



Mindfulness in the workplace - summary of evidence

Summary

Mindfulness developed from Buddhism (Brown, Ryan & Creswell, 2007) and is defined as “the awareness that emerges through paying attention, on purpose, and nonjudgementally to the unfolding of experience moment by moment” (Kabat-Zinn, 2003, p. 145). The Mental Health Foundation (2017) defined mindfulness as an “integrative, mind-body based approach that helps people to manage their thoughts and feelings.”

Traditionally, mindfulness has been used in a clinical setting to improve psychological health and wellbeing but more recently it has been applied within the workplace context. In a clinical setting, it is linked with several positive outcomes such as increased subjective well-being and decreased psychological symptoms (Keng, Smoski & Robins, 2011). Overholt and Vickers (2014) found that 49% of organisations provide mindfulness-related training or resources to some degree however, there are several practices that are used such as attention training, meditation, breathing exercises and yoga/tai chi.

There are a range of mindfulness interventions that can be implemented but popular meditation focused mindfulness courses are Mindfulness-Based Stress Reduction (MBSR) which was originally developed to help patients with chronic pain (Kabat-Zinn, 1982) and Mindfulness-Based Cognitive Therapy (MBCT; Segal, Williams & Teasdale, 2002).

Reviews of mindfulness in the workplace have evaluated its effectiveness and outcomes. Examining comparative reviews the findings suggest that MBSR or modified versions are one of the most commonly used type of interventions. From the findings it is also possible to conclude that mindfulness and meditation interventions are associated with many positive outcomes such as increases in health and well-being including decreases in anxiety, stress and depression. The literature however, suggests that less research has examined specific workplace outcomes such as turnover intention, performance and productivity.

Most of the interventions are implemented at the individual level and generally are delivered face to face but more recently a greater number of online interventions have been examined. Research conducted at the individual level shows a range of benefits such as a decrease in bad moods, longer sleep on weekday nights, increased mindfulness and decreased rumination, increased resilience, better psychological health, decreased stress and depression, an increase in sleep quality, better psychological detachment from work, greater satisfaction with work-life balance and sleep quality. Lately, there has also been a focus on mindful leadership and there have been some positive findings in this area, however, more research in this area is required.

To explore these studies in more detail, please click on [[Explore the Evidence](#)].

What is mindfulness?

Mindfulness developed from Buddhism (Brown, Ryan & Creswell, 2007) and is defined as “the awareness that emerges through paying attention, on purpose, and nonjudgementally to the unfolding of experience moment by moment” (Kabat-Zinn, 2003, p. 145). The Mental Health Foundation (2017) defined mindfulness as an “integrative, mind-body based approach that helps people to manage their thoughts and feelings.” Interestingly, in a recent review the results showed that most papers define mindfulness as a state, fewer as a practice and even fewer define it as both (Jamieson & Tuckey, 2017).

Mindfulness interventions

Popular mindfulness courses are Mindfulness-Based Stress Reduction (MBSR) which was originally developed to help patients with chronic pain (Kabat-Zinn, 1982) and Mindfulness-Based Cognitive Therapy (MBCT; Segal, Williams & Teasdale, 2002). Both interventions are meditation focused. MBSR consists of an 8-10 week course in which a group of individuals receive approximately two hours of meditation teaching and practice each week (Kabat-Zinn, 1990). Course participants are recommended to practice formal meditation practices each week and there is also an all-day retreat. MBCT is also an eight-week course and is comprised of mindfulness training and aspects of cognitive therapy.

In the workplace a range of interventions have been implemented; Jamieson and Tuckey (2017) in their systematic review found that 75% of the workplace studies had used MBSR (or a modified version) or aspects of MBSR along with another type of intervention such as MBCT and it seems that organisations are increasingly implementing such interventions. Overholt and Vickers (2014) found that 49% of organisations provide mindfulness-related training or resources to some degree however, there are a number of practices that are used such as attention training, meditation, breathing exercises and yoga/tai chi. Methods of delivery often vary and they found that 67% of respondents reported that mindfulness training is voluntary. Positively, 39% viewed the mindfulness training or

resources as very beneficial to the organisation and 46% viewed it as somewhat beneficial.

What are the effects of mindfulness?

