THE POLICY INSTITUTE

King's College London

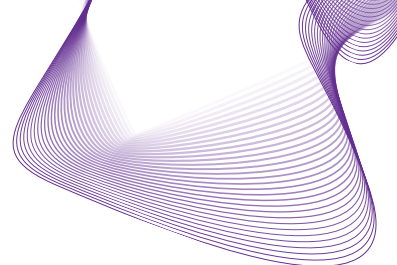# What do we know about the effectiveness of workplace mental health interventions?

Literature review

Rachel Hesketh, Lucy Strang,
Alexandra Pollitt and Benedict Wilkinson

April 2020

1. Executive summary

Huge progress has been made in recognising the scale and impact of mental ill health in UK workplaces. From the Stevenson Farmer review of mental health and employers we now know that around 15% of people at work have symptoms of an existing mental health condition,[1] and recent estimates put the costs of poor mental health to UK employers at £42-45 billion per year.[2]

There is clearly a strong rationale to take steps to reduce the burden of mental ill health at work, and many employers have already begun to respond through the introduction of workplace-based mental health support. This raises a whole new set of questions for employers though – what types of support are most effective? How should interventions be delivered? Who should they be directed at?

This review utilises the available evidence to assess what we know about the answers to these questions. It draws on predominantly academic review studies that evaluate a range of common occupational interventions and report on a variety of mental health and wellbeing outcomes. We also collected findings on work performance outcomes, but chose not to report these here due to the limited amount and robustness of the evidence available.

We find that there is some evidence that workplace interventions can improve mental health and wellbeing outcomes, though the size of the effect is often small. The fact that the available evidence reports on such a diverse range of interventions and outcomes makes it difficult to reach robust conclusions as to the effectiveness any single intervention, however, or to judge whether one type of intervention is more effective than other.

The quality of the available evidence also prevents us from having more confidence in the research findings. Methodological weaknesses are present in many of the studies and there is an urgent need for more high-quality research. This is also in some senses an opportunity – for forward-thinking employers to trial workplace interventions and work with researchers to robustly evaluate their impact on employee mental health, wellbeing and work performance. This has the potential not only to strengthen the body of evidence on what works to improve workplace mental health, but to benefit employees and reduce organisational costs.

2. Introduction

The scale and impact of mental ill health in UK workplaces is becoming increasingly apparent. Analysis produced for the Stevenson Farmer review of mental health and employers indicates that around 15% of people at work have symptoms of an existing mental health condition, while 300,000 people who have a long-term mental health problem lose their jobs every year.[3]

The costs of mental ill health are felt acutely by individuals and their families, but there are also economic costs. Absence from work, presenteeism (working with reduced productivity) and staff turnover associated with poor mental health are estimated to cost UK employers between £42 and £45 billion per year,[4] up from £33-42 billion in 2017.[5] The Health and Safety Executive estimated that stress, anxiety and depression were responsible for 54% of working days lost to ill health in 2018/19, equal to 12.8 million working days.[6]

The scale of the issue presents a clear rationale for employers to explore ways of improving the mental health of their employees. As suggested by the Stevenson Farmer review, workplace-based mental health support is one valuable way to do this,[7] and research by Deloitte concludes that the return on investment for workplace mental health interventions is 'overwhelmingly positive'.[8] Recent figures put the average return at £5 for every £1 spent.[9]

What appears to be much less clear is the types of mental health interventions that workplaces should be looking to provide, how and to whom. Given this lack of clarity, the present review aims to summarise the existing evidence on the effectiveness of workplace-based mental health interventions, drawing on existing reviews of intervention studies conducted in workplace settings.
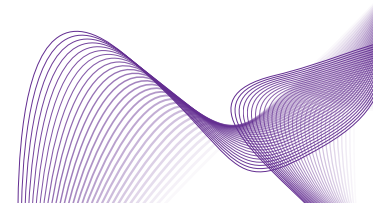
3. Methodology and characteristics of the evidence

3.1. Our research questions

1. What workplace-based mental health interventions have been implemented and evaluated?

2. How effective are workplace-based mental health interventions at improving mental health and wellbeing and work performance?

3. Under what conditions are workplace mental health interventions implemented more and less successfully?

3.2. Rapid evidence assessment methodology

A rapid evidence assessment (REA) approach was considered most appropriate to address these research questions. REA provides an approach to reviewing an existing evidence base that is quicker to execute than a full systematic review and more rigorous than a literature review.[10][11] Rapid review approaches are deemed particularly suited to policy-focused research given the need for timeliness and accessibility in the information provided to decision makers.[12]

We focused on existing systematic reviews and meta-analyses in this review to provide the broadest coverage of the available evidence. 23 review studies meeting our inclusion criteria were identified. Full details of the search strategy and inclusion criteria used are given in the appendix.

3.3. Evidence identified in this review

The 23 review studies included comprise 12 systematic reviews, seven systematic review and meta-analyses and four non-systematic literature reviews. Six of the 23 review studies take a review-of-reviews approach, focusing on the appraisal of existing review studies.

One important observation is the diversity of the review studies included here, in terms of both the interventions they focus on and the outcome measures they report. While some reviews address the full range of workplace mental health interventions, others target specific types of intervention (for example physical activity or mindfulness), or specific modes of intervention (for example brief interventions or digitally-delivered interventions). Some focus on specific conditions, for example the prevention of burnout or depression. The reviews also report a wide range of mental health and wellbeing outcomes, measured in different ways.

The implication of this diversity is to make it very challenging to reach robust conclusions about the effectiveness of interventions, and means that one intervention cannot be readily compared to another.

We provide a fuller assessment of the limitations of the evidence base in Section 5.

3.4. Useful terms for understanding the evidence

Our review focuses on academic research, which often uses technical and scientific language. To make this terminology more accessible to non-academic audiences we have provided definitions of some key terms below.

Randomised controlled trial (RCT): "An experiment in which two or more interventions, possibly including a control intervention or no intervention, are compared by being randomly allocated to participants".[13]

Effect size: the magnitude of the difference in outcomes between groups.[14] The effect size helps you to understand how effective an intervention is relative to a comparison group.[15]

Statistical significance: "the probability that the observed difference between two groups is due to chance".[16]

Control group: the group of participants that acts as the comparator to the intervention that is being tested. They may receive no intervention, a placebo or another intervention.[17]

Active control group: An active control group receives a different intervention to the treatment group. This sort of control group allows you to say whether one intervention is relatively more effective than another, whereas a regular control group (receiving no treatment or a placebo) can show whether the intervention is better than not receiving it (the intervention's absolute effect).[18]

Systematic review: "A review of a clearly formulated question that uses systematic and explicit methods to identify, select, and critically appraise relevant research, and to collect and analyse data from the studies that are included in the review".[19]

Meta-analysis: "The use of statistical techniques in a systematic review to integrate the results of included studies".[20]

4. Findings
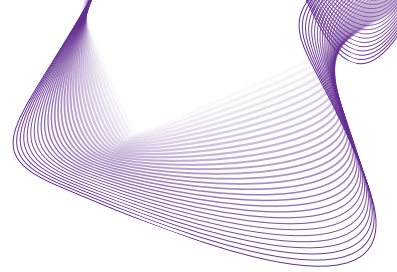
4.1. Headline findings

- There is research looking at the impact of a range of workplace mental health and wellbeing interventions. These include physical activity interventions, meditation and mindfulness, cognitive behavioural therapy-based interventions, resilience training and interventions to change organisational practices.

- There is some evidence that workplace interventions can improve mental health and wellbeing outcomes, though the size of the effect is often small. Negative effects of interventions are observed in some instances.

- The huge range of interventions and outcomes under study makes it difficult to reach robust conclusions as to the effectiveness of interventions, and in what circumstances they are effective.

- It is not possible, from the existing evidence, to conclude that one type of intervention is more effective than another at improving the mental health and wellbeing of employees, or reducing the symptoms of a specific condition.

- While few studies look at the longer-term effects of interventions, where they do, they tend to find that any positive effects diminish over time.

- A number of factors that can potentially impact on the effectiveness of interventions ('moderating' factors) have been studied in the literature. These include the mode of delivery, duration of intervention, the use of interventions in combination and the characteristics of the target group.

- There is a lack of evidence from which to draw conclusions on the optimum duration, intensity or delivery mode of interventions. There is a lack of research on how interventions can be combined to increase effectiveness.

- We found much less evidence on the impact of workplace interventions on work performance outcomes than on mental health and wellbeing outcomes. We therefore do not report on these outcomes here.

- The lack of high-quality evaluation studies means it isn't possible to treat findings as conclusive. It may be that some interventions are effective (or more effective than they appear), but that this can only be established through more rigorous evaluation. Equally, low quality evaluation may be inflating the effects of some interventions. This underlines the urgent need for more high-quality research.

