Outcomes of the University of Exeter Staff Mindfulness Offering

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Executive summary

This report summarises interim results of a staff mindfulness course being delivered to Exeter University staff during 2021. There has been a high degree of uptake and interest in the offering. The group received consistently positive (quantitative and qualitative) feedback from staff attending (all of whom would recommend the offering to other staff). Clear benefits in terms of enhancing wellbeing and reducing anxiety and depression have been observed, with preliminary evidence suggesting that the offering is cost-effective. All pre-specified performance indicators have been fully met.

Rationale and Overview of Offering

There is an increasing recognition it is important to invest in workplace wellbeing and mental health support, given high levels of stress reported by university employees and increasing referrals to OH for mental health issues across the university sector. The Stevenson-Farmer report outlines the financial costs and broader risks to organisations of mental health, meaning initiatives to manage mental health are likely cost-effective and potentially cost-saving.

Mindfulness groups offer an evidence-based approach to reduce stress and enhance wellbeing. There is a strong evidence base that mindfulness is effective at reducing symptoms of and vulnerability to mental illness and also can enhance wellbeing in a variety of populations, including positive but embryonic data in occupational settings (de Bruin et al., 2020; Heckenberg et al., 2018; Hilton et al., 2019; Janssen et al., 2018; Lomas et al., 2018; Virgilli et al., 2015). For example, deBruin et al (2020) in a naturalistic pre post design found that mindfulness reduced stress and risk from dropout from work and enhanced wellbeing and functioning (for key resource overview see document here prepared by the Oxford Mindfulness Centre).

A novel mindfulness curriculum has recently been developed by leading international mindfulness centres called Mindfulness Based Cognitive Therapy for Life (MBCT-L) that is potentially particularly well suited for delivery to general population samples in workplace settings. For example, Strauss et al (Strauss et al., 2021) showed in a randomised controlled trial run on health care staff (234 people randomised to MBCT-L or wait list control) that MBCT-L was acceptable to participants and led to a significantly greater enhancements in wellbeing and reduction in stress, anxiety, depression compared to waitlist.

This has motivated the university of Exeter to invest in a staff mindfulness offering during the 2021 calendar year, with the central component being three Mindfulness Based Cognitive Therapy for Life groups (MBCT-L; 8 weekly 2 hour sessions) courses (see details of offering here). Each MBCT-L group followed an eight-week programme, consisting of a two-hour weekly sessions that provide psychoeducation around stress/wellbeing, guided mindfulness practice, and group reflection. In between sessions, participants are invited to engage in home practice of mindfulness exercises (approximately one hour per day). Participants gain insight about patterns of thinking, feeling and behaving that either help or hinder stress/wellbeing and how mindfulness techniques can be used to manage these patterns (cultivating non-judgmental and non-reactive attention and awareness of the present moment to guide skillful action). Groups were delivered at the Mood Disorders Centre, by experienced clinicians and mindfulness facilitators, with access to regular supervision. Places were offered to up to 20 people on each group (optimal group size of 15). All participants had an individual orientation interview with a mindfulness facilitator to check suitability for the course prior to joining. Due to the covid pandemic, all groups were delivered online via Zoom, with one therapist and one

co-facilitator. Groups were advertised for two weeks in the weekly staff bulletin e-mail, an introductory webinar was offered, and a website was established. Places on the groups were offered on a first come, first served basis.

This document reports interim results for the 2021 calendar year to inform future commissioning as part of the suite of wellbeing offering available to staff. Modelling best practice, we report the degree to which a series of apriori performance targets have been met so far.