Traditionally, mindfulness has been used in a clinical setting to improve psychological health and wellbeing however more recently it has been applied within the workplace context. In a clinical setting, it is associated with numerous positive outcomes. For example, Keng, Smoski and Robins (2011) found mindfulness was associated with increased subjective well-being and decreased psychological symptoms. Supporting these findings, the National Institute for Health and Care Excellence (NICE) now recommend mindfulness as treatment for depression for those who have previously experienced three or more episodes of depression (NHS, 2016). Recently, the impact of mindfulness on employee health, well-being and performance has been studied and several workplace mindfulness interventions have been conducted (Jamieson & Tuckey, 2017).

Schaufenbuel (2014) concluded that not only is mindfulness at work is associated with many positive outcomes such as decreased stress, increased clarity and increased happiness and wellbeing which will be beneficial to organisations but additionally, specific business outcomes such as decreased absenteeism and turnover and better employee and client relationships and increased job satisfaction are also associated with mindfulness.

Reviews of mindfulness interventions

A number of reviews have been carried out to examine the benefits of mindfulness interventions. Luken and Sammons (2016) conducted a systematic review and concluded that there was evidence to support using MBSR and non-traditional mindfulness training to decrease burnout. Lomas, Medina, Ivtzan, Rupprecht and Eiroa-Orosa (2017) also conducted a systematic review but they focused specifically on mindfulness amongst teachers. They concluded that the variety of interventions, including Mindfulness-Based Stress Reduction (Kabat-Zinn, 1990), Community Approach to Learning Mindfully (CALM), Stress Management and Relaxation Training (SMART) and mindfulness – based wellbeing education, were beneficial for teachers. They proposed that it would be beneficial for all teachers to be offered an 8-week Mindfulness-Based Intervention (MBI) course, preferably with drop in sessions to enable continuous practice, however if that was not feasible it would be sufficient for teachers to have an introductory MBI session and then they could pursue a longer intervention outside school.

Amongst health profession students, a systematic review showed that mindfulness interventions were linked with significant positive changes in anxiety, stress and depression and positive moods, mindfulness, self-efficacy and empathy (McConville, McAleer & Hahne, 2017). They found that MBSR showed greater effects than just mindful meditation and postulated that further research to help enable home practice is needed. Supporting these findings, Ravalier, Wegrzynek and Lawton (2016)

found that mindfulness and meditation based interventions were effective in improving health and performance at work but the evidence regarding the relaxation interventions was inconclusive.

In their systematic review, Jamieson and Tuckey (2017) concluded that generally mindfulness interventions have a positive impact on health and well-being although there were a few studies that found differing results. However, the extant literature examining the impact of mindfulness on outcomes such as performance, turnover intention and productivity is inconclusive and further research is required. They also noted that less than 50% of the studies assessed mindfulness before and after the intervention which lead to concerns about internal validity.

In a recent meta-analysis, Virgili (2015) found that mindfulness-based interventions had a medium-large effect on psychological distress in working adults. All the variations of interventions (e.g. MBSR, mindfulness meditation, mindfulness training skills and mindful communication education) had similar effect sizes and these were seen across a variety of populations that covered a range of occupations, this suggests that shorter mindfulness interventions may be useful in an organisational context in reducing psychological distress. Furthermore, the effects of mindfulness were comparable to stress management interventions (e.g. relaxation and yoga).

Individual Interventions

A number of individual mindfulness interventions have been implemented to help employees develop their mindfulness.

Due to the high stress seen in this sector, teachers are one profession in which several mindfulness interventions have been conducted. Crain, Schonert-Reichl and Roeser (2017) found that their 8-week intervention based on MBSR showed positive results at both post-intervention and 3 month follow up. The results showed that those in the intervention reported a decrease in bad moods, longer sleep on weekday nights, increased mindfulness and decreased rumination about work compared to those in the control group. Weare (2014) concluded that amongst teachers, evidence suggests there are numerous benefits to practicing mindfulness such as improving occupational wellbeing and job satisfaction and that students need teachers who are skilled in mindfulness to teach it.

Mindfulness courses in a range of other sectors have also been implemented. Tobias (2016) found that amongst employees in an analytics company, after a 6-week mindfulness course there was a significant increase in resilience compared to the control group. Halliwell (2010) reported that amongst Transport for London employees who participated in a six-week stress reduction workshop,

which combined mindfulness, psychoeducation and CBT, there was a 71% decrease in the number of sick days for stress, anxiety and depression over the subsequent three years. Huang, Li, Huang & Tang (2015) also found findings to further support the notion that mindfulness is associated with better psychological health. Huang, Li, Huang and Tang (2015) found that factory workers in Taiwan with poor mental health (in this context this was defined as exhibiting psychological distress and job strain) who completed an 8-week mindfulness intervention reported lower psychological distress, fatigue and stress post intervention. The decreases in fatigue and stress were still present at 4 weeks post intervention and 8 weeks post intervention. Amongst NHS employees who participated in a mindfulness course 93% to 100% perceived that mindfulness had supported them in performing better at work and 45% to 59% reported a great or significant increase in performance. Furthermore, 100% agreed that the training had helped them function better when under pressure and 93% agreed it helped them to focus on work better (A head for work & Cambridgeshire and Peterborough NHS Foundation Trust, 2013). Mindfulness training has also helped to prepare people for work (Department of Health and NHS North West, 2011).

