**Evaluation of Outcomes from Sussex Partnership MBCT Staff Courses**

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**Background**

Mindfulness-Based Cognitive Therapy (MBCT) is an eight week course that can reduce stress in non-clinical populations (Chiesa & Serretti, 2009) and may be particularly helpful in workplace settings to reduce work-related stress (Virgili, 2015). Of all large public sector organisations in the UK, sickness absence is highest in the NHS, running at around 3.5% of the NHS workforce at any one time (ONS, 2017), with mental health related reasons being a prominent reason for sickness absence (ONS, 2017). Sussex Partnership has been offering MBCT courses to staff for over 15 years. This report presents outcomes from MBCT courses for Sussex Partnership staff between 2012 and 2016.

**Method**

Participants

Data was collected from 231 Sussex Partnership Trust Staff (187 females) with a range of professions between 16th April 2013 and 20th December 2016. Participants’ ages ranged from 21 to 75 years (*M*= 44.81, *SD*= 10.80). Participants completed a pack of self-report measures at baseline and post-MBCT, participation in the MBCT courses was voluntary. 168 participants (72.7% of those completing at least one set of measures) completed measures both before and after their MBCT course. The remaining 63 (27.3%) participants either completed just the baseline measures or just the post-MBCT measures, or there were large quantities of missing data.

Measures

*The Five-Facet Mindfulness Questionnaire Short-Form (*FFMQ; Bohlmeijer, Klooster, Fledderus, Veehof, & Baer, 2011). The FFMQ is designed to measure levels of mindfulness. It contains 24 items within five facets; non-reactivity to inner experience, observing, acting with awareness, describing, and non-judging of inner experience. Participants are asked to respond on a rating scale from 1 (never or very rarely true) to 5 (very often or always true) how frequently they had experienced the statements in the last month.

*Self-compassion Scale Short-form (*SCS-SF; Raes, Pommier, Neff, & Van Gucht, 2011). The SCS-SF is a 12 item measure of self-compassion. On a sub-scale level the it measures self-kindness, self-judgment, common humanity, over identification, isolation, and mindfulness. Participants were asked to indicate how often they behave according to the statements ranging from 1- (almost never) to 5- (almost always).

*Perceived Stress Scale* (PSS; Cohen, Kamarck, & Mermelstein, 1983). This 10-item scale measured perceived stress during the past month. Respondents were asked to indicate how often they have felt or thought a certain way ranging from 0 (never) to 4 (very often).

*Short Warwick-Edinburgh Mental Wellbeing Scale* (SWEMWBS; Stewart-Brown et al., 2009). The SWEMWBS is a 7-item scale measuring psychological and eudemonic well-being. Respondents were required to rate themselves from 1 (none of the time) to 5 (all of the time) to how that item best described their experience over the last 2 weeks.

*Compassion Scale – adapted (*CS; Pommier, 2011*).*This 24-item scale measuring compassion towards others was introduced later on within the study, thus not all participants completed this measure. An additional 10 items were added by the researchers of the present evaluation to make a final 34 item compassion towards others scale. Participants were asked on a scale of 1 (almost never) to 5 (almost always) how often they behave in the stated manner.

Procedure

All staff members within Sussex Partnership Trust are offered the opportunity to participate in MBCT courses in various locations around Sussex. Staff self-referred themselves to MBCT but had to get approval from their line managers before they were allocated to MBCT courses. Participants completed a pack of self-report measures at baseline and post-MBCT.

Analysis

Paired *t-*tests were used to compare participants’ baseline and post-MBCT scores. A total of 168 staff were included in the data analysis, being those who had completed both baseline and post-MBCT measures; this accounted for 72.7% of the total initial participant sample of 231. An independent *t*-test was used to compare baseline scores on each of the measures for those who completed both baseline and post-MBCT measures and those who did not complete both. A Chi-Square test was then carried out to see if there was a relationship between gender and whether participants completed both baseline and post-MBCT measures or not (completers or non-completers) and a t-test was used to see if completers and non-completers differed in age.

**Results**

*Mindfulness:* Scores of mindfulness at baseline (*M*=74.38, *SD*=12.27) increased significantly with a large effect size compared to post-MBCT (*M*=83.11, *SD*=11.34); *t*(169) = -11.569, *p*<.001, d= -0.99, 95% CI [-13.74, -9.73].

*Self-compassion*: Scores of self-compassion at baseline (*M*=34.42, *SD=*40.53) increased significantly with a large effect size compared to post-MBCT (*M=*40.53, *SD=*6.70); *t* (169) = -10.343, *p*<.001, d= -0.84, 95% CI [-7.28, -4.95].

*Stress*: Scores of stress at baseline (*M*=29.57, *SD=*7.47) decreased significantly with a medium-large effect size compared to post-MBCT (*M=*23.96, *SD=*7.77); *t* (168) = 9.263, *p*<.001, d= 0.74, 95% CI [4.41, 6.81].