Evaluation Methodology

Number of clients attending groups (and number of sessions they attended) was reported. Clinical outcomes were primarily evaluated in terms of change pre to post group in Warwick Edinburgh Mental Wellbeing Scale (WEMWBS) and a brief screening measures of depression and anxiety (PHQ-2 and GAD-2; combined into PHQ-4). These are all validated questionnaire measures. On the WEMWBS, a change of two points or greater is seen as clinically meaningful and languishing (clinical) levels of wellbeing are indicated by scoring less than 18. On the GAD-2 and PHQ-2 scores greater than 2 indicate clinically significant symptoms; on the composite PHQ-4 scores greater than 4 indicate clinically significant symptoms. Change of more than one point is seen as clinically meaningful on the PHQ-4 (estimates are not available for PHQ2 and GAD2 as the scales are so brief). Experience outcomes were evaluated in terms of a bespoke participant experience questionnaire (PEQ). Participants were asked to rate the extent to which they agreed or disagreed with statements that they were satisfied with the groups, found the groups acceptable, and would recommend the groups to other staff. They were also asked to answer a series of open-ended questions about the groups.

The following performance indicators were set a priori:

- At least 20 people express an interest in each group, and at least 15 people are recruited into each group.
- At least 10 people complete a minimum adequate dose (>4 [out of 8] sessions) of each MBCT-L group.
- At least 50% of people attending each group showed minimum clinically important difference improvement on the WEMWBS and/or the PHQ4.
- At least 80% of people attending each group strongly agree or agree with statements that the course was acceptable, satisfactory, and they would recommend it to colleagues
- Other narrative feedback on the groups is positive, with no significant concerns raised.

Using data about the number of staff attending the sessions and the costs of delivering the programme, exploratory cost-effectiveness analyses were conducted.

Results

The performance indicators have all been met or exceeded to date. Over 200 people initially expressed an interest in taking part in MBCT-L groups (on average 67 per group). Three groups have now successfully completed. An average of 15 people have fully completed eight sessions in each group (average of 18 starting each group), with a total number of 45 individuals completing a group. There have been 421 contacts in total (a mixture individual orientation sessions or group mindfulness sessions).

Figure 1 plots change in each questionnaire, demonstrating increases in wellbeing and decreases in anxiety and depression (as the error bars of the change do not cross the zero line in any case). Consistent with this conclusion, there were statistically significant improvements in wellbeing, paired sample t-test t=4.05,

p<.001, Cohen's d=.66 (a medium effect size), and GAD2 anxiety, t=4.00, p<.001, d=.67 (a medium effect size). There were trend significant improvements in PHQ2 depression, t=2.00, p=.05, d=.33 (a small effect size). When pooling the PHQ2 and GAD2 into the PHQ4 there were significant improvements observed, t=3.44, p=.001, d=.57 (a medium effect size).

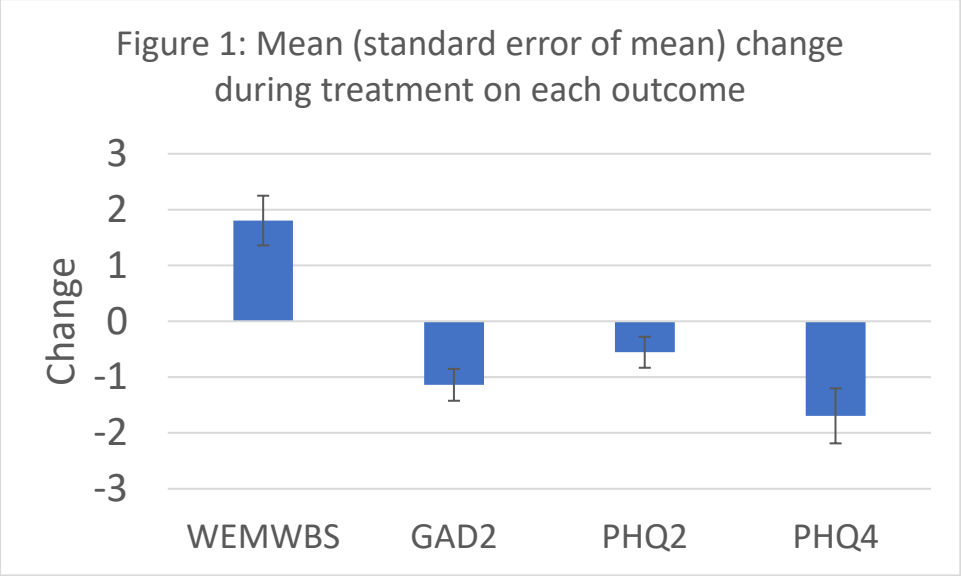


Figure 2 plots the proportion of staff who met clinical caseness criteria on each measure before the group who moved to the non clinical range after the group (and vice versa). Figure 3 plots the total proportion of staff before and after the group who met clinical caseness criteria on each measure. Figure 4 plots the total proportion of staff showing a clinically significant amount of improvement or worsening on each measure.