Shorter programmes have also shown positive results. The results from Gregoire and Lachance's (2015) 5-week mindfulness intervention demonstrated a significant increase in mindfulness at follow up 5 weeks after the intervention had been completed. There was also a decrease in psychological distress, anxiety, stress and depression and there were decreases in negative affect and fatigue but these were not significantly different to the control group when measured 5 weeks post intervention. Shorter programmes with no formal training have also been implemented, Hulsheger, Feinholdt and Nubold (2015) found that after their short 2-week self-training intervention participants reported an increase in mindfulness, sleep quality and sleep duration over the 10 working days of the study.

Recently, the effectiveness of online programmes has also been examined. The results from a 7-week online workplace intervention (Aikens, Astin, Pelletier, Levanovich, Baase, Park & Bodnar, 2014) showed a significant decrease in perceived stress and an increase in resiliency, vigor and mindfulness. These results were seen post intervention compared to the control group and these results either stayed similar or increased at the 6 month follow up. A positive impact on healthy dietary choices was also shown. There was also a decrease in self-reported burnout. This suggests that shorter, online programmes may have similar beneficial outcomes to a face to face MBSR (Kabat-Zinn, 1982) programme. Querstret, Copley and Fife-Schaw (2017) found that at 3 and 6 month follow up individuals who completed a 10-session online mindfulness course displayed lower work-related rumination, problem-solving pondering, chronic and acute fatigue and higher sleep quality, these were all a medium-large effect. These findings suggest that online interventions can have positive effects, this may be particularly beneficial for organisations as internet-based interventions are likely to be cheaper and easier for businesses to implement.

Mindfulness has also been implemented to help employees with work-life balance. Results from a 3 week online self-training intervention using MBCT (Segal, Williams & Teasdale, 2002) and Mindfulness-Based Stress Reduction (Kabat-Zinn, 1982) showed that after the intervention participants reported better psychological detachment from work, had less strain-based work-family conflict and showed greater satisfaction with their work-life balance. These results were shown both post intervention (after 3 weeks) and at two week follow up.

Leader interventions

More recently, there has been a focus on developing mindfulness specifically amongst leaders. Reitz, Chaskalson, Olivier & Waller (2016) examined whether an 8-week mindfulness programme developed using MBSR and MBCT and practice had an impact on leaders' capacities for resilience, collaboration and leading in complexity. 12 weeks after the programme, self-report measures showed that 93% felt that the programme had developed their resilience, for complexity this was 85% and regarding collaboration this was 85%. Other areas in which participants felt impact was decreased stress, calmness and emotional regulation.

Baron (2016) found that amongst middle managers who completed a training programme based on action learning principles there was a significant increase in authentic leadership and mindfulness. Brendel, Hankerson, Byun and Cunningham (2016) found that participants who completed regular mindfulness meditation (45 minutes per week for 8 weeks) showed a significant decrease in trait anxiety and stress and a significant increase in promotional regulatory focus. Another study found that mindfulness awareness practice was associated with a significant increase in mindfulness, a decrease in stress and a positive change in leadership effectiveness (Wasylikiw, Holton, Azar & Cook, 2015); however, it was clear that regular practice was hard to maintain. Research has also investigated, using a qualitative design, the experiences of participants who attended meditation awareness training, 6 themes were drawn from the data, which included changing attitudes towards work, improved job performance and wellbeing at work (Shonin & Van Gordon, 2015). Research also suggests that Transcendental Meditation programmes involving managers are associated with personal outcomes such as improved health, cognitive growth and management growth of consciousness and management outcomes such as improved communication, increased mutual acceptance and greater cohesiveness (Schmidt-Wilk, 2000).

Much less research has been conducted examining mindful leadership however there is a growing interest in this area. Results from a recent Systematic Literature Review (Donaldson-Feilder, Lewis & Yarker, 2018) suggest that mindfulness or meditation interventions for leaders and managers may positively impact on leaders'/managers' well-being and resilience and leadership capability. However the effect on the direct reports of leaders and managers has not been examined.

