Brief Mindfulness-Based Interventions: Teacher and Course Attendee Perspectives on Content

Kelly Birtwell^{1,2} · Rebecca Morris^{1,2} · Christopher J. Armitage^{3,4}

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Abstract

Objectives While brief mindfulness-based interventions (MBIs) show promise, stakeholder involvement in their design is lacking and intervention content can vary substantially. The aim of this study is to explore stakeholder perspectives of brief MBIs, brief MBI content, and adapting existing MBIs.

Methods In this convergent mixed methods design study, 22 mindfulness teachers and 20 mindfulness course attendees completed an online UK-based survey. Twenty-six participants were female, and mean age was 50.8 years. Data from closed questions were analysed using descriptive and inferential statistics, and data from open questions were analysed using reflexive thematic analysis.

Results Findings suggest a brief MBI could comprise five 80-min sessions and include focused attention practice, informal mindfulness, inquiry, psychoeducation, and 20 min of daily home practice. Opinions of some elements differed among participants, such as the body scan, poetry, and the sitting with difficulty practice. Four themes were generated from participants' comments about their attitudes to brief MBIs, which were generally positive but expressed concerns about insufficient content and poor delivery. Three themes were generated about adapting MBIs, suggesting tensions between adhering to a curriculum and meeting group needs. Five themes were generated from views about the content and characteristics of MBIs, highlighting the importance of accessibility, teacher training, and participant safety.

Conclusions Brief MBIs may increase access to mindfulness training, yet there is a need for adequate governance and transparency regarding their strengths and limitations. Clarity and evidence of MBI mechanisms along with scientific literacy in teachers will support fidelity-consistent modifications.

Keywords Mindfulness · Intervention development · Intervention adaptations · Stakeholder involvement · Brief interventions · Person-based approach

Mindfulness-based interventions (MBIs) are manualised programmes that typically combine mindfulness meditation practices, psychoeducation, and group discussion. MBIs are

beneficial for people with a range of physical and mental health conditions (Demarzo et al., 2015b; Keng et al., 2011). De Vibe et al. (2017) reviewed the evidence from 101 randomised controlled trials of mindfulness-based stress reduction (MBSR; Kabat-Zinn, 2004a) and included 96 studies in their meta-analyses. For MBSR versus waitlist control or treatment as usual, they reported small to medium Hedges' *g* effect sizes for mental health (0.54), somatic health (0.39), and quality of life (0.44).

While there is evidence for their efficacy, participation in 8-week programmes such as MBSR and MBCT (mindfulness-based cognitive therapy; Segal et al., 2013) can be challenging, and attrition rates are high at 15–30% (Carmody & Baer, 2008; Crane & Williams, 2010). The time commitment has been identified as a particular difficulty (Allen et al., 2009; Birtwell et al., 2019) and many participants do not

✉ Kelly Birtwell
Kelly.birtwell@outlook.com

¹ School of Health Sciences, Faculty of Biology, Medicine and Health, University of Manchester, Manchester Academic Health Science Centre, Manchester, England

² NIHR School for Primary Care Research, Manchester, England

³ Manchester Centre for Health Psychology, School of Health Sciences, University of Manchester, Oxford Road, Manchester M13 9PL, England

⁴ NIHR Greater Manchester Patient Safety Translational Research Centre, M13 9PL Manchester, England

complete all of the required home practice (Birtwell et al., 2019; Parsons et al., 2017; Quach et al., 2016). Although MBSR and MBCT are intensive programmes, recent research has found that larger “doses” of mindfulness are not associated with improved psychological outcomes (Strohmaier, 2020). Further, it has been suggested that mindfulness may be non-monotonic, meaning that positive effects may in certain circumstances, for example too much of a particular type of practice, turn negative (Britton, 2019).

In recent years, there has been increasing interest in brief MBIs that are shorter and less intensive than the 8-week programmes, and evidence for their efficacy is emerging. For example, Greeson et al. (2014) reported improvements in sleep ($d=0.52$) and perceived stress ($d=0.45$) from a US-based randomised controlled trial of the “Koru” 4-session mindfulness programme for college students and emerging adults ($n=90$). Keyworth et al. (2014) conducted a UK-based pilot study of a six-session mindfulness-based intervention for people with diabetes and coronary heart disease ($n=40$). They reported significant reductions in thought suppression and worry following the intervention, with effect sizes of $d=0.42$ and $d=0.26$ respectively, which are comparable with effect sizes associated with MBSR (de Vibe et al., 2017). Arif et al. (2017) conducted a UK-based randomised controlled trial of a 5-session MBI for people with tinnitus ($n=86$) and found lower levels of distress in the brief MBI group compared to the control group (Tinnitus Reaction Questionnaire scores: $d=-0.69$). Luberto et al. (2017) conducted a US-based feasibility study of a 4-week MBCT programme for 65 hospital employees. Qualitative themes from the post-intervention survey revealed improved self-regulation and emotional well-being, and reduced stress. Quantitative findings revealed reductions in stress and burnout, with medium to large effect sizes of $d=0.85$ and $d=0.57$ respectively. Recent systematic reviews have also reported encouraging findings, such as reduced negative affect, improved pain management, and improved psychological outcomes (Howarth et al., 2019; Jiménez et al., 2020; McClintock et al., 2019; Schumer et al., 2018).

A recurring issue in the brief MBI literature is the considerable heterogeneity of interventions. MBSR and MBCT comprise eight 2–2.5-h sessions that include mindfulness practices (e.g. the body scan, mindful breathing practice, mindful movement), inquiry (the teacher-led discussion that follows a mindfulness practice), and psychoeducation, plus a 2-h orientation session, a full day of mindfulness practice, and daily home practice of 40–60 min (for further information on typical MBI components, see supplemental materials [three](#)). Yet there is currently no consensus as to what constitutes a brief MBI. For example, Greeson et al.’s (2014) Koru intervention comprised four 75-min sessions (5 h long in total) with 10 min of daily home practice. The intervention involved mindfulness practices such as mindful walking,

mindful eating, meditation, guided imagery, and breathing exercises. Keyworth et al.’s (2014) intervention was based on MBSR and included the raisin exercise, body scan, sitting meditation with a focus on the breath, and walking meditation. The intervention was 12.5 h long (1 × 2.5-h session, 5 × 2-h sessions) and practices were 10–15 min long. In comparison, the original MBSR intervention amounts to 30 h, with mindfulness practices that can be up to 30–40 min long (Kabat-Zinn, 2004a). The MBI tested by Arif et al. (2017) comprised five 40-min sessions (a total duration of under 3.5 h) and included sitting meditation with a focus on the breath as well as education about tinnitus. Home practice was a 20-min practice and a 5-min practice per day. Luberto et al. (2017) collapsed the MBCT programme, combining and shortening sessions one and two, sessions three and four, sessions five and six, and sessions seven and eight. Each session was 60 min long, giving an overall intervention duration of 4 h. Practices were 15 min long and included the body scan, sitting meditation (including practice with a focus on the breath; practice with a focus on breath, body, sounds, thoughts; and practice with a focus on breath, body, sounds, thoughts, and a difficult thought or sensation), and the 3-min breathing space practice. In comparison, the original MBCT intervention amounts to 26 h with practices up to 30–40-min long (Segal et al., 2013).

