REVIEW

The Role of Mindfulness and Loving-Kindness Meditation in Cultivating Self-Compassion and Other-Focused Concern in Health Care Professionals

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Abstract Therapists and other health professionals might benefit from interventions that increase their self-compassion and other-focused concern since these may strengthen their relationships with clients, reduce the chances of empathetic distress fatigue and burnout and increase their well-being. This article aimed to review the effectiveness of mindfulness-based interventions (MBIs) and loving-kindness mediation (LKM) in cultivating clinicians' self-compassion and other-focused concern. Despite methodological limitations, the studies reviewed offer some support to the hypothesis that MBIs can increase self-compassion in health professionals, but provide a more mixed picture with regard to MBIs' affect on other-focused concern. The latter finding may in part be due to ceiling effects; therefore future research, employing more sensitive measures, would be beneficial. Turning to LKM, there is encouraging preliminary evidence from non-clinician samples that LKM, or courses including LKM and related practices, can increase self-compassion and other-focused concern. As well as extending the LKM evidence base to health professionals and using more robust, large-scale designs, future research could usefully seek to identify the characteristics of people who find LKM challenging and the supports necessary to teach them LKM safely.

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Introduction

Arguably, the capacity to be compassionate towards others is a key in psychotherapeutic and other clinical work (Gilbert 2005a). At the same time, continuous work with people in mental distress commonly leads to symptoms of psychological distress in clinicians, which may lead to burnout (Figley 2002; Hannigan et al. 2004). Over the past decades, Western psychology has increasingly become interested in training programmes that are thought to cultivate compassion for self and others, such as programmes based on mindfulness meditation (Gilbert 2005b; Kabat-Zinn 1990). Although the majority of research on mindfulness-based interventions (MBIs) has been carried out with people with medical or mental health problems (e.g. Baer 2003), there has been growing interest in the use of MBIs to reduce stress and increase self-compassion and self-care in healthcare professionals (e.g. Shapiro and Carlson 2009). More recently, research has started to explore loving-kindness meditation (LKM), a traditionally Buddhist meditation which is commonly practised in the context of mindfulness (Hofman et al. 2011; Tirch 2010), and can cultivate an attitude of unconditional love, kindness and compassion for oneself and others (Gilbert 2005b; Salzberg 1995).

Within this context, it seems timely to review the literature on the role of MBIs and loving-kindness-based interventions in fostering self-compassion and other-focused concern in healthcare professionals. Before reviewing the empirical literature, we will consider definitions of relevant constructs.

Definitions of Constructs

According to Gilbert (2005b) compassion 'involves being open to suffering of self and others, in a non-defensive and

non-judgmental way' (p.1) and includes a cognitive under- standing of suffering as well as the motivation and behav- iour directed to relieve suffering. Relatedly, Neff (2003) argues that self-compassion has three components: being kind rather than critical towards oneself, perceiving one's experiences not so much as isolated but rather as part of common humanity and being aware and non-judgmental of one's experiences rather than over-identifying with them.

Mindfulness has been described as a non-judgmental moment-to-moment awareness (Kabat-Zinn 1994), which Bishop et al. (2004) argue comprises two-components: a psychological process that regulates attention to focus on current experience, facilitating disengagement from worry or rumination, and an attitude of openness, curiosity and acceptance towards any arising experience.

Based on these definitions, mindfulness and compassion (for self and others) arguably differ in at least three impor- tant respects: firstly, mindfulness provides a way of relating to any experience, while compassion is specific to the con- text of suffering; secondly, compassion is directed towards oneself or other beings, while mindfulness is orientated towards experience more generally and finally, compassion could be seen as being more active than mindfulness, since it moves beyond acceptance of present-moment experience and includes the intention to bring a sense of concern and care to suffering.

That said, mindfulness is seen as an important foundation and component of compassion because self and other- focused compassion are created in an atmosphere of open- ness, awareness and acceptance of experience (cf. Gilbert 2010; Tirch 2010). Moreover, some have suggested com- passion as a quality of mindfulness (Shapiro and Schwartz 2000) and others as an outcome of mindfulness practice (Bishop et al. 2004; Gilbert and Tirch 2009; Walsh 2008).

The close relationship between compassion and mindful- ness is evidenced by the findings that post-MBI changes in mindfulness are correlated with changes in self-compassion (Birnie et al. 2010), and that mindfulness meditation is associated with changes in structure and activity of brain areas thought to be involved with caregiving behaviour, compassion and the experience of love (Cahn and Polich 2006; Lazar et al. 2005; Tirch 2010).

Turning to the concept of loving-kindness, this has been described as an unconditional love without desire for people or things to be a certain way; an ability to accept all parts of ourselves, others and life, including pleasurable and painful parts (Salzberg 1995). A key distinction between loving- kindness and compassion is that the latter is specifically directed towards suffering.

Finally, while measurement of self-compassion has been well developed by Neff (e.g. Neff 2003), unfortunately there is a lack of consensus regarding the measurement of com- passion for others, with the terms compassion, empathy and

sympathy sometimes being used interchangeably (Neff and Pommier 2012). Given that the evidence base is currently small, when we come to review it, we will take an inclusive approach and follow Neff and Pommier (2012) by using the umbrella concept of 'other-focused concern'. This encapsu- lates compassion for others and closely related concepts, such as 'empathetic concern'; the latter referring to feeling concern for the suffering of another.