References

A head for work & Cambridgeshire and Peterborough NHS Foundation Trust (2013). *Mindful.org Mindfulness at work case study*. Cambridgeshire and Peterborough NHS Foundation Trust.

<http://www.mindfulnet.org/cpft%20case%20study.pdf>

Aikens, K., Astin, J., Pelletier, K., Levanovich, K., Baase, C. M., Park, Y. Y., & Bodnar, C. M. (2014). Mindfulness goes to work. Impact of an on-line workplace intervention. *Journal of Occupational and Environmental Medicine*, 56(7), 721-731.

https://www.researchgate.net/publication/263712117_Mindfulness_Goes_to_Work_Impact_of_an_Online_Workplace_Intervention

Baron, L. (2016). Authentic leadership and mindfulness development. *Journal of Managerial Psychology*, 31(1), 296-311.

https://www.researchgate.net/publication/271214112_Authentic_leadership_and_mindfulness_development_through_action_learning

Brendel, W., Hankerson, S., Byun, S., & Cunningham, B. (2016). Cultivating leadership Dharma: Measuring the impact of regular mindfulness practice on creativity, resilience, tolerance for ambiguity, anxiety and stress. *Journal of Management Development*, 35(8), 1056-1078.

<http://www.emeraldinsight.com/doi/abs/10.1108/JMD-09-2015-0127>

Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry*, 18(4),

211-237. <http://www.tandfonline.com/doi/abs/10.1080/10478400701598298>

Crain, T. L., Schonert-Reichl, K. A., & Roeser, R. W. (2017) Cultivating teacher mindfulness: Effects of a randomized controlled trial on work, home, and sleep outcomes. *Journal of Occupational Health Psychology*, 22(2), 138-152.

<https://www.ncbi.nlm.nih.gov/pubmed/27182765>

Department of Health and NHS North West (2011). *Overview of the NW Mindfulness and Work Preparedness Project*. .

http://www.breathworks-mindfulness.org.uk/PDF/Mindfulness_Event_Overview.pdf

Gregoire, S., & Lachance, L. (2015). Evaluation of a brief mindfulness-based intervention to reduce psychological distress in the workplace. *Mindfulness*, 6(4), 836-847.

<https://link.springer.com/article/10.1007/s12671-014-0328-9>

Halliwell (2010). Mindfulness Report. *The Mental Health Foundation*

https://www.mentalhealth.org.uk/sites/default/files/Mindfulness_report_2010.pdf

Huang, S-L., Li, R-H., Huang, F-Y., & Tang, F-C. (2015). The potential for mindfulness-based intervention in workplace mental health promotion: Results of randomized controlled trial. *PLoS ONE*, 10(9)

<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0138089>

Hulsheger, U. R., Feinholdt, A., & Nubold, A. (2015). A low-dose mindfulness intervention and recovery from work: Effects on psychological detachment, sleep quality, and sleep duration. *Journal of Occupational and Organizational Psychology*, 88, 464-489.

<http://onlinelibrary.wiley.com/doi/10.1111/joop.12115/abstract>

Jamieson, S. D., & Tuckey, M. R. (2017). Mindfulness interventions in the workplace: a critique of the current state of the literature. *Journal of Occupational Health Psychology*, 22(2), 180-193.

<https://www.ncbi.nlm.nih.gov/pubmed/27643606>

Kabat-Zinn, J. (1982). An outpatient program in behavioral medicine for chronic pain patients based on the practice of mindfulness meditation: Theoretical considerations and preliminary results. *General Hospital Psychiatry*, 4, 33-47.

<https://www.ncbi.nlm.nih.gov/pubmed/7042457>

Kabat-Zinn, J. (1990). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain and illness*. New York: Delacorte.

<https://www.amazon.co.uk/Full-Catastrophe-Living-Revised-mindfulness/dp/0749958413>

Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present and future. *Clinical psychology: science and practice*, 10(2), 144-156.

<http://onlinelibrary.wiley.com/doi/10.1093/clipsy.bpg016/abstract>

Keng, S. L., Smoski, M. J., & Robins, C. J. (2011). Effects of mindfulness on psychological health: a review of empirical studies. *Clinical Psychology Review*, 31(6), 10141-1056.

