered in addition to antidepressants.

Nikolova et al. 2019.

Therapeutic Advances in Psychopharmacology vol. 9

Keywords: Probiotics, Clinical Depression, Treatment, Gut Microbiota, Stress, Anxiety, Antidepressants

Evidence Level: 1A

Link: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6595633/>

Mental Fatigue is Linked with Attentional Bias for Sad Stimuli

This study explored whether changes in an attentional bias toward negative emotional stimuli can be induced by mental fatigue in healthy individuals. The study found that acute mental fatigue induced by a long-lasting working memory task led to the alteration of cognitive processing of negative emotional information in healthy volunteers.

Watanabe et al. 2019.

Scientific Reports, vol. 9, no. 1

Keywords: Mental Fatigue, Depression, Anxiety, Attentional Bias, Emotional Stimuli, Cognitive Processing

Evidence Level: 5B

Link: <https://www.nature.com/articles/s41598-019-45428-0>

Mental Health and Mindfulness Amongst Australian Fire Fighters

This study explored the role mindfulness in supporting the mental health of Australian fire fighters. The study found evidence of an association between dispositional mindfulness and mental health markers of depression, anxiety and well-being in Australian fire fighters recently exposed to trauma. Mindfulness is a psychological characteristic that may be able to be modified, although further research is required to formally test mindfulness interventions.

Counson et al. 2019.

BMC Psychology, vol.7, no. 1

Keywords: Mental Health, Mindfulness, Fire Fighters, Australian, Positive, First Responders, Trauma, Depression, Well-being

Evidence Level: 4A

Link: <https://bmcpyschology.biomedcentral.com/articles/10.1186/s40359-019-0311-2>

From Neighboring Behavior to Mental Health in the Community: The Role of Gender and Work-Family Conflict

This study explored the potential influences of social community environments on low-income employees' mental health. The study found that neighboring behavior, defined as both giving and receiving various kinds of assistance to and from one's neighbors, positively influenced mental health; work-family conflict mediated the relationship between neighboring behavior and mental health; gender moderated the influences of neighboring behavior on mental health, such that neighboring behavior had a stronger positive influence on mental health for females than for males; gender moderated the mediating effect of work-family conflict; that is, the positive influences of neighboring behavior were stronger for female employees than for male employees.

Zhang et al. 2019.

International Journal of Environmental Research and Public Health, vol. 16, no. 12

Keywords: Neighboring Behavior, Mental Health, Community, Gender, Work-Family Conflict, Low Income Employees

Evidence Level: 6B

Link: <https://www.mdpi.com/1660-4601/16/12/2101>

Is Higher Resilience Predictive of Lower Stress and Better Mental Health Among Corporate Executives?

This study explored the impact of resilience, the ability to withstand and bounce back from adversity, on measures of well-being, self-reported stress, and mental health diagnoses amongst corporate executives. The study found that lower-resilience was related to depression and anxiety compared with higher-resilience. High resilience was positively associated with well-being and negatively associated with perceived stress. The authors concluded that higher resilience in the executive workplace environment was associated with better mental health, reduced stress, and greater well-being.

Kermott et al. 2019.

PLOS One vol. 14, no. 6

Keywords: Resilience, Stress, Mental Health, Corporate Executives, Well-being

Evidence Level: 4A

Link: <http://dx.plos.org/10.1371/journal.pone.0218092>

The Mental Health Impacts of Health and Human Service Work: Longitudinal Evidence about Differential Exposure and Susceptibility using 16 Waves of Cohort Data

This study explored psychosocial working conditions among health and human care workers compared to other workers. The study found that understanding the quality of employment in this workforce, and consequent impacts of this employment on mental health was critical to ensuring sustainable individual, organisational and client-related outcomes.

Milner et al. 2019.

Preventive Medicine Reports, vol. 14

Keywords: Mental health, Health and human service work, Workforce, Employment

Evidence Level: 4A

Link: <https://www.sciencedirect.com/science/article/pii/S2211335519300166?via%3Dihub>

Self-efficacy

Low Perceived Self-Efficacy Impedes Discriminative Fear Learning

Perceived self-efficacy relates to a subject's expectation about the outcomes their behavior will have in a challenging situation. This study investigated the effect of experimentally induced low perceived self-efficacy on a fear conditioning task. The authors concluded that lower perceived self-efficacy changed cognitive/expectancy components of discrimination during fear learning but not evaluative components and physiological responding, suggesting a selective, detrimental effect of low self-efficacy on the ability to learn the association between ambiguous cues and threat/safety.