4.2. The effect of workplace mental health interventions on mental health and wellbeing outcomes

We present our findings here according to the type of workplace mental health or wellbeing intervention, along with factors that can influence the success of the intervention. This is perhaps the clearest and most straightforward way of organising a complex body of evidence, looking at a wide range of interventions and outcomes, in a way that can be useful to the workplace context. The intervention types we discuss

are those covered in the evidence reviewed, so while they include most common interventions, the list is unlikely to be exhaustive.

4.2.1. Physical activity interventions

Two reviews focus on the effectiveness of physical activity interventions. Abdin et al. review five studies looking at the impact of yoga, walking and exercise interventions on psychological wellbeing.[21] They find some evidence that physical activity interventions can improve wellbeing in the workplace, but insufficient evidence to determine the most effective types of intervention. Chu et al. review 17 studies assessing the impact of yoga and aerobic and strength training on self-reported depression, anxiety and stress.[22] They conclude that the interventions are associated with reduced symptoms of depression and anxiety in participants, though the evidence of their impact on stress is less clear. None of the studies they review reported adverse effects on mental health following the intervention.
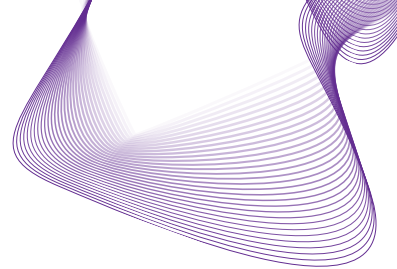
The impact of physical activity interventions is also assessed in the broader reviews. Harvey et al. conclude that there is 'promising' evidence around the impact of promoting workplace physical activity, at least in the short-term,[23] while Joyce et al. judge the evidence on the effectiveness of these interventions at reducing symptoms of anxiety and depression to be 'moderate'.[24] They also emphasise that the type of activity, its intensity and the amount required to maximise effectiveness is still unclear.

4.2.2. Contemplative interventions

Contemplative interventions aim to change individuals' cognitive and affective processes, and principally refer to meditation and mindfulness practices.[25] Examples of contemplative interventions in the workplace include the 8-week mindfulness-based stress reduction programme of guided mediation and formal classes, use of mindfulness apps and training in different meditation practices.[26] Two of the review studies included in our review focus on mindfulness[27][28] and two on a range of contemplative interventions.[29][30]

Looking at contemplative interventions overall, Slemp et al. conclude that while positive effects on employee distress (including measures of depression, anxiety, burnout and stress, among others) are observed, these effects are generally small to moderate in size.[31] They observe the weakest effects for burnout-related outcomes, which the authors suggest may be less responsive to contemplative interventions.

Bartlett et al. conduct a systematic review and meta-analysis of 25 RCTs assessing the effect of mindfulness interventions.[32] These interventions varied from 10-minute sessions of self-guided meditation completed five times a week, to more intensive interventions with 42 hours of class time spread over eight weeks and daily self-practice. Their meta-analysis found that the interventions increased mindfulness and were associated with significant improvements in psychological distress, anxiety, wellbeing and sleep (though they were not able to reach conclusions about the impact on depression or burnout). Negative effects, including increases in stress and emotional exhaustion and reduced wellbeing, were observed in a few studies. The authors suggest that these effects may be due to the additional demands of training on top of participants' existing workloads.

A separate meta-analysis of mindfulness-based interventions (including 35 RCT studies) by Lomas et al. also found that they led to improvements in a range of measures of mental wellbeing.[33] These included small to moderate improvements in stress, anxiety, distress, depression, burnout, compassion and empathy, mindfulness and positive wellbeing (though in the case of depression the change was not statistically significant). No effect on emotional regulation was observed.

Ravalier et al. review five studies of mindfulness interventions and conclude that there is 'strong evidence for the impact of mindfulness interventions on well-being'.[34] They find less evidence, however, that these improvements persist over the longer term.

Ravalier et al. also review evidence on the effectiveness of meditation and relaxation interventions. While they find inconclusive evidence for the impact of relaxation on employee wellbeing, stronger evidence is found that meditation can improve stress and general mental health. Evidence from one of the studies they review indicated that these positive effects could be maintained beyond the course of the intervention.

Comparing the effectiveness of contemplative interventions, Slemp et al. find the largest effects from meditation-based interventions, followed by mindfulness interventions. Acceptance-and-control based interventions, which promote acceptance of thoughts and behaviours and typically include a mindfulness component,[35] were found to have the smallest effects.[36]

4.2.3.   Resilience training

Resilience training aims to adjust how a person responds to potentially stressful situations to reduce the risk of a negative impact on their mental health.[37] Two papers focus directly on the impact of resilience training in the workplace; Robertson et al.'s systematic review of 14 studies and Vanhove et al.'s meta-analysis of 37 studies.[38] [39] Both reviews report on a range of mental health and wellbeing outcomes.

Robertson et al. conclude that there is evidence of a positive and large effect of resilience training on mental health and subjective wellbeing outcomes (most commonly depression, anxiety, stress and negative affect/mood) overall. They observe that a wide variety of interventions differing in content, mode of delivery and length have been tried, and judge that there is insufficient evidence to determine the most effective format and content.

The meta-analysis conducted by Vanhove et al. reports overall small but statistically significant effects of resilience-building interventions on mental health and wellbeing outcomes. These effects diminished over time following the completion of the intervention, however.

Other reviews also look at resilience building interventions. Harvey et al. conclude that resilience training for high risk occupations (such as the military or emergency services) 'can help individuals at increased risk to better manage work-related stressors and challenges',[40] but that, given the current evidence, this finding only holds for more intensive interventions rather than one-off programmes. Joyce et al. argue that there is a lack of good-quality reviews of workplace resilience training, and

that until robust overall assessments of the effectiveness of resilience training have been carried out, these interventions can't be readily recommended.[41]

4.2.4.   Cognitive behavioural therapy-based interventions

Cognitive behavioural therapy (CBT) aims to change individuals' 'specific misconceptions and maladaptive assumptions' to enable changes in behaviour and affect.[42] Workplace interventions based on CBT include the teaching of traditional CBT skills, stress inoculation training and acceptance and commitment therapy.[43] While CBT-based interventions appear to be relatively popular, we did not identify reviews that focused specifically on their effectiveness. Several reviews did however report on CBT approaches as part of their overall analysis.
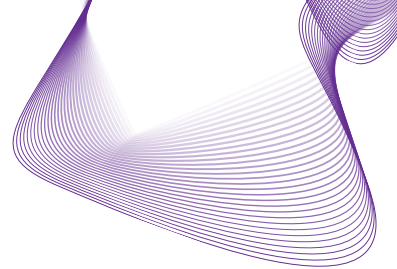
Two reviews looking at workplace interventions for depression present findings for CBT-based interventions among their results. Tan et al. identify five studies in which CBT-based approaches are used. Their meta-analysis finds a significant positive effect of these interventions on symptoms of depression, though lack of data means the authors are unable to compare the effectiveness of CBT-based interventions with other approaches.[44] Wan Mohd Yunus et al. also find evidence that CBT-based approaches can reduce symptoms of depression, though the observed effects diminished over time.[45] The authors find no significant differences in the effectiveness of individual as compared to group CBT, with group CBT having the advantage of being able to reach more people.

Two reviews assessing the effect of digital interventions (interventions delivered via the internet, a computer program or an app) look at the sub-set of CBT-based interventions. Over half of the 21 intervention studies reviewed by Carolan et al. used a CBT approach, though the authors find no significant difference between the effect of these interventions and those using different psychological approaches (including stress and coping, mindfulness, social cognitive theory, positive psychology, problem solving training and acceptance and commitment therapy).[46] Stratton et al. find that CBT-based interventions had a very small but statistically significant positive effect on mental health outcomes (a combination of standardised measures of stress, anxiety and depression), though these improvements were not maintained at follow-up.[47]

Other reviews also point to the effectiveness of CBT interventions for improving mental health outcomes, though the effects do not tend to be large. Public Health England find that CBT interventions can help to reduce the risk and symptoms of burnout,[48] while Joyce et al. assert that there is good evidence for the effectiveness of CBT in alleviating symptoms of depression and anxiety and managing stress.[49] Pieper et al. find evidence for the effectiveness of CBT interventions in reducing burn-out, anxiety and depression and increasing wellbeing, though they were not always better than comparative interventions.[50]

4.2.5.   Organisational interventions

A distinction is frequently made in the literature between individually and organisationally focused interventions. Individual-level interventions are directed at reducing the risk of a person developing a mental health condition, or at reducing their symptoms. Organisational-level interventions meanwhile seek to change the culture or ways of working of an organisation to reduce stressors on employees.[51]

Several reviews point out that individual-level interventions are far more common in the literature than organisational-level,[52] perhaps because of the greater cost and disruption to employers associated with organisationally-focused interventions.

Daniels et al. look at organisational-level interventions around job redesign (in which job characteristics are changed to improve job quality, such as increasing support, task variety or skill use) and employment practices, and their impact on worker wellbeing.[53] While finding mixed evidence across interventions, they assess the evidence to be 'promising' around training workers to improve their own jobs, combining job redesign with training and system-wide changes to job design and employment practices.