Within the aforementioned systematic reviews, intervention duration and content varied substantially and differed from the above studies. Schumer et al. (2018) included interventions that were 2 weeks long or less; however, there was no stipulation regarding the number or duration of the sessions, the mindfulness practices, or the home practice within the 2-week period. Jiménez et al. (2020) included MBIs of up to 60 min that were conducted in a laboratory setting. Howarth et al. (2019) included interventions that had a session duration of 30 min or less and were up to 100 min per week for up to 4 weeks. The review from McClintock et al. (2019) included MBIs that had no more than 1.5 h contact time; however, some interventions included additional home practice. The included interventions also varied by mode of delivery. While the review from Schumer et al. (2018) did not state the mode of intervention delivery, the other three reviews included MBIs that were teacher-led, supported only by audio or video guides, supported only by written guidance, or supported by a mixture of delivery modes (Howarth et al., 2019; Jiménez et al., 2020; McClintock et al., 2019).

The intervention content also varied. In the review from Jiménez et al. (2020), details of the intervention content were not provided beyond that stated in the title of the intervention condition: thirteen of the 19 included studies stated variations of “mindfulness training” and “mindfulness meditation”, three studies stated “mindful self-focus”, one stated mindfulness breathing, one stated mindful eating, and one stated “present moment attention and awareness”. From the

85 studies in the Howarth et al. (2019) review, 26 interventions included mindful breathing (nine of these included the body scan and some included psychoeducation), 25 included “general mindfulness instructions” (including mindfulness practices and psychoeducation), 14 interventions included “mindfulness-acceptance practice”, 14 included open monitoring, focused attention practice, and cognitive diffusion or a combination, and six interventions comprised only a body scan. Twenty-five MBIs were evaluated in the 20 studies reviewed by McClintock et al. (2019). Two interventions included mindful breathing, five included the body scan, one included “mindful acceptance of thoughts/pain”, one included “spiritualized mindfulness”, 13 comprised a combination of practices including open monitoring, and the content of three MBIs was unclear.

This lack of clarity regarding intervention components is of concern, as different mindfulness practices can have different effects. For example, Cebolla and et al., (2017a) found that the duration of a focused attention practice session (e.g. mindful breathing) predicted several facets of dispositional mindfulness as measured by the Five Facet Mindfulness Questionnaire (namely observing, acting with awareness, non-judging inner experience, non-reactivity to inner experience), whereas compassion practice did not. Practice sessions ranged from 5 to 100 min and the authors used the term “compassion practice” to refer to a range of compassion-focused practices. Schumer et al. (2018) reported stronger effects from programmes that included several types of mindfulness practices or completing a task mindfully compared to interventions comprising only a mindful breathing practice or a body scan. If the specific components of brief MBIs are not fully articulated, it will not be possible to investigate the mechanisms of action, optimise the interventions, and further develop the evidence base. Indeed, the recent dose–response meta-regression from Strohmaier (2020) was unable to account for the differential effects of specific mindfulness practices as information on the practices was not clearly stated in the published papers.

Another notable absence from the brief MBI literature is that of stakeholder involvement in their development. MBIs are complex interventions that consist of numerous interacting components and require course attendees to perform new behaviours with a range of outcomes (Craig et al., 2008; Demarzo et al., 2015a). Recent guidance on the development of complex interventions (O’Cathain et al., 2019) has identified stakeholder involvement as a key action and recommends that stakeholders are involved throughout the development process. This can include the design stage where ideas for intervention content are generated. Involving stakeholders in the development process can help to ensure interventions are acceptable (Band et al., 2017; Geraghty et al., 2016) and thus support future implementation. Secular mindfulness-based interventions have existed

for approximately 40 years within healthcare; however, few studies have examined participant perspectives on the duration and content of MBIs as part of the design stage, particularly in the development of brief MBIs. In addition, there is now a growing awareness of the adverse effects of mindfulness and meditation (Cebolla et al., 2017b; Lindahl et al., 2017; Van Dam et al., 2017) and it would seem pertinent to draw on the experiences and perspectives of attendees of MBIs in order to minimise risk and enhance acceptability of new brief MBIs.

The present study forms part of a wider programme of research that aims to develop a brief mindfulness-based intervention using a theory-, evidence-, and person-based approach to intervention development (Yardley et al., 2015). Our intention is to develop a brief MBI that is suitable for a mixed population, e.g. for the general population or primary care patients. The aim of the present study is to explore the perspectives of mindfulness teachers and mindfulness course attendees in relation to brief MBIs, what they should comprise, and components of MBIs generally. As brief MBIs can be developed by adapting existing MBIs, attitudes to making adaptations to existing MBIs are also explored. This study is concerned with elements of MBIs as taught in contemporary, secular MBIs such as mindfulness-based stress reduction and mindfulness-based cognitive therapy. For clarity, throughout this paper, “teachers” refers to mindfulness teachers, “course attendees” refers to people who have attended a mindfulness course, and “participants” refers to all participants in this study—both mindfulness teachers and mindfulness course attendees. The study seeks to answer the following questions: (1) What attitudes do participants hold towards brief MBIs? (2) What are the perspectives of participants regarding adapting existing standardised MBIs? (3) What is the ideal duration and format of a new brief MBI according to participants? (4) What are the views of participants regarding the content and characteristics of MBIs?