Raeder et al. 2019.

Frontiers in Psychology vol. 10

Keywords: Self-efficacy, Discrimination, Fear Learning, Learning, Behavior

Evidence Level: 4A

Link: <https://www.frontiersin.org/articles/10.3389/fpsyg.2019.01191/full>

Occupational Stress

Reciprocal Relationship Between Psychosocial Work Stress and Quality of Life: The Role of Gender and Education from the Longitudinal Study of the Survey of Health, Ageing and Retirement in Europe

This study investigated the relationship between psychosocial work stress and quality of life (QoL) and whether the relationship was moderated by gender or education. The study found that subjects with low reward and low control were at higher risk of poor QoL over a 2-year period. The authors concluded that there was a reciprocal relationship between psychological work stress and poor QoL, and that there was a role for education in managing this.

Lu et al. 2019.

BMJ Open, vol. 9, no. 6

Keywords: Work Stress, Quality of Life, Psychosocial, Gender, Education, Europe

Evidence Level: 4A

Link: <http://bmjopen.bmj.com/cgi/pmidlookup?view=long&pmid=31253617>

The Severity of Work-Related Stress and an Assessment of the Areas of Worklife in the Service Sector

This study examined the differences in the assessment of work-related stress, and the global assessment of the areas of worklife and individual worklife dimensions in employees working in service occupations. The study found differences between workers in service occupations in their assessment of the severity of work-related stress. The authors concluded that working in social service occupations, whether as emergency or helping professionals, lead to similar levels of stress severity, with no differences in assessment of workload or of the sense of trust, cooperation and support received from their co-workers.

Chudzicka-Czupala et al. 2019.

International Journal of Occupational Medicine and Environmental Health

Keywords: Work-related Stress, Worklife, Service Occupations, Workload

Evidence Level: 4B

Link: <http://ijomeh.eu/Work-related-stress-severity-and-assessment-of-areas-of-worklife-in-the-service-sector,109207,0,2.html>

Does Cognitive Function Predict Changes in Perception of Stressful Working Conditions?

This study explored the association of cognitive function with changes in stressful working conditions using a sample of German employees. Cognitive function was measured by perceptual speed (Symbol Digit Test) and word fluency (Animal Naming Test). The study found that neither perceptual speed nor verbal fluency was significantly related to changes in perceived working conditions.

Li et al. 2019.

Industrial Health

Keywords: Cognitive function, Stress, Working conditions, Cognitive health, Perceptual speed, Verbal fluency

Evidence Level: 4B

Link: https://www.jstage.jst.go.jp/article/indhealth/advpub/0/advpub_2019-0017/article

Occupational Stress and Musculoskeletal Symptoms in Firefighters

This study explored the association between occupational stress and musculoskeletal symptoms among Cypriot firefighters. The study found a high prevalence of stress in this cohort and a

positive dose-response relationship between occupational stress and musculoskeletal symptoms. The authors concluded that occupational stress constituted a significant risk for firefighters and was associated with higher prevalence of musculoskeletal symptoms at work.

Soteriades et al. 2019.

International journal of Occupational and Environmental Health, vol. 32, no. 3

Keywords: Occupational stress, Musculoskeletal symptoms, Firefighters, Depression, Anxiety

Evidence Level: 4B

Link: <http://ijomeh.eu/Occupational-Stress-and-Musculoskeletal-Symptoms-in-Firefighters,94554,0,2.html>

Burnout

Burnout Syndrome and Logotherapy: Logotherapy as Useful Conceptual Framework for Explanation and Prevention of Burnout

Burnout syndrome refers to a state of total exhaustion related to work conditions and stress from work. Logotherapy may provide a useful framework for understanding and potentially preventing burnout. This article reviews the evidence between burnout syndrome and an existential vacuum in workers.

Riethof et al. 2019.

Frontiers in Psychiatry, vol. 10

Keywords: Burnout Syndrome, Logotherapy, Prevention, Stress, Work Conditions

Evidence Level: 6A

Link: <https://www.frontiersin.org/articles/10.3389/fpsy.2019.00382/full>

The Relationship Between the Dark Triad Personality Traits, Motivation at Work, and Burnout Among HR Recruitment Workers

This study explored the relationship between motivation and level of burnout at work with the Dark Triad personality traits (Machiavellianism, narcissism, and psychopathy). The study showed that, in general, the relationship between the Dark Triad traits and burnout was mediated by the motivational sources. The Dark Triad traits were more closely related to external sources of motivation, which are in turn partly associated with higher levels of burnout.