Responding to the observation that greater control over working conditions is associated with better mental health outcomes among employees, Harvey et al. review interventions to increase job control.[54] They find that two common ways that organisations have tried to increase employee control are via increased flexibility in hours of work and promoting employee participation. The authors judge the strength of the evidence around the effectiveness of these interventions to be moderate, with 'some research evidence to guide practice'.[55]

Similarly, in their review of interventions to prevent burnout in high-risk individuals, Public Health England find that changing workload or working practices can reduce the factors contributing to burnout.[56] They also find some indications that organisational interventions can have longer-lasting effects than interventions focused on individuals, and that there may be benefits from combining the two.

Daniels et al. look at the impact of making changes to the workplace social environment.[57] They identify six studies that assess the effect on wellbeing of introducing shared activities to the workplace, such as dialogue groups, team building and mentoring programmes. Five of these studies used job satisfaction as their measure of wellbeing and all reported improvements. The authors calculate the overall size of the effect on job satisfaction from these five studies to be in the small to medium range. The sixth study, using a different measure of wellbeing, reported no effects of the intervention. The authors suggest that shared social activities are more successful when they are sustained, involve external facilitation, have different components and workers have positive attitudes towards them.

4.2.6. Interventions to address stigma to mental health in the workplace

While at the margins of the scope of this review, we also include attitudes to mental health in the workplace among our mental health outcomes of interest, as this appears to be a promising area for interventions to target.

Hanisch et al. review 16 studies of interventions targeting the stigma of mental illness in the workplace.[58] These interventions included Mental Health First Aid Training, role play, psychoeducation and Trauma Risk Management. They find that the interventions successfully increased both knowledge of mental ill health and supportive behaviour towards those with mental health problems. The evidence on the effectiveness of the interventions in improving attitudes towards people with mental health problems is found to be a little more mixed, with nine of the 14 studies

looking at this outcome reporting an improvement. While only a small number of studies conducted longer-term follow-up, these showed that the effects of the intervention could be sustained over time, at least in part.

4.3.   Factors influencing the effectiveness of interventions

The relationship between an intervention and its effect on mental health and wellbeing can be affected by a range of factors, referred to in the literature as 'moderating variables' or 'moderators'. We assess the influence of some of these potential moderators here, focusing on those discussed in the evidence we reviewed.
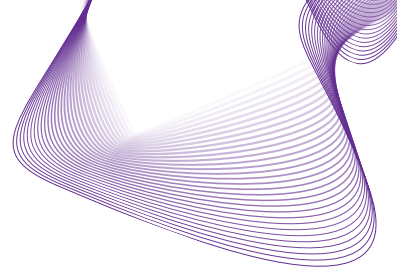
4.3.1.   Mode of delivery

Interventions can be delivered in person via one-to-one or group sessions or remotely via telephone or online methods. Interventions delivered online are growing in popularity and are considered appealing given their relative low cost of implementation and scalability.[59]

Two review studies focus solely on digital (or 'e-health') interventions, delivered via the internet, computer programs or apps. Stratton et al.'s meta-analysis of 23 controlled trials of website and app-based interventions finds them to have an overall small positive effect on mental health, both immediately post-intervention and at follow-up.[60] They also find the effect to vary according to type of intervention, the characteristics of the target population and the mental health outcome of interest. For example, mindfulness-based interventions showed the largest short-term effects, while the effect of stress management interventions differed substantially between universal and targeted populations[61] (with significantly larger effects observed among targeted populations at both post-intervention and follow-up). The authors caution that many e-health interventions lack evidence, and that getting the best outcomes depends on delivering an intervention appropriate to the needs of the target group.

Carolan et al.'s meta-analysis of web-based psychological interventions finds the interventions to have an overall small but statistically significant positive effect on psychological wellbeing (including stress, depression and psychological distress), with the size of the effect comparable to non-digital occupational interventions. They do not find significant differences in outcomes according to the type of intervention (distinguishing between CBT approaches and other approaches), mode of delivery (guided or self-guided) or between universal and targeted populations.

In a review of workplace interventions for depression, Wan Mohd Yunus et al. assess the effectiveness of various ways of delivering interventions.[62] They observe the highest drop-out rate among participants in an intervention with a computerised delivery method,[63] but find that attrition rates tended to be lower for computerised interventions where guidance was provided. They suggest that combining technology-based delivery methods with therapist support can reduce drop-out rates and potentially increase the effectiveness of the intervention.

Vanhove et al. also address the question of the most effective modes of delivery. From their review and meta-analysis of resilience building interventions they find that one-to-one delivery methods had the strongest effect on combined outcomes (including

measures of psychosocial deficits, wellbeing and work performance), with moderate effects for group-based classroom methods and weak effects for computer-based and train-the-trainer delivery methods.[64] The authors still consider computer-based delivery models to have potential however, and suggest that their findings may reflect the quality and characteristics of the interventions they studied. Also in the context of resilience training, Robertson et al. point to the beneficial effects of individualised training, but caution that the evidence is too limited to conclude that this is essential for programme effectiveness.[65]

4.3.2.   Duration of intervention

Ivandic et al.'s review focuses specifically on the effectiveness of brief interventions for improving employee mental health and wellbeing.[66] The authors define a brief intervention as up to five sessions, with each session lasting up to an hour. They find no evidence for most forms of brief intervention (including brief stress management, relaxation, mindfulness, meditation, massage or multidimensional interventions) and only very limited evidence for the positive effect of brief positive psychology interventions.

Other reviews also comment on the optimal duration of interventions and highlight the lack of evidence from which to reach robust conclusions. Bartlett et al., assessing mindfulness interventions, conclude that it is not possible to determine the minimum dose of the intervention required for effectiveness from the available evidence. In the context of resilience training, Robertson et al. suggest that from the limited evidence, longer programmes do not necessarily deliver better results, while Carolan et al. suggest that programmes delivered over a shorter timescale (6-7 weeks) may be more effective at promoting engagement and adherence in the context of web-based interventions.[67]

4.3.3.   Combining multiple interventions

Given that workplaces tend to implement a programme of support for mental health and employee wellbeing, rather than a single intervention, an important question is what is known about the effectiveness of combining interventions. While no studies address this as their primary focus, several report on it among their findings.

In their review of workplace interventions for depression, Wan Mohd Yunus et al. include five interventions combining two or more therapeutic approaches.[68] Four of these studies found that the combined intervention was more effective than the comparator and/or control group. An intervention combining CBT with coping flexibility reported the largest effect on depression of all the interventions in the sample, and was found to be significantly more effective than CBT alone.

Several studies reviewing the broad range of occupational mental health and wellbeing interventions also observe that multi-component interventions tend to have a greater effect than single interventions.[69] Joyce et al. caution however that there is a lack of research into how interventions should be combined.[70]

4.3.4.   Universal vs. targeted interventions

Who to direct interventions towards is also an important question. Universal interventions have no set criteria for inclusion and are thus available to everyone in

the workplace. Targeted interventions are only available to a more restricted group of employees – those at higher risk or already displaying symptoms of a mental health issue. Tan et al. note that there is a lack of research into the effectiveness of these different types of intervention, but suggest that universal interventions may be particularly appropriate for the workplace context.[71] This is because they can reach more individuals, including those at higher risk or with symptoms, and benefit those employees who may not wish to disclose symptoms of mental ill health due to the possibility of stigmatisation.

Studies that assess the relative effectiveness of universal and targeted interventions report different results. Looking at web-based interventions, Carolan et al. find that interventions delivered to targeted populations had a larger effect than those delivered to universal populations, where the targeted populations displayed elevated levels of depression, stress and insomnia.[72] However, the difference in outcomes between the two groups was not found to be significant.

Also looking at digital interventions, but distinguishing between intervention types, Stratton et al. find no difference in the effect of CBT-based interventions conducted in universal and targeted populations, while the effect of stress management interventions was found to be moderately large among targeted groups (those reporting increased stress), but had no effect in universal groups.[73]

Vanhove et al. find, contrary to their expectations, that resilience-building programmes had a stronger effect on combined mental health, wellbeing and work performance outcomes among universal than targeted populations in the short term.[74] At longer-term follow-up the effects were significantly stronger among targeted populations, however. The authors suggest that this may be because the targeted populations, including only those individuals at heightened risk of stress or lacking resilience, had more opportunities to apply the skills learned during the training than the universal groups.

In the context of interventions for depression, Wan Mohd Yunus et al. suggest that the type of participant recruited is more important than whether the intervention is explicitly universal or targeted.[75] Those with stronger depressive symptoms may report larger improvements following the intervention (as an improvement is more evident to them than among individuals with lower symptoms), and universal interventions as well as targeted interventions can be successful in attracting those with higher symptoms of depression. The authors also suggest that universal interventions have the benefit of reaching more of the workforce and typically recruit participants on a voluntary basis, so may attract those who are more committed to changing their behaviours.[76]

5. Limitations of the evidence base

The findings of this review must be interpreted cautiously given the substantial limitations of the evidence it draws on. These limitations are outlined by the authors of the reviews included here and can be grouped into three types – the limitations and methodological shortcomings of the included reviews themselves; the limitations and methodological weaknesses of the primary studies included in the reviews; and the need for further research in many areas.