Method

Participants

Mindfulness teachers and past mindfulness course attendees were recruited via convenience and snowball sampling using social media, professional networks, and mindfulness teaching and training organisations. As we intend the intervention we are developing to be suitable for a wide range of participants, recruitment of course attendees was irrespective of their reasons for attending a mindfulness course (e.g. clinical or non-clinical). Twenty-six of the 42 participants (62%) were female, and 22 (52%) were mindfulness teachers. Data were not collected as to whether mindfulness teachers were clinically trained. The mean age was 50.8 years ($SD = 10.2$,

range = 26–65) and most were university graduates ($n = 38$, 90.5%). All of the participants were from the UK apart from one mindfulness teacher and one course attendee who were from the USA and Sweden respectively. The mindfulness teachers had an average of 5.4 years teaching experience ($SD = 3.9$, range = 1–17) and on average, participants practised formal mindfulness for 114 min per week ($SD = 107$, range = 10–540). A Mann–Whitney test revealed a significant difference in the years of mindfulness practice experience between mindfulness teachers (mean = 10.2 years, $SD = 5.7$, $mdn = 8$, range = 4–26) and course attendees (mean = 5.1 years, $SD = 4.7$, $mdn = 3$, range = < 1 to 18), $U = 92.0$, $z = -3.23$, $p = 0.001$, $r = -0.50$. Further statistical analyses revealed only minor differences between the mindfulness teachers and mindfulness course attendees (as noted in a subsequent section of this paper), and due to similarities in qualitative responses, the participants in this study have been considered as a single sample. Information on the types of courses taught or attended along with reasons given by course attendees for attending a mindfulness course can be found in supplemental materials [one](#).

Procedures

This study employed a convergent mixed methods design (Creswell & Creswell, 2018) with data collection via a self-administered online survey comprising open and closed questions. As this study is exploratory in nature, a mixed methods approach with an emphasis on qualitative analysis of free-text responses was deemed appropriate. The qualitative and quantitative findings were integrated following analysis in order to better understand participant perspectives of the research questions. The study received ethical approval from the University of Manchester (Ref: 2018–3878-5778).

Stakeholders were involved in the design of the study. One previous mindfulness course attendee and two mindfulness teachers (with different levels of teaching experience) provided feedback on the participant information and survey content. Changes were made accordingly; for example, some of the MBI element descriptions were clarified and information added to the participant information section.

There was no payment or incentive for participating in the study. Sixty-two survey responses were submitted. Data were screened and responses that had not been completed beyond the demographics section were removed. There were no significant differences between those who completed the demographics section and did not progress further and those who completed the full survey. One partially completed survey response was identified as a duplicate to a fully completed response so these two records were merged. This left a total of 42 survey responses eligible for analysis.

Measures

“Select Survey” software was used to host the participant information, consent form, and survey. Survey questions were a mix of open, closed, and Likert scale questions. Data were collected regarding participant demographics, experiences of teaching and attending mindfulness courses, and opinions regarding the elements of standard and brief MBIs. Open questions included asking participants to name helpful and unhelpful MBI elements and Likert scale questions included rating a list of MBI elements in terms of how important it is to include the elements in a brief MBI and the minimum number of sessions each element should feature in. The survey questions and list of MBI elements and descriptions can be found in supplemental materials [two](#) and [three](#) respectively.

Data Analyses

Responses to free-text questions were analysed by the first author using reflexive thematic analysis (Braun et al., 2019). Analysis followed the steps outlined by Braun et al. (2019): familiarisation with the data, generating codes, constructing prototype themes, revising themes, defining themes, and producing the report. This was an iterative process that involved returning to the data several times, revising codes and themes, and discussing the themes with the co-authors. Survey responses were grouped and combined for analysis according to the research questions, thereby producing three tables of themes (one each for research questions 1, 2, and 4, with question 3 exclusively quantitative). Although data were coded inductively without the use of an a priori framework, analysis was influenced by the researchers’ experience, as described below. In addition, the MBI elements generated spontaneously by participants as being helpful or unhelpful were counted and frequencies generated.

Within qualitative research, it is acknowledged that the researcher brings their own subjective influence to the research process. Rather than being seen as bias to be avoided, this subjectivity is seen as a resource and an active part of the meaning-making process (Braun & Clarke, 2013). For this study, data analysis was conducted by the first author (a female PhD candidate) who is experienced in conducting qualitative research. To support the process of reflexivity, notes were made during data analysis. The first author is trained to teach both MBCT and brief mindfulness-based approaches. The second author is a social sciences researcher (female) and the third author is a health psychologist (male), neither practice mindfulness, both have interests in patient safety and developing health interventions for the general population, and both are experienced in conducting qualitative research. This combination, both

of different levels of mindfulness experience and of different backgrounds, provided a broad perspective of the current topic area.

Quantitative data were analysed using SPSS version 22. Data were not normally distributed so Mann–Whitney was used to explore potential differences between the mindfulness teachers and course attendees. As this is an exploratory study, there was no formal hypothesis. Some survey participants did not answer all questions so the number of responses analysed for each question or group of questions has been stated.

Results

Qualitative responses to the survey questions varied in length from two words to 137 words. The shorter responses tended to be in response to questions about helpful and unhelpful elements (e.g. “body scan”), or where providing additional comments about the quantitative questions on course practicalities (e.g. mode of delivery, providing hand-outs). However, most responses were several sentences long and this was consistent across teachers and course attendees. The table of survey questions in supplemental materials [two](#) indicates which question responses were analysed to generate which table of themes.

Attitudes Towards Brief MBIs

Forty comments from teachers and 34 comments from course attendees about the advantages and disadvantages of a brief MBI, and general comments about brief MBIs, were analysed. Four themes were generated: Improving access to MBIs, Learning to practice mindfulness, Perceived positive outcomes, and Proceed with caution (see Table 1). In addition, three survey participants (two teachers and one course

attendee) stated there were no disadvantages of a brief mindfulness course.

Within the theme *Improving access to MBIs*, participants expected a brief MBI would place fewer demands on participants and organisations, thereby improving access to MBIs, as well as potentially increasing engagement. A reduction in cost and the commitment required to attend classes were seen as particularly likely to improve access. There was also an expectation that there would be less home practice for a brief MBI, which could make attending the course less “onerous”. In addition, organisational burden was considered: “costs less in time, money of being charged, organisational time.” (1009T). Within this theme, there are implications for provision, i.e. organisations may be more able to deliver brief MBIs, and there may be increased engagement.

A brief MBI was seen as a good introduction to mindfulness that could support participants in *Learning to practice mindfulness*: “Introduces good habits and knowledge of mindfulness” (1062A). However, within this theme, there were also concerns that a brief MBI would not be sufficient (e.g. in terms of time and depth of training) to support participants in this endeavour, particularly to develop a habit of regular mindfulness practice. This theme points to the complexities of mindfulness practice, particularly in terms of how participants may derive meaning and benefits from their practice. It also reveals varied perspectives of brief MBIs: as sufficient in themselves for supporting participants to learn to practice mindfulness, as an introduction enabling participants to then progress to an existing 8-week MBI, or as an inferior replacement for existing 8-week MBIs.