Prusik et al. 2019.

Frontiers of Psychology, vol. 10

Keywords: Personality Traits, Motivation, Work, Burnout, HR Recruitment Workers, Dark Triad

Evidence Level: 4B

Link: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6566539/>

A Strategy for Wellness in a Pathology Residency Program: Enhancing Chances of Success During an Epidemic of Burnout

This study explored use of a high-stress environment resiliency strategy employed in the finance industry, in a residency program for physicians. The initiatives included: (1) approach burnout as a dilemma requiring a tridimensional strategy: providing wellness training for the individual, programmatic group strategies, and an institutional wellness plan; (2) formalise a wellness curriculum, implementing wellness talks focused on stress prevention, management, and treatment; (3) offer free sessions with resilience coaches, psychological help, Employee Assistance Program, and chaplain services; (4) modify the mentorship program, (5) implement mindfulness practices; (6) provide easy access to volunteer opportunities and networking; (7) offer fitness center discounts.

Saint Martin et al. 2019.

Academic Pathology vol. 6

Keywords: Burnout, Pathology, High Stress, Strategy, Wellness

Evidence Level: 4A

Link: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6560792/>

Can Engagement Go Awry and Lead to Burnout? The Moderating Role of the Perceived Motivational Climate

This study explored if when employees become too engaged, they may become burnt out due to resource depletion, and if this outcome was contingent upon the perceived motivational psychological climate (mastery and performance climates) at work. The study found that employees with too much work engagement were exposed to a higher risk of burnout. Furthermore, a performance climate may enhance, whilst a mastery climate, may mitigate the likelihood that employees become cynical towards work.

Nerstad et al. 2019.

International Journal of Environmental Research and Public Health vol. 16, no. 11

Keywords: Burnout, Perceived Motivational Psychological Climate, Employees, Resource Depletion

Evidence Level: 4B

Link: <https://www.mdpi.com/1660-4601/16/11/1979>

Well-Being: Its Relationship with Work-to-Family Conflict and Burnout among Males and Females

This study applied gender-specific analyses to examine how work-to-family conflict (WFC) and burnout are related to well-being among Taiwanese workers. The study showed no significant gender difference occurred on WFC, however, females had higher scores on burnout compared to males. WFC as well as burnout were negatively associated with well-being in both genders. The authors concluded that to improve workers' well-being, organisations should develop policies to decrease burnout, including policies beyond work-related burden for females.

Huang et al. 2019.

International Journal of Environmental Research and Public Health, vol. 16, no. 13

Keywords: Well-being, Work-to Family Conflict, Burnout, Gender, Work-related Burden

Evidence Level: 4B

Link: <http://www.mdpi.com/resolver?pii=ijerph16132291>

Bullying

Locus of Control Moderates the Relationship Between Exposure to Bullying Behaviors and Psychological Strain

Workplace bullying is one of the most devastating stressors at work for those targeted. This study explored whether internal and external locus of control, moderated the bullying-mental health relationship. The study found that internal locus of control did not have a positive effect on strain when exposed to bullying behaviors, whilst an external locus of control appeared relatively beneficial when facing bullying behaviors.

Reknes et al. 2019.

Frontiers in Psychology, vol. 10

Keywords: Workplace Bulling, Psychological Strain, Mental Health, Behavior, Stressors

Evidence Level: 4B

Link: <https://www.frontiersin.org/articles/10.3389/fpsyg.2019.01323/full>

Workplace Bullying and Psychological Distress of Employees Across Socioeconomic Strata: A Cross-sectional Study

This study explored the prevalence of workplace bullying and its association with socioeconomic factors and psychological distress amongst Malaysian employees. The study found that more than one in three employees reported having experienced workplace bullying, which associated with being female, drawing a higher income, and greater psychological distress. Low individual income was associated with greater psychological distress, however, higher income employees were more likely to report experiencing workplace bullying.

Chan et al. 2019.

BMC Public Health, vol. 19

Keywords: Workplace Bullying, Psychological Distress, Employees, Socioeconomic, Malaysia, Sick Days, Unemployment, Stress

Evidence Level: 4B

Link: <https://bmcpublihealth.biomedcentral.com/articles/10.1186/s12889-019-6859-1>

Enabling Healthy and Safe Workplaces

Sedentary work

Office Workers' Experiences of Attempts to Reduce Sitting-time: An Exploratory, Mixed-Methods Uncontrolled Intervention Pilot Study

Office workers sit for most of the workday, which has been linked to physical and mental ill-health and premature death. This study explored barriers and facilitators to reducing sitting in office workers who received an intervention prototype (the 'ReSiT [Reducing Sitting Time] Study'). The program involved a sit-stand workstation and tailored advice to enhance motivation, capability and opportunity to replace sitting with standing. The authors concluded that it was important to understand workers' mental representations of their work, and the social functions of sitting and standing in the workplace.