5.1. Limitations of the review methodologies

A problem identified by many of the reviews we studied was the difficulty in drawing conclusions from the highly diverse body of intervention studies they reviewed. The available studies employ a wide range of different interventions and outcome measures, leading reviewers to caution against attempts to draw firm conclusions about which type of intervention is most effective for improving a given mental health/wellbeing outcome in a certain population group.[77] This limitation aligns with the need for additional research set out below.

Additional potential limitations relate to the search techniques used by reviewers in their studies. Some reviewers point out that their search strategies may not have identified all the studies relevant to their research question,[78] and Chu et al. point out that publication bias is also a risk where reviewers include only published studies.[79] Mixed evidence of publication bias was reported when authors tested for the likelihood of publication bias.

These limitations also apply to our study. As a rapid evidence review rather than a systematic literature review, our study faces a higher possibility that relevant results have been excluded, which could affect the findings.

5.2. Weaknesses of the primary studies included in the reviews

The quality of a review and the reliability of its findings ultimately depends on the quality of the primary intervention studies it includes. In overall assessment, the quality of the studies included in the 23 reviews used here is low. As Wagner et al. point out, randomised controlled trials, the 'gold standard' in evaluation studies, are relatively uncommon in workplace mental health interventions as the nature of the intervention can make it difficult to randomly assign participants to a treatment and to blind them to their group allocation.[80][81] While some reviews restrict themselves to studies employing more rigorous study designs (such as RCTs), the reviewers still often point to the low and variable quality of these studies.[82]

Study design problems identified by review authors include the failure to include a control group,[83] or, where a control group was included, the failure to include an active control.[84] This is where a group of participants receive a different intervention, allowing the study to draw conclusions about the particular effectiveness of one intervention relative to another (rather than just assessing whether an intervention is better than no intervention).[85] Many authors also highlight small sample sizes as an important weakness,[86] while low response rates and high attrition rates are pointed to in other cases.[87] Others report insufficient follow-up post-intervention.[88] In some

cases, authors assess that a lack of information is provided about the intervention and research design.[89]

Reviewers also identify issues around the definitions of mental health/wellbeing outcomes and their measurement. Across outcomes, a reliance on measurement by self-report (rather than using objective measures) is highlighted,[90] which, as Hanisch et al. emphasises, raises the risk of detection bias.[91] The lack of accepted definitions for the outcomes of burnout[92] and resilience[93][94] is also pointed out.

The narrow range of occupational contexts in which primary studies were conducted also calls into question the transferability of the findings to other workplace settings. The quantity of studies conducted in a healthcare context is pointed to by several of authors,[95] while others observe the frequency of studies conducted in large, white collar occupations and among managers, with a related lack of evidence from SMEs and other occupational groups.[96] The fact that different occupations are likely to face different stressors[97] is one reason why interventions found to be effective in one workplace context cannot automatically be assumed to work in a different one.

5.3. Areas where further research is needed

There need for both more primary research into the effectiveness of workplace mental health and wellbeing interventions and more rigorous evaluation designs, particularly more high quality RCTs, is raised by many authors.[98]

Studies looking at a wider range of mental health outcomes and indicators of those outcomes are also called for by some,[99] while the need for more evidence on work performance-related outcomes is noted by others.[100] Daniels et al. and Joyce et al. observe that little is still understood about how workplace interventions can be combined to deliver better outcomes,[101][102] which appears to be an important strand of research given that in practice organisations tend to provide packages of interventions to improve mental health and wellbeing. Also relevant is the observation that interventions focused on the individual are most common, with more research needed on the effectiveness of interventions that change organisational structures and processes.[103]

The dominance of studies conducted in healthcare contexts and among white collar occupational groups in large organisations means many reviewers highlight the need for research in more diverse populations. This includes a wider range of sectoral and occupational contexts,[104] and in smaller organisations.[105] Wagner et al. urge for research to also assess whether the effects of interventions differ across genders and cultural groups.[106]

There are also calls for more research into the longer-term effects of interventions,[107] as many studies are designed with only short follow-up periods. Wan Mohd Yunus et al. also call for greater focus on how the effects of an intervention can be maintained beyond the near term.[108]
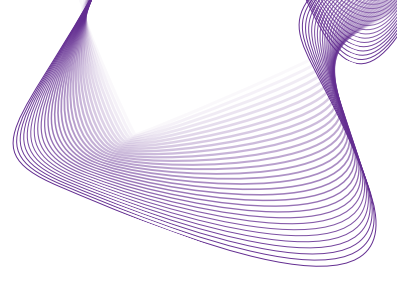
Finally, the lack of attention to how interventions are implemented is raised by some authors.[109] Proper and van Oostrom call for more research into the barriers to and facilitators of the successful implementation of interventions in the workplace,[110] while Bartlett et al. request studies that focus on process and contextual factors.[111]

6. Conclusions

From the evidence we reviewed, there are indications that workplace-based mental health and wellbeing interventions can improve employee mental health and wellbeing outcomes. While these effects are often small in size, taken across the working population they have the potential to be significant.

It is harder though to recommend specific interventions on the basis of this evidence. No single intervention seems to be backed by a comprehensive and robust set of studies, and there is a lack of research comparing one intervention to another or investigating how interventions can be combined to deliver better outcomes. We know very little about the optimal duration, intensity and mode of delivery for interventions, and what intervention is most suited to a given occupational context or group of employees. We also have very little information on the impact of workplace interventions on work performance.

Our main recommendation is therefore of the need for more, and more methodologically rigorous, research. Employers have a vital role to play in this; by working with researchers to trial and evaluate workplace interventions, the opportunity exists to both contribute to building this evidence base and deliver benefits to employees and the business as a whole.

Appendix: Methodology and search strategy
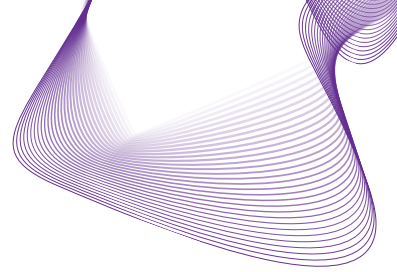
A rapid evidence assessment (REA) approach was considered most appropriate to address these research questions. REA provides an approach to reviewing an existing evidence base that is quicker to execute than a full systematic review and more rigorous than a literature review.[112][113] Rapid review approaches are deemed particularly suited to policy-focused research given the need for timeliness and accessibility in the information provided to decision makers.[114]

Rapid review approaches do have limitations, however. The faster timeline for production and lower degree of rigour as compared to a systematic review can mean that relevant information is omitted, and the review may be at greater risk of bias or error.[115][116]

Papers for inclusion in the REA were identified via searches of both academic publications and the grey literature. Searches were conducted in the Web of Science database, including both the Web of Science Core Collection and Medline, in Google Scholar and in Google. A full list of the search terms employed for each search is given below. Searches were restricted to papers published in the last five years (from 2014 to 2019) and in English.

A two-stage process was used to review the results, with the first stage involving scanning titles and abstracts of search results. At this stage results from the Web of Science search were reviewed in full, while, due to the large number of hits returned by the searches in Google and Google Scholar, only the first 100 results were reviewed. The second stage involved screening papers in full to identify the final set of studies for inclusion in the review. We also retained the option of 'snowballing' from studies identified via these searches to other relevant papers.

At the second stage, a second reviewer checked the inclusion/exclusion process by reviewing a sample of papers. Any differences were resolved by discussion between the reviewers.

Search terms

SEARCH TERM	DATABASE
("systematic review" OR "review" OR "meta-analysis") AND ("occupational" OR "workplace" OR "employer") AND ("mental health" OR "wellbeing" OR "well-being") AND ("intervention" OR "programme" OR "initiative")	Google Scholar
TI = (("systematic review" OR "review" OR "meta-analysis") AND ("occupation*" OR "workplace" OR "work" OR "employ*") AND ("mental health" OR "wellbeing" OR "well-being") AND ("intervention*" OR "programme*" OR "initiative*"))	Web of Science
'workplace mental health interventions systematic review'	Google
'workplace mental health interventions meta-analysis'	Google
'occupational mental health interventions systematic review'	Google
'occupational mental health interventions meta-analysis'	Google
'workplace wellbeing interventions systematic review'	Google
'workplace wellbeing interventions meta-analysis'	Google
'occupational wellbeing interventions systematic review'	Google
'occupational wellbeing interventions meta-analysis'	Google
'review mental health employers'	Google
'review mental health workplace'	Google

Inclusion criteria

The following criteria were employed to identify the papers for inclusion in the REA:

* **Review of intervention studies.** To be included papers must take the form of a review of existing intervention studies, including systematic reviews, meta-analyses and non-systematic reviews. Reviews of reviews/meta-reviews were also included. No assessment of the quality of the review was used in the selection of studies.