Focusing first on the depression and anxiety measures, even though this was a general population sample a substantial minority scored in the clinical ranges of questionnaire measures of depression and anxiety before the group (between 20% and 40%; Fig 3). Over 60% of those in caseness before the group moved to recovery, whereas <20% of those in recovery before the group moved to caseness during it (Fig 2). There were substantial reductions in the total proportion of clients meeting caseness criteria from before to after the groups (Fig 3). Over 60% of clients showed clinically significant improvement and less than 20% showed clinically significant worsening. That a majority of clients improved, and only a minority worsened, is noteworthy given the groups ran during the midst of the covid pandemic (including the winter lockdown), where staff were under significant stress and pressure.

Moving on to the wellbeing measure, it is noteworthy that before the group a very high proportion (>80% of staff) scored in the languishing range of the scale (below average wellbeing falling in the clinical range)(Fig 3). There was relatively little shift from the languishing range to the average range from before to after treatment (Fig 2) and the overall number of staff in the languishing range remained high after the groups (Fig 3). However, over 50% of staff did show clinically significant improvements in wellbeing and very few showed clinically significant deterioration (Fig 4). What this indicates is staff scored well under the average range before the group. Whilst they showed meaningful improvements during the groups, they nevertheless remained in the languishing range after the groups. Again, this needs to be interpreted in the context of the covid pandemic and winter lockdowns, as it likely reflects staff were under significant personal and professional pressure.

Figure 2: Proportion of clients moving to recovery (improving) and moving to caseness (worsening) during treatment on each measure

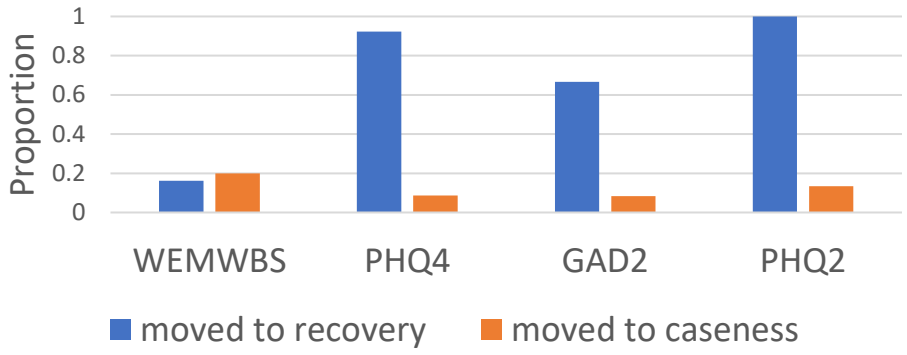


Figure 3: Proportion of clients in caseness before and after treatment on each measure