Dewitt et al. 2019.

BMC Public Health, vol.19, no. 1

Keywords: Office Workers, Sitting-time, Sitting-reduction, Stand, Mental-ill Health,

Evidence Level: 5A

Link: <https://bmcpublihealth.biomedcentral.com/articles/10.1186/s12889-019-7196-0>

Is High Aerobic Workload at Work Associated with Leisure Time Physical Activity and Sedentary Behaviour Among Blue-Collar Workers? A Compositional Data Analysis Based on Accelerometer Data

This study explored the association between duration of work time spent at a high relative aerobic workload and leisure time movement behaviors among blue-collar workers. The study found that for men there was no association between the predominance of work time spent at $\geq 40\%$ HRR and leisure time movement behaviors, whilst among women, the predominance of $\geq 40\%$ HRR at work was negatively associated with relative leisure time spent in ≥ 10 min bouts of active behavior. The authors concluded that there was a need to consider work-related barriers for an active leisure time in high-risk populations.

Lund Rasmussen et al. 2019.

PLOS One, vol.14, no. 6

Keywords: Aerobic Workload, Leisure, Physical Activity, Sedentary Behaviour, Blue-Collar Workers,

Evidence Level: 4A

Link: <http://dx.plos.org/10.1371/journal.pone.0217024>

Risk Assessment

Health Risk in Road Transport Workers. Part I. Occupational Exposure to Chemicals, Biomarkers of Effect

This review analysed biomarkers of effect and assessed the hazard of occupational exposure of driver to motor vehicle emissions. The review found that car drivers were exposed to chemicals deriving from incomplete combustion of fuels, exhaust emissions from working engines and fuel evaporation. Concentrations of these substances were low and do not exceed the applicable hygiene standards, but some of them pose, or are suspected to pose, carcinogenic risk.

Gromadzinska et al. 2019.

International Journal of Occupational Medicine and Environmental Health, vol. 32, no. 2

Keywords: Road transport workers, Occupational exposure, Chemicals, Biomarkers, Health risk

Evidence Level: 6A

Link: <http://ijomeh.eu/Health-risk-in-road-transport-workers-Part-I-Occupational-exposure-to-chemicals-biomarkers,99520,0,2.html>

Differences in Work Injury Risk Between Immigrants and Natives: Changes Since The Economic Recession in Italy

This study explored the occupational injury rates in immigrant compared to native workers in 2005 (before the economic crisis) and in 2010 (after the economic crisis). The study found that the economic recession had an impact on the risk of workplace injury with differences between immigrants and natives. The authors concluded that this was due to immigrants being assigned to the more dangerous jobs and the more dangerous tasks within these jobs, differences in the perception of workplace injury risks, linguistic barriers, and cultural factors.

Giraud et al. 2019.

BMC Public Health vol. 19, no. 1

Keywords: Work Injury Risk, Immigrants, Occupational Injury, Native Workers, Cultural Factors, Italy

Evidence Level: 4B

Link: <https://bmcpublihealth.biomedcentral.com/articles/10.1186/s12889-019-7178-2>

Wellbeing

Well-Being Champion Impact on Employee Engagement, Staff Satisfaction, and Employee Well-Being

This study explored the impact of a workplace well-being champion on employee and organisational measures of well-being. The study found that employees with a work well-being champion had more favorable responses than employees reporting no well-being champion. The authors concluded that having a work unit well-being champion, coupled with an organisational commitment to employee well-being, is associated with better employee engagement, satisfaction, and perception of personal well-being, as well as a more favorable perception of the organisation.

Wieneke et al. 2019.