Participants highlighted *Perceived positive outcomes* of a brief MBI, particularly in relation to mental and physical health, and daily life: “It could provide people with techniques to help them manage health problems and cope with everyday life.” (1056A). Whereas the theme *Learning to*

Table 1 Themes and sample quotes for attitudes towards brief MBIs

Themes	Sample quotes
Improving access to MBIs	“Cheaper, accessible to busier people” (1059A) “Good for people who would have difficulties attending 8 weeks” (1033T)
Learning to practice mindfulness	“A 4-session course may not be long enough for some people to understand the concepts” (1061A) “It introduces people to mindfulness and mindfulness practice, and those interested can follow up with their own practice or a longer session” (1017T)
Perceived positive outcomes	“Provides techniques that can help mental health issues” (1023A) “I have found that just a basic understanding can lead to really positive outcomes ... (I feel as though there is more room in my head, my brains not overflowing anymore)” (1018T)
Proceed with caution	“Too short, too lightweight, people don’t have the opportunity to explore aspects such as turning towards difficulties, developing a regular practice” (1012T) “It may not help everyone and could have negative consequences for some” (1056A) “If in health care need to be mindful of evidence base” (1009T) “Unprofessional delivery and guidance” (1045A)

Participant ID numbers ending in “A” represent mindfulness course attendees, and those ending in “T” represent mindfulness teachers

practice mindfulness highlighted some of the challenges of understanding mindfulness concepts and learning to practice, within this theme, *Perceived positive outcomes*, it was felt that if brief MBI attendees could achieve even a “basic understanding”, this could lead to positive outcomes. This points to differing opinions among survey participants regarding the intensity and depth of training that should be offered in MBIs.

In the theme *Proceed with caution*, a range of concerns were expressed, for example that a brief MBI may lack depth and impact and that the content may not be sufficient to lead to positive outcomes, particularly if turning towards difficulty is not included. There were also concerns about the quality of teaching and that brief MBIs may not be delivered skilfully: “treat with care...takes a lot of skill to do well and I have much concern that it can be taught in a very shallow way” (1027T). This was coupled with concerns about adverse effects:

There’s a risk of having under experienced clinicians delivering it if it is rushed out too quickly. I still think the therapists should have experience of practice before training. Also, with some adverse events reported, there’s a risk of exacerbating some symptoms if clients aren’t suitably screened (participant 1043A).

In addition, concerns were raised about brief MBIs in relation to Good Practice Guidelines: “Don’t dilute what works. It would be outside the UK Mindfulness Network Guidelines for Mindfulness-based Interventions so please don’t do this” (1007T). In the UK, mindfulness teachers are advised to follow the Good Practice Guidelines for teaching mindfulness-based courses, which provide guidance for teaching 8-week courses such as MBSR and MBCT (British Association for Mindfulness-Based Approaches [BAMBA], 2020). The comments expressed within this theme suggest a need for reassurance about the quality of brief MBIs and their delivery, and indicate uncertainty about the place of brief MBIs within existing frameworks.

Perspectives on Adapting Existing Standardised MBIs

Thirteen of the 22 mindfulness teachers (59.1%) stated they had adapted existing standardised mindfulness course curricula. Adaptations included shortening the duration of practices, changing the order of some practices, adding in soothing or compassion practices where these are not included as standard, adapting the MBCT curriculum to be suitable for a group of people with depression, anxiety, stress (e.g. including information about anxiety), and making changes to some activities and scenarios so they were more relatable to the group. None of the teachers mentioned excluding specific practices.

Four out of the twenty mindfulness course attendees (20%) stated adaptations had been made to the course they attended, nine (45%) stated no adaptations had been made, five (25%) stated they did not know or were not aware if adaptations had been made, and two participants (10%) stated there had been no adaptations but an all-day mindfulness practice day was not included as part of their course (this is a standard feature in some 8-week mindfulness courses).

The mean preference for following or adapting a curriculum as rated by 21 of the 22 mindfulness teachers was 3.8 (SD=2.0, range = 1–7, median = 4) on a scale of 1–7. This indicates a mix of opinions regarding making adaptations, which is borne out by the number of teachers who stated they made adaptations (59%, above) as well as the free-text comments. Of the nineteen comments submitted by mindfulness teachers, three themes were generated: Experience level of the mindfulness teacher, Participant needs, and Sense of credibility (see Table 2).

The *Experience level of the mindfulness teacher* was seen as a key factor in determining whether to adapt a course curriculum. Clinical training was not mentioned; however confidence, knowledge, and skills were all seen as important considerations. There was also talk of obtaining support from more experienced peers: “Took advice from experienced MBCT teachers before developing and delivering the

Table 2 Themes and sample quotes for teacher perspectives on adapting existing standardised MBIs

Themes	Sample quotes
Experience level of the mindfulness teacher	“Early on in learning the method I think it is good to follow the curriculum exactly and deliver to the previously researched population but as you become more practised amend it to the population needs” (1006T)
Participant needs	“Every group has different needs which ought to be accommodated” (1044T) “Make up of the groups, time available for sessions and contexts of learning all dictated against exact curricula. ... I work from the principle of finding people where they are and starting there” (1029T)
Sense of credibility	“I think the curriculum is really important because it / they have been developed by highly qualified professionals over long periods of time and it has been subjected to research and outcome studies” (1049T) “I think following the curriculum honours the experience that has led to its development” (1046T)

Participant ID numbers ending in “T” represent mindfulness teachers

shortened course” (1052T). This theme points to the importance of training, supervision, and ongoing peer support in the development of mindfulness teachers and suggests that adaptations may be acceptable and even desirable under certain circumstances.

The theme *Participant needs* reflects the influence of group and individual needs and group composition in the decision to make adaptations. There was a sense from some participants that meeting such needs may be incompatible with adhering to a curriculum. “Finding people where they are” (participant 1029T, Table 2) suggests a bottom-up, person-centred approach, rather than strict adherence to a curriculum. There were also concerns, although unspecified, that adapting existing curricula too much could be detrimental: “I think there are risks/disadvantages in adapting too far from the curriculum for groups” (1020T). As with the *Experience level of the mindfulness teacher* theme, mindfulness teacher training and adequate supervision could help to manage these risks.

Within the third theme, adhering to a curriculum was seen as providing a *Sense of credibility* for the work of the mindfulness teachers in this study. This credibility is derived in two ways, firstly through evidence associated with the curriculum. An evidence-based curriculum was viewed as providing a level of authority and adhering to a curriculum was seen as being authentic and respecting the development process of MBIs. Secondly, through association with leading figures in the field, for whom there was a sense of reverence: “I seek to be true to mindfulness as defined/used by Jon Kabat-Zinn” (1017T). In spite of this respect for the evidence base and the work of leading figures, almost two thirds of the teachers in this study made adaptations to the courses they taught. This suggests there may be tensions between curriculum adherence and responsiveness to a group (*Participant needs* theme), and between the research evidence and teacher experience.