* **Focus on workplace interventions directed at improving mental health/wellbeing.** Eligible review studies must focus on interventions conducted in the workplace and designed to improve mental health or wellbeing. This excluded studies looking at interventions for employee populations not carried out in a workplace setting, as well as those looking at a range of workplace health interventions without a specific focus on mental health/wellbeing.

* **Reporting mental health or wellbeing outcomes.** Eligible studies must report mental health or wellbeing outcomes. Studies assessing the impact of interventions on attitudes to mental health/mental health stigma were also considered to be in scope. Data on the effect of interventions on work performance-related outcomes such as productivity or absenteeism was also collected when reported. The cost-effectiveness of interventions was considered out of scope.

- **Conducted among working employee populations across occupational contexts, including those displaying symptoms of mental ill health.** Studies looking at employees in any occupational context were permitted, though reviews looking at a single occupation were excluded for the sake of generalisability. Single-occupation reviews identified tended to focus on workers in healthcare settings or education, which were not deemed to be highly relevant to the audience. Included studies were required to look at employees currently in work, rather than return-to-work interventions directed at those who had left the workplace due to mental health issues. Studies looking at both general employee populations and targeting those displaying symptoms were included.

While there was an effort to restrict the REA to studies conducted either in the UK or in countries with similarities to the UK context (such as Western/Northern Europe, North America and Australasia) the nature of the evidence identified made it difficult to enforce this strictly. None of the review studies identified focused solely on evidence collected in the UK, and some reviews did not report information on the countries in which included studies were conducted. Most reviews reported evidence from a range of countries, typically with a focus was on advanced industrial democracies/western countries. In some cases though studies conducted in other country contexts were also included, and it was not possible to separate the results of these individual intervention studies from the findings of the review as a whole. Reviews focusing solely on countries outside of Europe/North America/Australasia were excluded.

This search process ultimately identified 23 papers for inclusion in the REA. Summary information on these papers is given in the table over page.

AUTHOR(S)/YEAR	TITLE	APPROACH	INTERVENTION(S)	OUTCOME(S) OF INTEREST	SUMMARY FINDINGS
Abdin, S., Welch, R.K., Byron-Daniel, J. and Meyrick, J. (2018)	The effectiveness of physical activity interventions in improving well-being across office-based workplace settings: a systematic review	Systematic review, 5 studies included	Physical activity interventions	'Psychological wellbeing' captured via a range of variables including stress, life satisfaction and subjective wellbeing	Mixed evidence regarding the effectiveness of physical activity interventions. Variable study quality and heterogeneity of approaches preventing stronger conclusions from being drawn.
Bartlett, L., Martin, A., Neil, A., Memish, K., Otahal, P., Kilpatrick, M. and Sanderson, K. (2019)	A Systematic Review and Meta-Analysis of Workplace Mindfulness Training Randomized Controlled Trials.	Systematic review and meta-analysis. 25 RCTs included in review, 23 with enough data for meta-analysis	Mindfulness training	Mindfulness, stress, mental health, wellbeing and work performance	Meta-analysis finding that interventions had a positive effect on mindfulness, perceived stress, psychological distress, anxiety, wellbeing and sleep. Unable to draw conclusions on effect on depression or burnout. Lack of data for meta-analysis of work performance outcomes. Mixed results from studies reporting these outcomes.
Carolan, S. Harris, P. and Cavanagh, K. (2017)	Improving Employee Well-Being and Effectiveness: Systematic Review and Meta-Analysis of Web-Based Psychological Interventions Delivered in the Workplace	Systematic review and meta-analysis 21 RCT studies (21 included in effectiveness meta-analysis and 13 included in work effectiveness meta-analysis)	Web-based psychological interventions	Psychological wellbeing (stress, depression, psychological distress) Work effectiveness	Evidence of a positive and statistically significant effect of the interventions on both psychological wellbeing and work effectiveness. Relatively small effect sizes. No significant differences in outcomes between CBT and other types of approaches, between guided and unguided interventions and for targeted and universal populations.
Chu, A.H.Y., Koh, D., Moy, F.M. and Muller-Riemenschneider, F. (2014)	Do workplace physical activity interventions improve mental health outcomes?	Systematic literature review 17 studies included	Physical activity Yoga	Self-reported depression, anxiety and stress	Limited evidence that physical activity/yoga interventions reduce stress. Stronger evidence that physical activity and yoga programmes are associated with a significant reduction in symptoms of depression and anxiety.
Daniels K., Watson, D., Gedikli, C., Semkina, A. and Vaughn, O. (2017)	Job design, employment practices and well-being: a systematic review of intervention studies	Systematic literature review 33 studies included – 31 looking at outcomes, 2 looking at processes	Employment practices to enable/augment job redesign	Wellbeing Performance where recorded	Inconsistent findings regarding effect of worker training to improve own job design on wellbeing and performance. Lack of evidence on the effect of training managers in employee job redesign on wellbeing and performance. Participative effects to improve job quality found to have mixed effects on both outcomes – including adverse effects. Some evidence that combining job design with training can improve wellbeing and performance. System-wide changes (that enhance job design and other management practices) may improve wellbeing and performance.

AUTHOR(S)/YEAR	TITLE	APPROACH	INTERVENTION(S)	OUTCOME(S) OF INTEREST	SUMMARY FINDINGS
Daniels, K., Watson, D. and Gedikli, C. (2017)	Well-Being and the Social Environment of Work: A Systematic Review of Intervention Studies	Systematic literature review 8 studies included	Improving social environments in the workplace (shared activities, improving perceptions of fairness)	Wellbeing (job satisfaction as the most common measure) Performance indicators where reported	Some evidence that introducing shared activities to the workplace can improve wellbeing and performance. No consistent evidence on the impacts of improving perceptions of fairness. Few intervention studies related to social environments in the workplace.
Hanisch, S., Twomey, C., Szeto, A., Birner, U., Nowak, D. and Sabariego, C. (2016)	The effectiveness of interventions targeting the stigma of mental illness at the workplace: a systematic review	Systematic literature review 16 studies included	Interventions targeting the stigma of mental illness in the workplace	Knowledge of mental health disorders and treatment, recognising signs and symptoms. Attitudes to people with mental health problems and supportive behaviour	Evidence that interventions can improve mental health knowledge. Evidence that interventions can improve supportive behaviour towards those with mental health problems More mixed evidence on the impact of interventions on employee attitudes, but majority of studies finding a positive effect.
Harvey, S., Joyce, S., Tan, L., Johnson, A., Nguyen, H., Modini, M. and Groth, M. (2014)	Developing a mentally healthy workplace: A review of the literature	Literature review (non-systematic), focusing on peer-reviewed academic papers	Workplace mental interventions	Range of mental health outcomes	Conclude there is some research evidence to guide practice for the following interventions: • Encouraging flexible work • Encouraging employee participation • Providing manager and leadership training • CBT-based stress management/resilience training • Resilience training for high-risk occupations • Coaching and mentoring • Worksite physical activity programs Find strong evidence that routine psychological debriefing following a traumatic event is not effective/has adverse effects.
Ivandic, I., Freeman, A., Birner, U., Nowak, D. and Sabariego, C. (2017)	A systematic review of brief mental health and wellbeing interventions in organisational settings	Systematic literature review 11 brief intervention studies identified	Brief mental health and wellbeing interventions (interventions consisting of up to 5 sessions and each session lasting up to an hour)	A range of mental health and wellbeing outcomes	Inconclusive evidence on the effectiveness of brief mental health interventions. No evidence on the effectiveness of brief stress management, relaxation, massage, mindfulness meditation or multi-modal interventions. Some limited evidence for the effectiveness of brief positive psychology interventions.