Mayo Clinic Proceedings: Innovations, Quality & Outcomes, vol 3, no. 2

Keywords: Well-Being Champion, Employee, Workplace Well-Being, Engagement, Staff Satisfaction, Employee Well-Being

Evidence Level: 4A

Link: [https://mcpiojournal.org/article/S2542-4548\(19\)30040-2/fulltext](https://mcpiojournal.org/article/S2542-4548(19)30040-2/fulltext)

Sustained Weight Loss and Improvements in Cardiometabolic Risk Factors in a Worksite-based Behavioral Program

This study evaluated the effectiveness of a novel low-burden behavioral intervention (BI) for weight loss on changes in body weight and cardiometabolic risk factors when implemented with or without meal replacements (MR) in a worksite. The study found clinically significant reductions in weight and cardiometabolic risk factors sustained in the intervention group at 12 and 18 months. Weight loss did not significantly differ between the BI and BI + MR groups. The authors concluded that the novel approach was a feasible way to achieve clinically impactful weight management in a worksite setting.

Das et al. 2019.

Current Developments in Nutrition vol. 3.

Keywords: Weight Loss, Behavioral Program, Cardiometabolic Risk Factors, Body Weight, Worksite

Evidence Level: 2A

Link: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6573983/>

Frequency of Firefighters' Heat-related Illness and its Association with Removing Personal Protective Equipment and Working Hours

This study explored the frequency of firefighters' heat-related illness (HRI) in the line of duty related to resting/working hours and the behavior of taking off PPE during rest periods. The study found that 74.8% of firefighters experienced HRI symptoms and 5% of firefighters suffered from symptoms of HRI 20 times or more in a year. The authors concluded that firefighters routinely experienced mild HRI symptoms, but fatalities were rare, and attention should be given to taking off PPE during rest.

Kim et al. 2019.

Industry Health, vol. 57, no. 3

Keywords: Health related illness, Firefighters, Personal protective equipment, Working hours

Evidence Level: 4B

Link: https://www.istage.ist.go.jp/article/indhealth/57/3/57_2018-0063/article

Workplace regulation

Metabolic Energy Cost of Workers in Agriculture, Construction, Manufacturing, Tourism, and Transportation Industries

This review provides the energy cost (EC) estimations in jobs/tasks included in tourism, agriculture, construction, manufacturing, and transportation industries. The study found that agriculture included the most energy-demanding jobs, construction industry were the 2nd most demanding and the 3rd highest EC estimate was manufacturing. Transportation had relatively moderate EC estimates, whilst tourism jobs demonstrated the lowest EC values

Poulianiti et al. 2019.

Industrial health, vol. 57, no. 3

Keywords: Metabolic Energy Cost, Workers, Agriculture, Construction, Manufacturing, Tourism, Transportation, Industry

Evidence Level: 1B

Link: https://www.istage.ist.go.jp/article/indhealth/57/3/57_2018-0075/article

Occupational exposure

Systematic Evidence Maps as a Novel Tool to Support Evidence-based Decision-making in Chemicals Policy and Risk Management

This article presents the concept of a systematic evidence map (SEM) in the context of risk management decision-making, to facilitate evidence-based decision-making SEMs are databases of systematically gathered research which characterise broad features of the evidence base. The authors concluded that SEMs have strong and growing potential as a high value tool in chemical risk management.

Wolffe et al. 2019.

Environmental International, vol. 130

Keywords: Risk Management, Decision-making, Chemical Substances, Policy, Exposure, Health Risks

Evidence Level: 6A

Link: <https://www.sciencedirect.com/science/article/pii/S0160412019310323?via%3Dihub>

Vibration and Noise Transmitted by Agricultural Backpack Powered Machines Critically Examined Using the Current Standards

This study analysed the field back vibration, hand-arm vibration (HAV), and noise transmitted to ten operators by eight blowers and mist blowers. The study found that the vibration to the operators' back was low, but high for the onset of vibration white finger. Noise levels were always high: more than 100 dB(A), excluding one blower with the exhaust inside the blower hose, which had noise levels lower than 86 dB(A), but its specific feature could increase environmental pollution.

Calvo et al. 2019.

International Journal of Environmental Research and Public Health, vol. 16, no. 12

Keywords: Vibration, Noise, Agricultural Backpack Powered Machines, Exposure

Evidence Level: 5B

Link: <https://www.mdpi.com/1660-4601/16/12/2210>

Hydration Status and Kidney Health of Factory Workers Exposed to Heat Stress: A Pilot Feasibility Study

This study explored the feasibility of measuring markers of hydration and kidney function in foundry factory workers in Southern Brazil, exposed and not exposed to heat stress. Clinical and biochemical markers of hydration and kidney function were evaluated before and after a single 8.5 hour shift. The study demonstrated the feasibility and challenges of conducting future hydration and kidney function research among indoor factory workers.

Nerbass et al. 2019.