The Ideal Duration and Format of a New Brief MBI According to Participants

The mean minimum number of sessions suggested for a brief course by participants in this study was 5.00 (mode = 4, median = 5, SD = 1.5, range = 1–7, $N = 39$) and the mean duration suggested for each session was 78 min, although more participants suggested 60-min sessions (mode = 60, median = 60, SD = 29, range = 20–120, $N = 39$) (for details of the response distribution see supplemental materials [one](#)). Participants stated the frequency of sessions should be as follows: once or twice a week: 1 (2.6%); weekly: 31 (79.5%); weekly and/or fortnightly: 4 (10.3%); depends on the group context: 3 (7.7%). In comparison, MBSR and MBCT courses have eight weekly sessions of 120–150 min in duration. The mean minimum number of participants suggested for each

mindfulness course group was 5 (SD = 3, range = 1–15, $N = 39$) and the mean maximum number of participants suggested was 17 (SD = 15, range = 8–100, $N = 39$). Forty-one study participants said course attendees should be asked to complete home practice as part of a brief mindfulness course. The mean duration of home practice per day suggested by participants was 20 min (SD = 13, range = 5–60, $N = 38$), compared to MBSR and MBCT courses which recommend approximately 40–60 min of home practice per day. Thirty-two participants said they thought reunion sessions should be offered following completion of the course. The suggested frequency of reunion sessions was as follows ($N = 33$): monthly: 45.5%; every 2 months: 21.2%; every 3 months: 27.3%; every 6 months: 6.1%.

With regard to mode of delivery, on average, participants indicated that the largest portion of content in a course should be delivered face-to-face ($M = 68.5\%$, SD = 36.4), and less than a third of the content should be delivered online ($M = 21.5\%$, SD = 25.9) or over the phone ($M = 9.8\%$, SD = 2.1). When asked how important it is for participants to be in a face-to-face group, on a scale of 1 to 7 with 7 as very important, the mean score of survey respondents was 6.2 (SD = 1.3, range = 1–7). The mean importance scores (from 1–7) for course materials were as follows ($N = 36$): electronic handouts: 4.9 (SD = 1.9, range = 1–7); printed handouts: 5.6 (SD = 1.7, range = 1–7); CDs of audio guidance for practising at home: 5.7 (SD = 1.7, range = 1–7); a link to online audio guidance for practising at home: 6.2 (SD = 1.1, range = 4–7); a link to YouTube clips providing guidance for practising at home: 5.3 (SD = 1.3, range = 3–7).

Participant Views Regarding the Content and Characteristics of MBIs

Table 3 presents data about the practice and non-practice elements of mindfulness-based interventions that participants identified spontaneously (without the aid of a pre-set list) as either helpful or unhelpful. From 44 comments from mindfulness teachers and 38 comments from mindfulness course attendees, 15 distinct types of mindfulness practice were identified as being helpful and four practices were identified as being unhelpful. The four “unhelpful” practices were also identified as being “helpful” by some participants. As with the prior results, this illustrates the range of opinions and personal preferences for practice. In addition, eight participants stated all practices were helpful and one participant stated all aspects of the course were helpful. One participant stated “long practices” were unhelpful, and 14 participants stated there was nothing unhelpful in the course.

Regarding the non-practice elements (i.e. theory and activities), 18 elements of theory and six activities were identified as helpful, and one theory element and three activities were identified as unhelpful (see Table 3). Six

Table 3 Helpful and unhelpful course elements

	Helpful	Unhelpful
Mindfulness practices	Body scan (16) Breath practice (11) Mindful movement (8) Mindful eating (6) Kindness and compassion practices (5) Three-step breathing space (5) Informal practice (4) Breath/body/sounds/thoughts practice (3) Guided visualisations (3) Mindful walking (2) Tactile object practice (2) FOFBOC (feet on floor bottom on chair; 1) Meditating with difficulty (1) Soles of feet practice (1) Sounds practice (1)	Body scan (2) Mindful movement (2) Mindful walking (2) Meditating with difficulty (1)
Non-practice elements: theory	Attitudes/pillars of mindfulness (6) Acceptance/befriending (5) Automatic pilot (4) Aversion/responding to unpleasant (4) Awareness (4) Being and doing modes (2) Compassion (2) Decentring (2) Definition and concepts of mindfulness (3) Stress (2) The wandering mind (2) Emotion systems (1) Focused attention (1) Impact of self-kindness on cortisol (1) Open awareness (1) Primary and secondary suffering (1) Role of rumination (1) Urge surfing (1)	Education about depression (1)
Non-practice elements: activities	Inquiry (group discussion) (6) Enactments/experiments (1) Mindful listening and talking (1) Self-care plan (1) Story/poem (1) Thoughts and feelings exercise (1)	CBT exercises (2) Aikido exercise (1) Daily practice tracking sheets (1)

Note: Figures in parentheses indicate total number of times an element was mentioned

participants stated inquiry (the group discussion following practice) was an important element, for example as a way of drawing together theory and experience of practice. Inquiry has therefore been included with “activities” in Table 3 to reflect the interactive nature of this element. The elements and number of times each element was mentioned can be found in Table 3.

From a pre-determined list of elements, participants then rated the importance of including particular elements in a brief mindfulness course. Tables 4 and 5 show the mean ratings provided by 31 participants (16 mindfulness teachers, 15 course attendees). There were significant differences between teachers and course attendees for the items marked with an asterisk: the importance of poems ($U=62$, $z=-2.33$, $p=0.019$, $r=-0.42$), and the number

of sessions the following should feature in: informal mindfulness ($U=62.5$, $z=-2.29$, $p=0.021$, $r=-0.41$); inquiry ($U=61.5$, $z=-2.35$, $p=0.018$, $r=-0.42$); psychoeducation ($U=63.5$, $z=-2.26$, $p=0.023$, $r=-0.41$); practical exercises ($U=70.5$, $z=-1.99$, $p=0.047$, $r=-0.36$); and poems ($U=61.5$, $z=-2.35$, $p=0.018$, $r=-0.42$). Compared to mindfulness course attendees, the mindfulness teachers rated these elements as more important or stated they should feature in more sessions.