| AUTHOR(S)/YEAR	TITLE	APPROACH	INTERVENTION(S)	OUTCOME(S) OF INTEREST	SUMMARY FINDINGS
Joyce, S., Christensen, H., Modini, M. and Mykletun, A. (2016)	Workplace interventions for common mental disorders: A systematic meta-review	Systematic review of reviews 20 papers included	Workplace mental health interventions – primary, secondary and tertiary prevention	Anxiety and depression symptoms Work performance where reported	**Primary prevention interventions:** • Moderate evidence for the effectiveness of interventions to increase employee control and promote physical activity. • Lack of evidence for resilience training. **Secondary prevention interventions:** • Tend to be focused on stress management • Good evidence for effectiveness of CBT-based interventions. • Limited evidence for counselling. • Evidence against the use of debriefing following trauma. Limited evidence on the impact of these interventions on workplace outcomes. Lack of evidence on how best to combine multiple interventions.
Lomas, T., Medina, J.C., Ivtzan, I., Rupprecht, S. and Eiroa-Orosa, F.J. (2019)	Mindfulness-based interventions in the workplace: An inclusive systematic review and meta-analysis of their impact upon wellbeing	Systematic review and meta-analysis 35 RCTs included in meta-analysis	Mindfulness-based interventions (mindfulness-based cognitive therapy and mindfulness-based stress reduction)	Wellbeing outcomes, (including anxiety, depression, stress, burnout, health, job performance, compassion and empathy, and mindfulness)	Positive effects of mindfulness interventions on most outcomes, but the size of the effect varies. Find a moderate-sized effect of mindfulness on stress, anxiety, distress and health. Find small to moderate effects on depression, burnout, job performance, compassion and empathy, mindfulness and positive wellbeing. Impact on depression not statistically significant. Not significant observed effect on emotional regulation.
Martin, A., Shann, C. and LaMontagne, A. (2017)	What works to promote workplace wellbeing? A rapid review of recent policy developments and intervention research	Rapid review of systematic reviews and meta-analyses (22 included) Supplemented with a focused review of recent primary intervention studies (24 included)	Interventions to prevent harm to mental wellbeing, promote positive mental wellbeing and promote mental wellbeing among those with a mental illness	Range of mental wellbeing outcomes	Conclude that evidence exists to support a number of interventions. **Evidence from review studies:** • Some supportive evidence for bullying prevention, stress prevention, depression prevention and total worker health interventions. • Lack of evidence for physical activity interventions. • Evidence that mindfulness can help to promote employee wellbeing. • Tentative evidence for the effectiveness of resilience training, but small effect sizes. **Evidence from primary intervention studies:** Some promising evidence for interventions to increase control over working time, job crafting (employee redesign of job characteristics), wellbeing-focused manager training, stress management training programs, positive psychology, psychological capital and recovery strategies (e.g. relaxation activities at lunchtime).

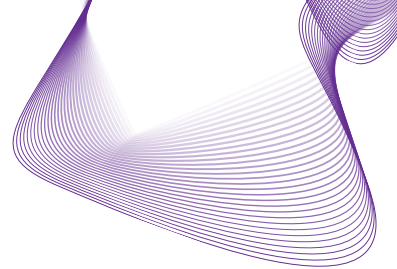| AUTHOR(S)/YEAR	TITLE	APPROACH	INTERVENTION(S)	OUTCOME(S) OF INTEREST	SUMMARY FINDINGS
Public Health England (2016)	Interventions to prevent burnout in high-risk individuals: evidence review	Literature review focusing on existing reviews and large-scale projects	Interventions designed to reduce symptoms and impact of burnout and reduce burnout risk Conducted at individual /small group level and organisational level	Outcomes related to reduced symptoms of burnout	Interventions more common at the individual/small group level than at the organisational level. Moderate evidence for the effectiveness of individually-focused interventions (including interventions to reduce stress, CBT, mindfulness). Generally small effect sizes. One review suggesting that organisationally-focused interventions can have longer lasting positive effects than individually-focused. Changes to workload and working practices can reduce the stressors that contribute to burnout.
Pieper, C., Schroer, S. and Eilerts, A-L. (2019)	Evidence of Workplace Interventions—A Systematic Review of Systematic Reviews	Systematic review of systematic reviews 74 studies included (38 looking at mental disorders)	Range of MH interventions	Range of MH outcomes (depression, anxiety, burn-out symptoms, wellbeing)	Evidence for the effectiveness of CBT-based interventions, but they are not necessarily more effective that comparative interventions (and results rarely reach statistical significance). Evidence for positive effects of mindfulness training. Results not always reaching statistical significance, however. Evidence that multi-component interventions are more effective than single interventions. Lack of evidence to recommend specific interventions/programs.
Proper, K.I. and van Oostrom, S.H. (2019)	The effectiveness of workplace health promotion interventions on physical and mental health outcomes – a systematic review of reviews	Systematic review of reviews 23 studies included (6 assessing MH outcomes)	Workplace health promotion interventions (including those related to mental health)	Mental health outcomes (defined as depression, anxiety or stress)	Good evidence of a positive effect of interventions on mental health outcomes, but small effect size. Strongest evidence (highest quality) for e-health interventions and those using CBT techniques.
Ravalier, J.M., Wegrzynek, P. and Lawton, S. (2016)	Systematic review: complementary therapies and employee well-being	Systematic literature review 10 studies included	Mindfulness, relaxation, meditation	Employee wellbeing	Inconclusive evidence for the effectiveness of relaxation techniques. Strong evidence that mindfulness has a positive impact on wellbeing, though less evidence that the effects persist over time. Strong evidence for the positive impact of meditation on wellbeing, and one study finding that the effect was maintained at follow-up.

AUTHOR(S)/YEAR	TITLE	APPROACH	INTERVENTION(S)	OUTCOME(S) OF INTEREST	SUMMARY FINDINGS
Robertson, I., Cooper, C., Sarkar, M. and Curran, T. (2015)	Resilience training in the workplace from 2003 to 2014: A systematic review	Systematic literature review 14 studies included	Workplace resilience interventions	Resilience plus mental health and subjective wellbeing outcomes and psychosocial outcomes (other health-related outcomes also reported)	Evidence that resilience training can increase resilience. Studies reporting impact on a range of mental health and subjective wellbeing outcomes, with both significant and non-significant outcomes reported. Depression, stress, anxiety and negative mood/affect/emotion the most common outcomes studied. Calculating mean effect size from these results indicates a large effect. Also evidence of significant improvements in psychosocial outcomes such as optimism, self-efficacy and motivation.
Slemp, G., Jach, H., Chia, A., Loton, D. and Kern, M. (2019)	Contemplative interventions and employee distress: a meta-analysis	Systematic review and meta-analysis Data from both published and unpublished studies - 119 studies included	Contemplative interventions (mindfulness, meditation, acceptance-and-commitment based interventions)	Psychological distress (overall distress, depression, anxiety, burnout, stress, negative affect, somatic symptoms)	Evidence that contemplative interventions can be effective at reducing employee distress. Small to moderate effect size. Meditation-based interventions found to have the largest effect. Effect sizes are likely to be inflated by publication bias. Contemplative interventions are more effective than no intervention, but not necessarily more effective than an active control group (alternative intervention).
Stratton, E., Lampit, A., Choi, I., Calvo, R.A., Harvey, S.B. and Glozier, N. (2017)	Effectiveness of eHealth interventions for reducing mental health conditions in employees: A systematic review and meta-analysis	Systematic literature review and meta-analysis 23 studies included	e-Health mental health interventions (both app and web-based)	Standardised mental health measures of depression, anxiety and stress	Overall, find a small positive effect of the interventions on mental health outcomes, both post-intervention and at follow-up. Mindfulness-based interventions showing the largest effect. CBT-based interventions and stress-management showing small effects. Stress management interventions having a moderate to large effect on those with symptoms, and no significant effect on universal populations.
Tan, L., Wang, M.J., Modini, M., Joyce, S., Mykletun, A., Christensen, H. and Harvey, S. (2014)	Preventing the development of depression at work: a systematic review and meta-analysis of universal interventions in the workplace	Systematic literature review and meta-analysis 9 RCTs included	Interventions to prevent depression in the workplace (universal prevention – untargeted) Mainly CBT-based	Symptoms of depression	Overall, evidence that interventions have a small positive effect on symptoms of depression. Looking at CBT-based interventions alone, the authors found a positive, significant effect (but still small).

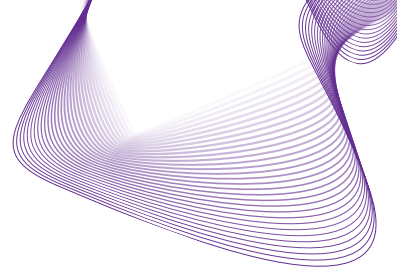| AUTHOR(S)/YEAR	TITLE	APPROACH	INTERVENTION(S)	OUTCOME(S) OF INTEREST	SUMMARY FINDINGS
Vanhove, A., Herian, M., Perez, C., Harms, P. Lester, P. (2016)	Can resilience be developed at work? A meta-analytic review of resilience-building programme effectiveness	Systematic literature review and meta-analysis 37 primary studies included (42 independent samples)	Resilience-building programmes delivered in occupational settings Primary prevention initiatives	Outcomes reflecting wellbeing, psychological deficits (e.g. depression, anxiety) or work performance	Overall evidence that resilience-building interventions have a small but statistically significant effect on mental health and performance outcomes. Strongest effect on work performance outcomes. Effects diminish over time. Effect size is similar to that of other primary prevention interventions (but not larger). Delivery method appears to matter – generally larger effects with more direct delivery methods (one-to-one and classroom-based group). However, authors consider computer-based methods to have potential. Stronger effects found in studies employing less rigorous evaluation designs.
Wagner, S.L., Koehn, C., White, M.I., Harder, H.G., Schultz, I.Z., Williams-Whitt, K., Warje, O., Dionne, C. E., Koehoorn, M., Pasca, R. Hsu, V., McGuire, L., Schulz, W., Kube, D., Wright, M.D. (2016)	Mental health interventions in the workplace and work outcomes: a best evidence synthesis of systematic reviews	Review and synthesis of systematic literature reviews 14 systematic reviews included	Mental health interventions in the workplace	Work performance outcomes – productivity, absenteeism, costs to employers etc.	Moderate evidence (in terms of strength and consistency) that mental health interventions can have a positive effect on work outcomes. More evidence to support the effectiveness of programs involving both mental and physical health interventions and multi-component mental health and/or psychosocial interventions.
Wan Mohd Yunus, W.M.A., Musiat, P. and Brown, J.S.L. (2017)	Systematic review of universal and targeted workplace interventions for depression	Systematic literature review 22 RCTs included	Workplace interventions targeting depression (both universal and targeted) CBT the most common intervention type	Depression symptoms	Most studies finding that interventions had positive effects, though with varying effect sizes. Interventions combining therapeutic approaches may be more effective than single interventions. Lower attrition rates when therapist support was provided with technology-based interventions.