<https://www.ncbi.nlm.nih.gov/pubmed/21802619>

Lomas, T., Medina, J. C., Ivtzan, I., Rupprecht, S., & Eiroa-Orosa, F. J. (2017). The impact of mindfulness on the wellbeing and performance of educators: A systematic review of the empirical literature. *Teaching and Teacher Education*, 61, 132-141.

https://www.researchgate.net/publication/309338249_The_impact_of_mindfulness_on_the_wellbeing_and_performance_of_educators_A_systematic_review_of_the_empirical_literature

Luken, M., & Sammons, A. (2016). Systematic review of mindfulness practice for reducing job burnout. *American Journal of Occupational Therapy*, 70(2).

<https://www.ncbi.nlm.nih.gov/pubmed/26943107>

McConville J., McAleer, R., & Hahne, A. (2017). Mindfulness training for health profession students – the effect of mindfulness training on psychological well-being, learning and clinical performance of health professional students: A systematic review of randomized and non-randomized controlled trials. *Explore*, 13(1), 26-45.

<http://www.sciencedirect.com/science/article/pii/S1550830716301616>

NHS. (2016). *Mindfulness*. Retrieved from

<http://www.nhs.uk/Conditions/stress-anxiety-depression/Pages/mindfulness.aspx#what>

Overholt, M., & Vickers, M. (2014). *Stress management and mindfulness in the workplace*. American Management Association

<http://affinityhealthhub.co.uk/storage/app/attachments/hri-mindfulness-ama-1498492940.pdf>

Querstret, D., Cropley, M., & Fife-Schaw, C. (2017). Internet-based instructor-led mindfulness for work-related rumination, fatigue and sleep: Assessing facets of mindfulness as mechanisms of change. A randomized waitlist control trial. *Journal of Occupational Health Psychology, 22*(2), 153-169.

http://epubs.surrey.ac.uk/809897/1/Manuscript_mindfulness%20for%20WRR%20fatigue%20and%20sleep_JoHP_accepted.pdf

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

<https://www.ncbi.nlm.nih.gov/pubmed/27048297>

Reitz, M., Chaskalson, M., Olivier, S., & Waller, L. (2016). *The Mindful Leader. Developing the capacity for resilience and collaboration in complex times through mindfulness practice*. Ashridge Executive Education. Hult.

<https://mindfulnessworks.com/website4/userfiles/Publications/Ashridge-Mindful-Leader-for-web-low-res.pdf>

Schaufenbuel, K. (2014). *Bringing Mindfulness to the Workplace*. UNC Executive Development.

http://www.kenan-flagler.unc.edu/~media/Files/documents/executive-development/unc-white-paper-bringing-mindfulness-to-the-workplace_final.pdf

Schmidt-Wilk, J. (2000). Consciousness-Based Management Development. Case studies of international top management teams. *Journal of Transnational Management Development, 2*, 61-85.

http://www.tandfonline.com/doi/abs/10.1300/J130v05n03_05?journalCode=wzmd20

Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2002). *Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse*. New York: Guilford Press.

<https://www.amazon.com/Mindfulness-Based-Cognitive-Therapy-Depression-Preventing/dp/1572307064>

Shonin, E., & Van Gordon, W. (2015). Managers' experiences of meditation awareness training. *Mindfulness*, 6(4), 899-909.

<https://link.springer.com/article/10.1007/s12671-014-0334-y>

The Mental Health Foundation. (2017). *Mindfulness*. Retrieved from <https://www.mentalhealth.org.uk/a-to-z/m/mindfulness>

Tobias, J. (2016). *Mindfulness Training at Aimia: Research Study Report*. <http://affinityhealthhub.co.uk/storage/app/attachments/aimia-research-summary-jt-january-2016-1498492543.pdf>

Virgili, M. (2015). Mindfulness-based interventions reduce psychological distress in working-adults: A meta-analysis of intervention studies. *Mindfulness*, 6, 326-337.

<https://link.springer.com/article/10.1007%2Fs12671-013-0264-0>

Wasylikiw, L., Holton, J., Azar, R., & Cook, W. (2015). The impact of mindfulness on leadership effectiveness in a health care setting: A pilot study. *Journal of Health Organization and Management*, 29(7), 893-911.

<https://www.ncbi.nlm.nih.gov/pubmed/26556157>

Weare, K. (2014). *Evidence for Mindfulness: Impacts on the Wellbeing and Performance of School*

Staff. Mindfulness in Schools Project in association with University of Exeter.

<https://mindfulnessinschools.org/wp-content/uploads/2014/10/Evidence-for-Mindfulness-Impact-on-school-staff.pdf>