For importance, all elements were rated 4.0 or above which is above the midpoint of the scale and suggests a moderate to high level of importance. The mean minimum number of sessions that participants thought the elements should feature in ranged from 1.6 (compassion practice) to 4.6 (inquiry). Participants suggested inquiry, informal

Table 4 Mindfulness practice elements (mean, SD, range)

	Focused attention practice	Informal mindfulness	Three-step breathing space	Compassion meditation	Open-monitoring meditation
How important is it to include this in a brief mindfulness course?	6.32 SD 1.5 1–7	6.8 SD 0.6 4–7	5.8 SD 1.7 1–7	5.1 SD 2.0 1–7	5.4 SD 1.9 1–7
What is the minimum number of sessions you think this should feature in?	4.3 SD 2.2 1–8	4.5* SD 2.2 1–8	2.4 SD 1.9 0–7	1.6 SD 1.7 0–7	2.2 SD 1.8 0–7

1 = not very important; 7 = very important

*Differences between teachers and course attendees

Table 5 Non-practice elements (mean, SD, range)

	Inquiry	Psychoeducation	Practising being with pleasant experiences	Practising being with unpleasant experiences	Practical exercises	Poems
How important is it to include this in a brief mindfulness course?	6.1 SD 1.3 3–7	6.5 SD 1.1 3–7	5.3 SD 1.7 2–7	5.5 SD 1.7 1–7	4.9 SD 2.0 1–7	4.0* SD 2.3 1–7
What is the minimum number of sessions you think this should feature in?	4.6* SD 2.4 0–8	4.0* SD 2.4 1–8	2.1 SD 1.8 0–7	2.0 SD 1.5 0–7	2.5* SD 2.1 0–7	2.6* SD 2.4 0–7

1 = not very important; 7 = very important

*Differences between teachers and course attendees

mindfulness, focused attention practice, and psychoeducation should feature in four or more sessions (mean scores). All other elements were recommended as featuring in under three sessions (mean scores).

In addition to the above, 123 comments from mindfulness teachers and 119 comments from course attendees were analysed and five themes were generated: Facilitators and barriers to accessibility; Weaving a course curriculum; Pathways of learning (with subthemes of Attitude to practice, Teaching and learning methods, and Challenges of practice); Human dynamics (with subthemes of Role of the teacher and Learning with and from others); and Governance of MBIs (see Table 6; see supplemental materials [two](#) for details of which question responses were analysed to generate the themes). These themes speak to some of the unseen elements of mindfulness-based interventions and help to elucidate some of the quantitative findings above.

Within the theme *Facilitators and barriers to accessibility*, participants discussed the different course delivery options and format of supporting materials as a way of increasing access to MBIs: “All formats important for access to all in different circumstances” (1042A). This reflects the quantitative findings where the different formats for course materials were rated moderately to highly

important, with mean scores of 4.9 and above. In addition, participants raised concerns about costs being prohibitive and preventing access, not only for course attendees, but for mindfulness teachers with regard to training: “I had initially intended to do more group teaching of MBCT but I found the criteria for mindfulness teachers such as finding money for regular retreats impossible” (1020T).

The theme *Weaving a course curriculum* illustrates the interconnected nature of MBI elements, and how they may be woven together to create an intervention. Participants discussed the curriculum as a whole as well as individual elements and how they combine to support learning: “inquiry/education to help me understand mindfulness concepts + daily meditation practice” (1059A). There was talk of “essential” and “extra value” elements, reflecting the quantitative findings that all elements were considered important but not all were seen as necessary to include in each course session. Individual preferences were expressed; for example, some participants felt a curriculum “flowed”, while others commented that curriculum elements “grate” (e.g. CBT, participant 1006T, Table 6). The “flow” of a curriculum is an important consideration that could affect engagement in a mindfulness course and integration of learning. Some participants expressed a preference for existing curricula,

Table 6 Themes, subthemes, and sample quotes from participant comments on the content and characteristics of MBIs

Themes	Subthemes (where applicable) and sample quotes
Facilitators and barriers to accessibility	“The courses I attended were free, which I feel was a very important factor when I decided to attend. Had I been expected to pay, then I don’t think I would have attended the courses” (1023A) “if a person is home-bound then online and telephone could definitely be good formats” (1033T)
Weaving a course curriculum	“hard to distil essential from extra value elements” (1002A) “the cognitive model and cbt exercises seem sometimes to grate a little on the philosophy of mindfulness” (1006T)
Pathways of learning	<i>Attitude to practice:</i> “just turning up to the practice, without expectations, just do it, and trust the process/training” (1055A) <i>Teaching and learning methods:</i> “The theory just needs to be offered in a very experiential way as otherwise it doesn’t really come across in my opinion” (1033T) “I would prefer to receive information on the background to mindfulness or theory as a handout, rather than this taking up part of the session. I could then consult this as and when, and if I wanted to” (1056A) <i>Challenges of practice:</i> “I would get quite uncomfortable with sitting practices that lasted that long. They could feel like a chore” [re 40-min practices] (1043A) “most people who come on the courses, in my experience, do very little formal practice during the course. Even most teachers of mindfulness find it hard to sustain a daily formal practice, so it is not really surprising” (1049T)
Human dynamics	<i>Role of the teacher:</i> “Sometimes other pupils on the courses tend to talk about themselves too much and it becomes more of a counselling session for them, although the leaders do try to gently get the class back on track” (1008A) <i>Learning with and from others:</i> “Most people describe that learning alongside others is very helpful. ... Sharing the struggles is also helpful, I would worry that alone it’s harder to deal with the ‘doing it wrong’ ideas” (1009T)
Governance of MBIs	“Must be done by professionals under supervision and following best practice guidance in order to safeguard people and not undermining the potential benefits” (1032T)

Participant ID numbers ending in “A” represent mindfulness course attendees, and those ending in “T” represent mindfulness teachers

including all “MBCT curriculum elements” (1007T). This may indicate a sense of attachment to existing curricula which could have implications for the implementation of brief mindfulness-based interventions.

The theme *Pathways of learning* represents the different ways of learning and developing mindfulness skills, as expressed by participants. This theme includes three subthemes: *Attitude to practice*, *Teaching and learning methods*, and *Challenges of practice*. Within the subtheme *Attitude to practice*, participants discussed the attitude or qualities they considered important to bring towards themselves and to their mindfulness practice, such as friendliness and compassion: “coming back to working with attention to what’s happening/awareness of what’s happening in a friendly way” (1027T). There was also talk of the “pillars” or “attitudinal foundations” of mindfulness, both implicitly (e.g. participant 1055A, Table 6) and explicitly: for example, “By implementing the seven pillars of mindfulness we can appreciate that each [mindfulness practice] is its own learning experience and all as valuable” (1018T). The seven attitudinal foundations (also referred to as pillars of mindfulness) were first described by Kabat-Zinn (2004a) and include non-judging, patience, beginner’s mind, trust, non-striving, acceptance,

and letting go. As participant 1018T described, it was felt that bringing these attitudes to each mindfulness practice could support and facilitate the learning from mindfulness practice.