References

1. Stevenson, D. and Farmer, P. (2017). *Thriving at work: The Stevenson Farmer review of mental health and employers*.
2. Deloitte (2020). *Mental health and employers: Refreshing the case for investment.*
3. Stevenson and Farmer, *Thriving at work*.
4. Deloitte, *Refreshing the case for investment.*
5. Monitor Deloitte (2017). *Mental health and employers: The case for investment.*
6. *Health and Safety Executive (2019).* Health and safety at work: Summary statistics for Great Britain 2019.
7. *Stevenson and Farmer, Thriving at work, p.32*
8. Monitor Deloitte, *Mental health and employers.*
9. Deloitte, *Refreshing the case for investment.*
10. Ganann, R., Ciliska, D. and Thomas, H. (2010): Expediting systematic reviews: methods and implications of rapid reviews. *Implementation Science,* 5(1), 56.
11. Department of International Development (2017). *Rapid evidence assessments*
12. Khangura, S., Konnyu, K., Cushman, R., Grimshaw, J. and Moher, D. (2012). Evidence summaries: the evolution of a rapid review approach. *Systematic Reviews*, 1(1), 10.
13. Cochrane Community. Glossary
14. Sullivan, G. and Feinn, R. (2012). Using Effect Size—or Why the P Value Is Not Enough. *Journal of Graduate Medical Education*, 4(3): 279-282.
15. Coe, R. (2002). *It's the Effect Size, Stupid. What effect size is an why it is important.*
16. Sullivan and Feinn, *Using Effect Size*, p.2
17. Cochrane Community. Glossary
18. Karlsson, P. and Bergmark, A. (2015). Compared with what? An analysis of control-group types in Cochrane and Campbell reviews of psychosocial treatment efficacy with substance use disorders. *Addiction,* 110(3): 420-428.
19. Cochrane Community. Glossary
20. Cochrane Community. Glossary
21. Abdin, S., Welch, R.K., Byron-Daniel, J. and Meyrick, J. (2018). The effectiveness of physical activity interventions in improving well-being across office-based workplace settings: a systematic review. *Public Health*, 160: 70-76.
22. Chu, A.H.Y., Koh, D., Moy, F.M. and Muller-Riemenschneider, F. (2014). Do workplace physical activity interventions improve mental health outcomes? *Occupational Medicine*, 64(4): 235-245.
23. Harvey, S., Joyce, S., Tan, L., Johnson, A., Nguyen, H., Modini, M. and Groth, M. (2014). *Developing a mentally healthy workplace: A review of the literature.* Sydney, University of New South Wales.
24. Joyce, S., Christensen, H., Modini, M. and Mykletun, A. (2016). Workplace interventions for common mental disorders: A systematic meta-review. *Psychological Medicine*, 46(4): 683-697.
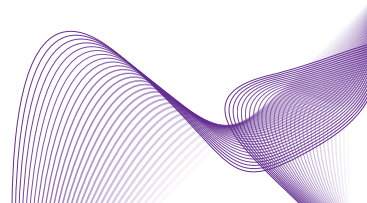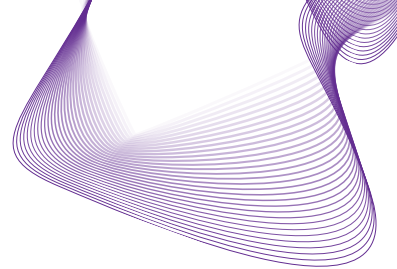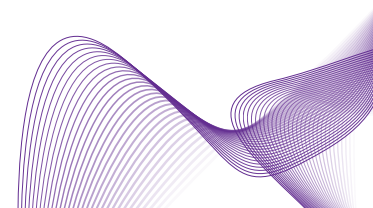
25. Slemp, G., Jach, H., Chia, A., Loton, D. and Kern, M. (2019). Contemplative interventions and employee distress: a meta-analysis. *Stress and Health*, 35(3): 227-255.

26. Slemp et al., *Contemplative interventions.*

27. Bartlett, L., Martin, A., Neil, A., Memish, K., Otahal, P., Kilpatrick, M. and Sanderson, K. (2019). A Systematic Review and Meta-Analysis of Workplace Mindfulness Training Randomized Controlled Trials. *Journal of Occupational Health Psychology*, 24(1): 108.

28. Lomas, T., Medina, J.C., Ivtzan, I., Rupprecht, S. and Eiroa-Orosa, F.J. (2019). Mindfulness-based interventions in the workplace: An inclusive systematic review and meta-analysis of their impact upon wellbeing. *The Journal of Positive Psychology*, 14(5): 625-640.

29. Slemp et al., *Contemplative interventions.*

30. Ravalier, J.M., Wegrzynek, P. and Lawton, S. (2016). Systematic review: complementary therapies and employee well-being. *Occupational Medicine*, 66(6): 428-436.

31. Slemp et al., *Contemplative interventions.*

32. 23 of these had sufficient data for meta-analysis.

33. Lomas et al. *Mindfulness-based interventions in the workplace.*

34. Ravalier et al., *Complementary therapies and employee wellbeing*, p.434

35. Slemp et al., *Contemplative interventions.*

36. Slemp et al., *Contemplative interventions.*

37. Harvey et al., *Developing a mentally healthy workplace.*

38. Robertson, I., Cooper, C., Sarkar, M. and Curran, T. (2015). Resilience training in the workplace from 2003 to 2014: A systematic review. *Journal of Occupational and Organizational Psychology*, 88(3): 533-562.

39. Vanhove, A., Herian, M., Perez, C., Harms, P. Lester, P. (2016). Can resilience be developed at work? A meta-analytic review of resilience-building programme effectiveness. *Journal of Occupational and Organizational Psychology*, 89(2): 278-307.

40. Harvey et al., *Developing a mentally healthy workplace*, p.39

41. Joyce, S., Christensen, H., Modini, M. and Mykletun, A. (2016). Workplace interventions for common mental disorders: A systematic meta-review. *Psychological Medicine*, 46(4): 683-697.

42. Joyce et al., *Workplace interventions for common mental disorders,* p.8

43. Joyce et al., *Workplace interventions for common mental disorders.*

44. Tan, L., Wang, M.J., Modini, M., Joyce, S., Mykletun, A., Christensen, H. and Harvey, S. (2014). Preventing the development of depression at work: a systematic review and meta-analysis of universal interventions in the workplace. *BMC Medicine*, 12(1): 74.

45. Wan Mohd Yunus, W.M.A., Musiat, P. and Brown, J.S.L. (2017). Systematic review of universal and targeted workplace interventions for depression. *Occupational and Environmental Medicine*, 75(1): 66-75.

46. Carolan, S. Harris, PR. and Cavanagh, K. (2017). Improving Employee Well-Being and Effectiveness: Systematic Review and Meta-Analysis of Web-Based Psychological Interventions Delivered in the Workplace. *Journal*

of Medical Internet Research, 19(7): e271.

47. Stratton, E., Lampit, A., Choi, I., Calvo, R.A., Harvey, S.B. and Glozier, N. (2017). Effectiveness of eHealth interventions for reducing mental health conditions in employees: A systematic review and meta-analysis. *PloS One*, *12*(12).

48. Public Health England (2016). *Interventions to prevent burnout in high-risk individuals: evidence review.*

49. Joyce et al., *Workplace interventions for common mental disorders.*

50. Pieper, C., Schroer, S. and Eilerts, A-L. (2019). Evidence of Workplace Interventions—A Systematic Review of Systematic Reviews. *International Journal of Environmental Research and Public Health*, 16(19): 3553.