Annals of Nutrition and Metabolism, vol. 74

Keywords: Hydration Status, Kidney Health, Factory Workers, Heat Stress, Workplace Injury, Productivity, Chronic Occupational Heat Stress

Evidence Level: 4B

Link: <https://www.karger.com/Article/FullText/500373>

Musculoskeletal health

People with Low Back Pain Want Clear, Consistent and Personalised Information on Prognosis, Treatment Options and Self-Management Strategies: A Systematic Review

This systematic review explored the questions "What health information needs are perceived by people with low back pain (LBP)?" . The review found that two major areas of perceived health

information needs for low back pain emerged. The first related to information content and the second to how this information was delivered. People with LBP required clear, consistent and personalised information on prognosis, treatment options and self-management strategies, related to healthcare and occupational issues.

Lim et al. 2019.

Journal of Physiotherapy, vol.65, no. 3

Keywords: Low Back Pain, Prognosis, Treatment, Self-Management Strategies, Personalised Information, Diagnosis

Evidence Level: 1A

Link: <https://www.sciencedirect.com/science/article/pii/S1836955319300578?via%3Dihub>

Effect of Reassuring Information About Musculoskeletal and Mental Health Complaints at the Workplace: A Cluster Randomised Trial of the at Work Intervention

This study explored the difference between the Modified atWork intervention (MAW) and the Original at Work intervention (OAW) on sick leave and other health related outcomes. atWork is a group intervention using the workplace as an arena for distribution of evidence-based knowledge about musculoskeletal and mental health complaints. The study found that the MAW group reduced sick leave by 5.7% during the intervention year, while the OAW group had a 7.5% increase, although the difference was not statistically significant.

Johnsen et al. 2019.

Journal of Occupational Rehabilitation, vol. 29, no. 2

Keywords: Musculoskeletal, Mental health, Workplace, Work intervention

Evidence Level: 2A

Link: <https://doi.org/10.1007/s10926-018-9786-6>

Manual handling

Support System for the Assessment and Intervention During the Manual Material Handling Training at the Workplace: Contributions from the Systematic Observation

The effectiveness of traditional manual material handling (MMH) training interventions on back pain prevention at work has been called into question. This study developed a self-observation (S-O) and hetero-observation (H-O) instrument to assess changes in the worker behavioural patterns and provide feedback. The study reported high inter-rater reliability of this instrument, and high levels of reported usability and usefulness by workers. The observational instruments developed can characterise the body positions adopted during manual handling performance, providing feedback on performance instead of only feedback on results.

Portell et al. 2019.

Frontiers of Psychology, vol. 10

Keywords: Manual Material Handling, Back Pain, Prevention, Workplace

Evidence Level: 5B

Link: <https://www.frontiersin.org/articles/10.3389/fpsyg.2019.01247/full>

The CONSTANCES Job Exposure Matrix Based on Self-reported Exposure to Physical Risk Factors: Development and Evaluation

This paper presents the development of a job exposure matrices (JEM) based on self-reported physical exposures and its ability to create homogeneous exposure groups (HEG). The JEM consisted of 27 physical risk factors from 407 job codes. The study found that the JEM yielded HEGs and can therefore classify individual participants based on job title, opening new possibilities for using unbiased exposure estimates to study the effects of workplace physical exposures on a variety of health conditions within a large general population study.

Evanoff et al. 2019.

Occupational and Environmental Medicine, vol. 76, no. 6

Keywords: Physical risk factors, Job exposure matrices, Physical exposures, Workplace

Evidence Level: 4B

Link: <https://oem.bmj.com/content/76/6/398.long>

Evaluation of a Proposed Chair with an Arm Support for Wiring Terminal Blocks on a Vertical Plane

This study explored the use of a chair with a unique back that can be used as a back support or arm support to reduce the muscular exertion of an operator wiring terminal blocks on a vertical plane. The study found that exertion on the anterior deltoid, upper trapezium, and erector spinae muscles decreased with decrease in terminal block height; using the arm support reduced exertion on the anterior deltoid and upper trapezium muscles; and the subjects reported less self-perceived fatigue in the wrist, elbow, and shoulder regions when the arm support was used. The authors concluded that the proposed chair can reduce muscular workload in the shoulder muscle over a proper range of working heights, however, the arm support may restrict certain working postures.

Chen et al. 2019.

Industrial Health, vol. 57, no. 3

Keywords: Chair, Muscular load, Arm support, Wiring terminal blocks, Operator

Evidence Level: 5B

Link: https://www.istage.ist.go.jp/article/indhealth/57/3/57_2018-0039/article