*Wellbeing:* Scores of wellbeing at baseline (*M*=23.15, *SD=*3.99) increased significantly with a large effect size compared to post-MBCT (*M=*26.32, *SD=*3.46); *t* (162) = -10.847, *p*<.001, d= -0.85, 95% CI [-3.74, -2.59].

*Compassion*: Scores of compassion at baseline (*M*=131.10, *SD=*18.32) increased significantly with a small effect size compared to post-MBCT (*M=*135.11, *SD=20.32*); *t* (126) = -3.937, *p*<.001, d= -0.21, 95% CI [-6.03, -1.99].

*Table 1: Baseline scores for participants completing and not completing measures at both baseline and post-MBCT (as a proxy for intervention completion)*:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **N** | **Mean** | **Std. Deviation** | ***t*** | ***p*** |
| **FFMQ** | **non-completer** | 50 | 72.770 | 13.27 | 0.617 | .538 |
|  | **completer** | 168 | 71.536 | 12.16 |  |  |
| **SCS** | **non-completer** | 50 | 34.690 | 8.30 | 0.244 | .807 |
|  | **completer** | 168 | 34.379 | 7.76 |  |  |
| **PSS** | **non-completer** | 50 | 28.740 | 8.45 | -0.580 | .563 |
|  | **completer** | 168 | 29.467 | 7.58 |  |  |
| **CS** | **non-completer** | 36 | 135.028 | 17.75 | 1.162 | .247 |
|  | **completer** | 127 | 131.035 | 18.31 |  |  |
| **SWEMWBS** | **non-completer** | 50 | 22.780 | 4.29 | -0.679 | .498 |
|  | **completer** | 163 | 23.227 | 4.00 |  |  |

Table 1 shows when looking at the means of completers vs. non-completers on all outcome measures that there were non-significant differences between these groups on all the measures. Also, measure completers and non-completers did not differ in relation to gender (*χ*2=2.265, p=.132) or age (t=1.468, p=.144). This shows that individuals who failed to complete measures at both time points were not experiencing higher perceived stress or poorer mindfulness, compassion or wellbeing than individuals completing both the baseline and post-MBCT measures and that they did not differ from each other in terms of age or gender.

**Discussion**

The aim of this report is to evaluate outcomes from MBCT courses for SPT staff. Findings were that there were significant pre-post MBCT improvements in mindfulness, wellbeing, stress and self-compassion, with effect sizes being large. An important factor to note is that stress levels decreased significantly, which indicates that the course has beneficial effects on stress (albeit the evaluation is uncontrolled). This in turn may have a positive impact on how staff deliver care to service users, although the current evaluation did not assess this directly.

The size of effect on perceived stress (*d*= 0.84) is in line with findings from a meta-analysis of mindfulness-based interventions (MBIs) in non-clinical populations (Chiesa & Serretti, 2009) and from a meta-analysis of MBIs in workplace settings (Virgili, 2015). Virgili (2015) found a medium to large effect size for within group (pre-post) reductions in stress (Hedges *g*=.68[[1]](#footnote-1)). This suggests that the benefits of SPT staff MBCT courses on staff stress are in line with what would be expected given the research evidence. Taken together this suggests that MBIs are beneficial for healthcare staff stress and that these benefits can translate from research trials into real-world healthcare settings.

On evaluating those who completed both the baseline and post-MBCT measures initial assessment scores, to those who did not complete both, scores did not differ significantly, suggesting they did not drop out due to experiencing more severe stress or lower mindfulness, compassion or wellbeing. It would have been a concern for instance if participants had dropped out due to higher stress levels. Furthermore, there was no significant difference in the effect that age and gender had on who those who completed both baseline and post-MBCT measures and those who did not.

There are some limitations to the current evaluation. One limitation is that participants completed the measures in the MBCT group setting which could increase demand characteristics and inflate effect sizes. Having an independent researcher administer the measures could be a solution to this limitation. Furthermore, 27.3% of participants did not complete both the baseline and post-MBCT measures, therefore those who did not complete the post-MBCT measures may have benefitted less from the MBCT course than measure completers. This may have been for reasons including but not limited to; pressures and time commitments of working within the NHS, pre-existing mental health conditions, time off work, or non-enjoyment of the course. In despite of this, it is important to note that those who did not complete both the baseline and post measures and those who did, did not differ significantly on any of the outcome measures or on age or gender. Enhancing measure completion rates in future evaluations would be recommended. It may be helpful to collect qualitative data as to why these staff members dropped out. In turn, this would allow course leaders to make any changes to the way they administer the course where necessary.

Findings of this evaluation provide strong support for staff MBCT courses in Sussex Partnership. In order to reduce staff stress and improve wellbeing MBCT should be made widely available for healthcare staff. Although further research is needed, reducing staff stress and improving wellbeing may lead to reduced levels of staff sickness absence or mindfulness skills could be a protective factor in managing highly stressful care giving roles.

**References**

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1. Cohen’s d and Hedge’s g are roughly comparable, with Hedge’s g being a variant of Cohen’s d taking into account small sample sizes. [↑](#footnote-ref-1)