Within the second subtheme, there were differing opinions regarding effective *Teaching and learning methods*. For example, while some participants favoured experiential learning, others raised concerns about this method: “Experiential learning does not benefit all participants- especially if they are attending due to mental health issues- it can compound the doubt they already have in themselves” (1018T). Mindfulness practice outside of sessions was viewed as important for reinforcing learning from the course sessions, whether through home practice while attending a course, or reunion sessions to help maintain practice beyond the course.

Within the third subtheme, participants discussed the *Challenges of practice*. Some difficulties with practice were attributed to the type of practice or the duration of a practice, and with the periods of silence that typically feature in MBSR and MBCT mindfulness practice days: “Didn’t enjoy or benefit from enforced silences” (1005A). Although practising mindfulness at home and maintaining mindfulness

practice beyond a course were seen as a helpful learning method in the *Teaching and learning methods* subtheme, this was also acknowledged as challenging, both for course attendees and for mindfulness teachers. Participants also commented on confusion regarding the meaning of mindfulness and some of the concepts of mindfulness, such as acceptance.

The theme *Human dynamics* illustrates the dynamic nature of mindfulness-based interventions and the pivotal role of both the teacher and the course attendees. In the subtheme *Role of the teacher*, participants described the importance of the teacher “holding” the group and managing the group process. Teaching in a mindful or embodied way was considered important and working with a co-teacher was thought to facilitate this process: “co-facilitating always or most of the time is invaluable—gives the time to be led in a practice & stay mindful within the group, notice the group process more easily...” (1009T). This places the mindfulness teacher in a unique position of being both within the group (a part of it) and holding the group—taking a wider view to manage the process.

Participants discussed the process and benefits of *Learning with and from others*, the second subtheme within the *Human dynamics* theme. It was felt the group environment created a sense of support for course attendees, which helped to normalise the challenges of learning to practice mindfulness as well as helping course attendees to overcome these challenges. The process of inquiry, exploring experiences of mindfulness practice through teacher-led discussion in the group, facilitated learning and validated individual experiences: “It helped me to understand that there is no such thing as a good or bad meditation, everyone has their own personal experience when meditating” (1023A). In addition, participants described how a group agreement at the start of a course could support the group process.

The final theme to be generated concerned *Governance of MBIs*. Participants commented on mechanisms for safeguarding mindfulness course attendees, such as adequate training and supervision for the mindfulness teacher, and practice guidelines. The value of gaining teaching experience was also recognised. Screening and orientation were considered important, whether a course was delivered face-to-face or online: “If a course is online, it should have regular, personalised tutor support ... It still needs a risk assessment at the start” (1020T). This theme pointed to the risks and adverse effects associated with MBIs and the need to support both mindfulness teachers and course attendees in order to manage these risks. It also connects to the theme *Proceed with caution* from the section on “Attitudes Towards Brief MBIs” presented earlier.

Discussion

This study explored mindfulness teacher and mindfulness course attendee perspectives of MBI elements, adaptations, the content of brief MBIs, and attitudes to brief MBIs. The findings point to a number of issues that are important for the development and implementation of brief MBIs as well as revealing valuable insights into perceptions of existing curricula.

Based on the quantitative findings, a brief MBI could take the following preferred form: five face-to-face weekly sessions of approximately 1 h 20 min duration, with 5–17 participants; 20 min of daily home practice; and monthly reunion sessions. Focused attention practice, informal mindfulness, inquiry, and psychoeducation would feature in most sessions. This is under half the duration of 8-week MBIs with approximately one third of the home practice (Kabat-Zinn, 2004a; Segal et al., 2013). The home practice duration is approximately two thirds of the actual amount practised by MBI participants (estimated at 30 min per day, 6 days per week, by Parsons et al., 2017).

The element rated the most important to include in a brief MBI was informal mindfulness; however, compared to teachers, course attendees thought this should feature in fewer sessions. Research suggests informal mindfulness is associated with positive emotions and well-being (Birtwell et al., 2019; Fredrickson et al., 2019); however, participants have reported struggling to remember to practise informally (Hindman et al., 2015), which could have been an influencing factor here. The element rated the least important to include in a brief MBI was poems, and this was the only element for which the importance score differed between mindfulness teachers and course attendees, with teachers providing a higher rating. Poetry is included in both MBSR and MBCT, where it is considered “accessible” (Kempton, 2020); however, it was not favoured by course attendees in this study.

There were also differing opinions regarding helpful and unhelpful elements of MBIs; for example, the body scan was identified as both helpful and unhelpful. While the body scan is an integral part of the MBSR and MBCT programmes, such intense focus on the body can be dysregulating for people with experience of trauma, and modifications have been suggested such as instilling a sense of choice throughout the practice (Treleaven, 2018). The meditating with difficulty practice was also named as helpful and unhelpful, by one participant each. This is a key aspect of the MBCT programme (Segal et al., 2013) and as 15 teachers and eight course attendees had experience of MBSR and/or MBCT, it is surprising that more participants did not suggest this as a helpful practice. However, aversion and responding to the unpleasant were noted as helpful theory elements by

four participants, suggesting the theory may have had a bigger impact on some participants than the practice. Interestingly, from the pre-set list of elements, being with pleasant experiences was rated almost as important to include in a brief MBI as being with unpleasant experiences. There are differing opinions regarding the place of positive experiences within MBIs. For example, some advocate equanimity, where a balanced and impartial approach to both positive and negative experiences is taken (e.g. Kabat-Zinn, 2004b), whereas others, particularly in clinical settings, highlight the importance of increasing awareness of pleasant experiences, e.g. for people with recurrent depression (Segal et al., 2013).

As indicated within the themes “Proceed with caution” and “Governance of MBIs”, there were concerns about the quality of teaching of brief MBIs, including the skill and training of the mindfulness teacher, and mechanisms for safeguarding course attendees. Seventy % of course attendees in this study stated they attended an MBI for mental health reasons; however, clinical training is not a pre-requisite for applicants to mindfulness teacher training courses in countries such as the UK and USA. In addition, while teaching guidelines exist for standardised 8-week courses (e.g. British Association for Mindfulness-Based Approaches [BAMBA], 2020), specific guidance for teachers of brief MBIs is lacking and scant attention has been paid to teachers of brief MBIs in the literature. Poirier (2016) has cautioned that some MBI participants “may experience insights or rushes of psychological turmoil that an inexperienced instructor may be ill-equipped to address or perhaps even to recognise” (p.16). Yet standard teacher training courses do not include training about meditation safety and adverse effects (e.g. dissociation). As awareness of adverse effects and the relationship between mindfulness and trauma grows, some mindfulness teacher training organisations have begun to offer training about how to manage adverse effects (e.g. Britton et al., 2017). Such training is welcomed and important for teachers of brief MBIs as well as 8-week interventions.