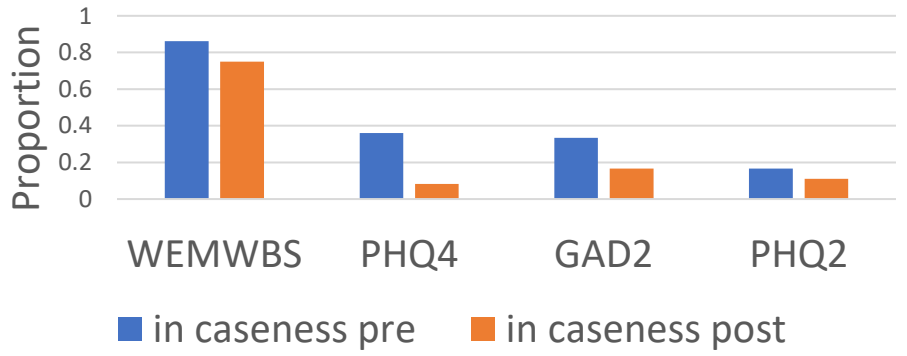
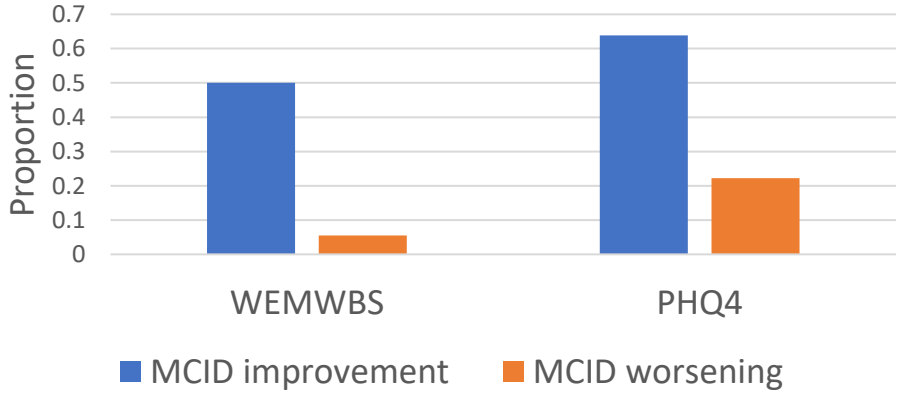


Figure 4: Proportion of clients showing minimum clinically significant improvement and worsening on the WEMWBS and PHQ4



Of those who staff who provided rating data about their experience of the groups (39/45), attendees found the groups acceptable (46% extremely; 51% very; 2% moderately), were satisfied with the groups (46% extremely; 44% very; 8% moderately), and would recommend them to other staff members (72% very likely, 23% likely, 5% neither likely nor unlikely). Qualitative feedback was generally very positive, for example:

- " Yes I have benefitted. The main benefit is the power to choose, by which I mean the power to know that I have a choice about how I react, which thoughts I pursue, what activities I fill my day with, how I approach challenges, how I treat myself. These wide-ranging impacts affect every aspect of lived experience.

Some staff raised some challenges with fitting the course around busy working and personal lives and found the degree of home practice recommended as too high, but no other significant concerns were raised (see Appendix One for all qualitative comments raised).

Assuming a cost per group of £2000 (£1750 fee for facilitator, £250 admin fee) and based on the contact data reported above, this is a cost per contact of £14 and a cost per participant completing the course of £133. As an estimate of number of individuals showing mental health recovery, we conservatively used the 12 individuals moving from caseness to non-caseness during the groups on the PHQ-4. In the original business case to fund this line of work, we used data from the Stevenson-Farmer report to crudely estimate the cost per employee per year with a diagnosed mental health condition in the university sector (estimate of £7500-£9000 per employee with a mental health condition). On this basis the current groups are likely to have been cost-effective and cost-saving. The cost to deliver the groups (£6000) was significantly less than the estimated total cost savings of the 12 individuals moving from caseness to recovery during the groups instead living with mental health difficulties for a year (£90000-£108000). The groups would still remain cost-effective even if factoring in staff salaried time to attend the groups.

Discussion and Recommendations

This data suggest the MBCT-L groups have been valued by staff, are clinically effective, and are likely to be cost-effective. The groups have met all of the pre-specified performance indicators. Overall, these outcomes are very positive and indicate the offering is of value and worthy of continuation. Of broader interest, partly on the basis of these promising results, the offering from the Mood Disorders Centre is now being commissioned by other organisations (including NHS staff as part of the Devon wellbeing hub and to music charity live music now). While staff did benefit from the courses, wellbeing for many remained in the languishing (clinical) range, reflecting the covid pandemic context and the need to consider broader organisational initatives to enhance wellbeing at work.

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Appendix One: Qualitative feedback on MBCT-L groups

Not included in this training report due to anonymity issues