51. Public Health England, *Interventions to prevent burnout*.

52. See for example Public Health England, *Interventions to prevent burnout*; Pieper et al., *Evidence of Workplace Interventions*; Ivandic et al., *Brief mental health and wellbeing interventions in organisational settings.*

53. Daniels K., Watson, D., Gedikli, C., Semkina, A. and Vaughn, O. (2017). Job design, employment practices and well-being: a systematic review of intervention studies. *Ergonomics*, 60(9): 1177-1196.

54. Harvey et al., *Developing a mentally healthy workplace.*

55. Harvey et al., *Developing a mentally healthy workplace.* p.52.

56. Public Health England, *Interventions to prevent burnout.*

57. Daniels, K., Watson, D. and Gedikli, C. (2017). Well-Being and the Social Environment of Work:
A Systematic Review of Intervention Studies. *International Journal of Environmental Research and Public Health*, 14(8): 918.

58. Hanisch, S., Twomey, C., Szeto, A., Birner, U., Nowak, D. and Sabariego, C. (2016). The effectiveness of interventions targeting the stigma of mental illness at the workplace: a systematic review. *BMC Psychiatry,* 16(1), 1.

59. Stratton et al., *Effectiveness of eHealth interventions.*

60. Stratton et al., *Effectiveness of eHealth interventions.*

61. Where universal populations are not selected on the basis of being at high risk of mental health problems or displaying symptoms and targeted populations are.

62. Wan Mohd Yunus et al., *Universal and targeted workplace interventions fordepression.*

63. The studies classed by the authors as 'computerised' include those delivered via the internet, computer programmes and automated phone systems.

64. Vanhove et al., *Can resilience be developed at work?*

65. Robertson et al., *Resilience training in the workplace.*

66. Ivandic, I., Freeman, A., Birner, U., Nowak, D. and Sabariego, C. (2017). A systematic review of brief mental health and wellbeing interventions in organisational settings. *Scandinavian Journal of Work, Environment & Health, 43(2): 99-108.*

67. Carolan et al., *Improving Employee Well-Being and Effectiveness.*

68.   Wan Mohd Yunus et al., *Universal and targeted workplace interventions forde-pression.*

69.   See Pieper et al., *Evidence of Workplace Interventions*; Joyce et al., *Workplace interventions for common mental disorders;* Martin, A., Shann, C. and LaMontagne, A. (2017). *What works to promote workplace wellbeing? A rapid review of recent policy developments and intervention research*. Victorian Workplace Mental Wellbeing Collaboration, Melbourne.

70.   Joyce et al., *Workplace interventions for common mental disorders.*

71.   Tan et al., *Preventing the development of depression at work.*

72.   Carolan et al., *Improving Employee Well-Being and Effectiveness.*

73.   Stratton et al., *Effectiveness of eHealth interventions.*

74.   Vanhove et al., *Can resilience be developed at work?*

75.   Wan Mohd Yunus et al., *Universal and targeted workplace interventions forde-pression.*

76.   Wan Mohd Yunus et al., *Universal and targeted workplace interventions forde-pression.*

77.   See for example: Hanisch et al., *The effectiveness of interventions targeting the stigma of mental illness*; Pieper et al., *Evidence of Workplace Interventions*; Public Health England, *Interventions to prevent burnout*; Abdin et al., *The effectiveness of physical activity interventions.*

78.   Abdin et al., *The effectiveness of physical activity interventions;* Wan Mohd Yunus et al., *Universal and targeted workplace interventions fordepression.*

79.   Chu et al., *Do workplace physical activity interventionsimprove mental health outcomes?*

80.   Harvey et al., *Developing a mentally healthy workplace.*

81.   Wan Mohd Yunus et al., *Universal and targeted workplace interventions forde-pression.*

82.   See for example: Lomas et al. *Mindfulness-based interventions in the work-place;* and Wan Mohd Yunus et al., *Universal and targeted workplace interventions fordepression.*

83.   See for example Abdin et al., *The effectiveness of physical activity interventions*; Daniels et al., *Well-Being and the Social Environment of Work*; Hanisch et al., *The effectiveness of interventions targeting the stigma of mental illness.*

84.   See for example: Abdin et al., *The effectiveness of physical activity interventions*; Lomas et al. *Mindfulness-based interventions in the workplace;* Slemp et al., *Contemplative interventions.*

85.   Lomas et al. *Mindfulness-based interventions in the workplace.*

86.   See for example: Chu et al., *Do workplace physical activity interventionsimprove mental health outcomes?*; Hanisch et al., *The effectiveness of interventions targeting the stigma of mental illness*; Joyce et al., *Workplace interventions for common mental disorders;* Ravalier et al., *Complementary therapies and employee wellbeing*; Robertson et al., *Resilience training in the workplace*; Wan Mohd Yunus et al., *Universal and targeted workplace interventions fordepression.*

87.   See for example: Ravalier et al., *Complementary therapies and employee well-being*; Chu et al., *Do workplace physical activity interventionsimprove mental health outcomes?*

88.   See for example: Abdin et al., *The effectiveness of physical activity interventions.*

89.   See for example: Chu et al., *Do workplace physical activity interventionsimprove mental health outcomes?*; Lomas et al. *Mindfulness-based interventions In the workplace*; Joyce et al., *Workplace interventions for common mental disorders;* Ivandic et al., *Brief mental health and wellbeing interventions in organisational settings.*

90.   See for example: Chu et al., *Do workplace physical activity interventionsimprove mental health outcomes?*; Stratton et al., *Effectiveness of eHealth interventions*; Tan et al., *Preventing the development of depression at work.*

91.   Hanisch et al., *The effectiveness of interventions targeting the stigma of mental illness.*

92.   Public Health England, *Interventions to prevent burnout.*

93.   Vanhove et al., *Can resilience be developed at work?*

94.   Robertson et al., *Resilience training in the workplace.*

95.   See for example: Daniels et al., *Well-Being and the Social Environment of Work*; Lomas et al. *Mindfulness-based interventions in the workplace;* Public Health England, *Interventions to prevent burnout.*

96.   See for example: Public Health England, *Interventions to prevent burnout*; Bartlett et al., *Workplace Mindfulness Training Randomized Controlled Trials*; Hanisch et al., *The effectiveness of interventions targeting the stigma of mental illness.*

97.   Vanhove et al., *Can resilience be developed at work?*

98.   See for example: Joyce et al., *Workplace interventions for common mental disorders;* Wan Mohd Yunus et al., *Universal and targeted workplace interventions fordepression*; Vanhove et al., *Can resilience be developed at work?*

99.   See for example Stratton et al., *Effectiveness of eHealth interventions*; Lomas et al. *Mindfulness-based interventions in the workplace;* Daniels et al., *Well-Being and the Social Environment of Work.*

100. See for example: Carolan et al., *Improving Employee Well-Being and Effectiveness*; Joyce et al., *Workplace interventions for common mental disorders;* Bartlett et al., *Workplace Mindfulness Training Randomized Controlled Trials.*

101. Daniels et al., *Job design, employment practices and well-being.*

102. Joyce et al., *Workplace interventions for common mental disorders.*

103. See for example: Pieper et al., *Evidence of Workplace Interventions*; Ivandic et al., *Brief mental health and wellbeing interventions in organisational settings.*

104. See for example: Daniels et al., *Well-Being and the Social Environment of Work*; Hanisch et al., *The effectiveness of interventions targeting the stigma of mental illness*; Bartlett et al., *Workplace Mindfulness Training Randomized Controlled Trials.*

105. Public Health England, *Interventions to prevent burnout.*

106. Wagner et al., *Mental health interventions in the workplace and work outcomes.*

107. See for example: Chu et al., *Do workplace physical activity interventionsimprove mental health outcomes?*; Hanisch et al., *The effectiveness of interventions targeting the stigma of mental illness*; Bartlett et al., *Workplace Mindfulness*

   Training Randomized Controlled Trials; Vanhove et al., *Can resilience be developed at work?*

108. Wan Mohd Yunus et al., *Universal and targeted workplace interventions forde-pression.*

109. See for example: Daniels et al., *Job design, employment practices and well-being*; Harvey et al., *Developing a mentally healthy workplace.*

110. Proper, K.I. and van Oostrom, S.H. (2019). The effectiveness of workplace health promotion interventions on physical and mental health outcomes – a systematic review of reviews. *Scandinavian Journal of Work, Environment and Health*, 45(6), 546-559.

111. Bartlett et al., *Workplace Mindfulness Training Randomized Controlled Trials.*

112. Ganann et al., *Expediting systematic reviews.*

113. Department of International Development, *Rapid evidence assessments.*

114. Khangura et al., *Evidence summaries.*

115. Khangura et al., *Evidence summaries*

116. Ganann et al., *Expediting systematic reviews*

The Policy Institute

The Policy Institute at King's College London works to solve society's challenges with evidence and expertise.

We combine the rigour of academia with the agility of a consultancy and the connectedness of a think tank.

Our research draws on many disciplines and methods, making use of the skills, expertise and resources of not only the institute, but the university and its wider network too.

Connect with us

🐦 @policyatkings   ➤ kcl.ac.uk/policy-institute