The subtleties of mindfulness teaching were also evoked within the theme “Challenges of practice”, where there was reference to “enforced silences”. An important aspect of mindfulness teaching is to “invite” participants to engage in various aspects of a mindfulness course and encourage them “only to follow the guidance and participate as much as feels appropriate and right to them” (Crane et al., 2018, p. 21). The use of the word “enforced” is at odds with this invitational style and points to the challenges of conveying and understanding such invitations. Indeed, “subtle but unmeasured sociocultural differences” such as hearing invitations as “an instruction they had to obey” were highlighted as having a possible impact on the effectiveness of MBCT at one study site in a large randomised dismantling trial (Williams et al., 2014). Measured differences in participant demographics

did not account for the effect and no differences were identified between the competence of mindfulness teachers at each site. Moreover, feeling a sense of choice is a key aspect of trauma-informed approaches to mindfulness (Treleaven, 2018) and it seems that this particular participant felt a lack of choice.

The themes from the comments about adapting MBI curricula revealed tensions between making adaptations in response to group needs and adhering to a standard curriculum. The Mindfulness-based Interventions Teaching Assessment Criteria (MBI:TAC; Crane et al., 2013), developed primarily to assess the teaching of MBSR and MBCT, highlights the importance of curriculum adherence. However, the MBI:TAC manual also states that assessors should consider “Responsiveness and flexibility in adhering to the session curriculum” (Crane et al., 2018, p.15) and that mindfulness teachers should hold the session curriculum lightly. Indeed, Marques et al. (2019) discuss the importance of making minor adaptations to evidence-based protocols. Their findings suggest “fidelity-consistent modifications” that do not alter the core components of an intervention may contribute to improvements in clinical outcomes (Marques et al., 2019). Almost two thirds of teachers in this study made adaptations to the programmes they were teaching; yet, in order to make fidelity-consistent modifications that do not diminish the effects of the intervention, they would need to have knowledge of the intervention mechanisms (Onken et al., 2014). In order to do this effectively, a certain degree of scientific literacy is required, and this has been suggested as a core competency for MBI teachers (Britton, 2016).

Qualitative findings also reflected a sense of attachment to existing 8-week MBIs, particularly among some of the mindfulness teachers. While this may appear contrary for an approach that includes the concept of non-attachment, it is understandable if individuals have benefitted from their practice or seen others benefit from a particular approach. Indeed, Rosenbaum (2016) acknowledges, “We can even become attached to the practice of mindfulness itself: “I” am the person who practices mindfulness” (p. 30). This indicates there may be resistance to new brief approaches and highlights the need for a strong evidence base in order to support future implementation.

Throughout the study, accessibility was highlighted as an issue and brief MBIs were viewed as being able to improve access to mindfulness training. In contrast, there were concerns that brief MBIs could be seen as a “quick fix” and lack sufficient depth of training. In addition, the cost of mindfulness teacher training and retreats was seen as a barrier to some participants training to be a mindfulness teacher. Previous research has reported that 67% of MBCT teachers received no financial support for their training and 66% received no financial support for continuing education or supervision (Crane & Kuyken, 2013). This has implications

for the accessibility of mindfulness-based interventions to those from different sociodemographic backgrounds. If MBIs are to be made available to participants from all communities, there must be teachers in place who represent those communities. McCown and Micozzi (2012) described practitioners of American Buddhism that have influenced the development of mindfulness-based interventions in healthcare as “highly educated, economically advantaged, politically and socially liberal, and overwhelmingly of European descent” (p. 35). Further work is needed to prevent contemporary mindfulness-based interventions from being restricted to a similar elite.

Limitations and Future Research Directions

There are several limitations to this study. Almost two thirds of participants were female, most (90.5%) were highly educated, and the main reason for attending an MBI as stated by course attendees was mental health. None of the participants stated physical health as a reason. These factors may limit the transferability of the findings to participants with other characteristics or contexts. In addition, in light of the reasons for attending, it would have been useful to ascertain the clinical training of the mindfulness teachers, yet questions on clinical training were not included in the survey.

A further limitation could be the survey design. Somatic and movement-based practices were not included in the list of elements so it is not possible to compare ratings of these in comparison to other components. There were a greater number of helpful MBI elements named than unhelpful elements in response to the open questions. Asking for a specific number of each may have resulted in a more balanced list. Section three of the survey refers to a brief MBI for the general population; however, other sections do not refer to a specific population (e.g. clinical or non-clinical), which, if specified, may have affected the responses. Furthermore, all of the participants in this study were either mindfulness teachers or people who had completed a mindfulness course, which suggests a positive experience of, and some investment in, mindfulness. People who started but did not complete a mindfulness course—those who “dropped out”, may have different experiences and opinions and should be consulted in future research. Such voices are seldom heard, yet their inclusion could enhance the development of future interventions and support MBI engagement. The majority of participants were also quite experienced mindfulness practitioners and newer course attendees may hold different views.

The current study adds to the body of research on brief MBIs by exploring mindfulness teacher and course attendee perspectives, including areas of disagreement and barriers to implementation. Findings indicate brief MBIs were viewed in three main ways: as inferior alternatives to existing

8-week MBIs, as effective interventions in their own right, or as a useful introduction enabling progression to existing 8-week MBIs. While participants were not advised to provide feedback in relation to 8-week MBIs, the majority of participants (32) had experience of such interventions and it is likely these MBIs were held as a standard of comparison.

Transparency regarding the strengths and limitations of brief MBIs is required, along with clarity and evidence of MBI mechanisms and scientific literacy in MBI teachers in order to support fidelity-consistent modifications of MBIs. There may be resistance (at least initially) to new, brief, mindfulness-based interventions if it cannot be demonstrated that these new MBIs are evidence-based, that there is adequate training and supervision of mindfulness teachers, and that safeguards are in place for participants.

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Author Contribution KB designed and executed the study, analysed the data, and wrote the paper. RM assisted with data analysis and collaborated in the writing and editing of the final manuscript. CJA collaborated with the study design and in the writing and editing of the final manuscript. All authors approved the final version of the manuscript for submission.

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Declarations

Ethics Approval and Consent to Participate This study was given approval by the University of Manchester Research Ethics Committee and has therefore been performed in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki and its later amendments. All participants gave their informed consent via an online consent form prior to taking part in the study.

Conflict of Interest The authors declare no competing interests.

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