The Importance of Self-Compassion and Other-Focused Concern

Before turning to the main focus of this review, it is helpful to briefly consider why self-compassion and other-focused concern seem important qualities for therapists and other clinicians to cultivate. Arguably, the relationship between client/patient and clinician is of relevance to any substantive client–clinician interaction. This relationship has been most studied with regard to psychotherapy, where compassion for others or components of this, in particular empathy and warmth, have been viewed as key factors in establishing good therapeutic relationships with clients (Ackerman and Hilsenroth 2003; Bennett-Levy 2005; Elliott et al. 2011). Empathy has been described as the 'ability of the therapist to enter and understand, both affectively and cognitively, the client's world' (Hardy et al. 2007, p.29). Findings from a meta-analysis have shown that empathy accounts for about 9 % of outcome variance in psychotherapies (Elliott et al. 2011). It has further been estimated that the therapeutic alliance predicts about 30 % of psychotherapy outcome variance, compared with 15 % predicted by specific therapy techniques (Lambert and Barley 2001).

Klimecki and Singer (2011) argue that cultivating com- passion for others may also offer healthcare professionals protection against the risks of burnout. In particular, they argue that if a clinician responds to their client/patient's suffering with compassion, they will empathise with the suffering, but not identify with it, and thus will be able to contain their own negative feelings. In contrast, if a clinician responds with 'empathetic/personal distress', their identifi- cation with the suffering of their client could lead them to feel distressed, which over the longer term could lead to burnout. This distinction has lead Klimecki and Singer (2011) to propose that 'compassion fatigue' could more helpfully be thought of as 'empathetic distress fatigue'. In summary, cultivating other-focused concern, in the form of empathy and compassion for others, has the potential to help healthcare professionals build stronger therapeutic relation- ships and may offer protection against burnout.

Turning to the cultivation of self-compassion, this could be helpful to clinicians both because it may play an impor- tant mediating role in maintaining their own mental health (cf. Kuyken et al. 2010; Ringenbach 2009) and because of

the emerging evidence that self-compassion is usually associated with compassion for others (Neff and Pommier 2012).

Literature Review: the Effect of MBIs

MBIs, such as mindfulness-based stress reduction (MBSR; Kabat-Zinn 1990) and mindfulness-based cognitive therapy (MBCT; Segal et al. 2002) are potential candidates as interventions to increase self-compassion and other-focused concern in healthcare professionals (cf. Shapiro and Carlson 2009). The literature concerning the effectiveness of MBIs in this regard will now be reviewed.

Method

The following databases were searched up until week 3 in October 2011: PsycINFO, Assia, Web of Science, the British Nursing Index, Medline, and the Cochrane library. The search combined terms for 'mindfulness' with a number of terms for therapists and other healthcare professionals, such as medical personnel. Abstracts of articles were screened and references of relevant articles and books were hand searched for further references. Only publications in English were selected. Quantitative studies were included if they evaluated an MBI with healthcare professionals and measured self-compassion or other-focused concern, resulting in eight studies. In addition, four qualitative studies on MBIs with therapists were identified. The studies are summarised in Tables 1 and 2.

Findings

Studies Measuring Self-Compassion as the Outcome

All studies used the Self-Compassion Scale (SCS) by Neff (2003) as an outcome measure. Two uncontrolled studies with clinical psychology trainees showed post-MBI increases in self-compassion (Moore 2008; Rimes and Wingrove 2011). Qualitative analysis of feedback questionnaires supported this finding and further suggested that participants felt more able to empathise with clients. Given the small sample sizes of these studies ($n=17$ and $n=20$, respectively), the generalizability of these findings is limited. Furthermore, results of the studies are difficult to compare due to the difference in the MBI used. Whereas Moore examined the impact of 14 ten-minute-long mindfulness sessions, Rimes and Wingrove evaluated an 8-week-long MBCT course. In addition, conclusions are limited due to the lack of control groups.

Using a cohort–controlled design and larger sample size ($n=64$), Shapiro et al. (2007) examined the effects of an MBSR course on counselling students. The control group consisted of students taking part in psychology courses that had the same facilitator contact time as the MBSR group. Compared with the control group, the MBSR group showed an increase in self-compassion, which was related to changes in mindfulness. Although the study provided stronger evidence than uncontrolled studies, students volunteered to take part in the MBSR course, which may have biassed the results.

This problem of self-selection was addressed by an RCT that allocated 40 healthcare professionals into an MBSR group or wait list control (WLC) group (Shapiro et al. 2005). The MBSR group showed a significantly larger increase in self-compassion compared with the WLC group. Although RCTs provide the most robust evidence, neither this study nor the one by Shapiro et al. (2007) employed an active intervention as control group, leaving it uncertain whether changes in self-compassion were specifically due to the MBSR intervention or more generic factors. Moreover, none of the studies reviewed used follow-up assessments; thus it remains unclear how durable the changes in self-compassion are.

Studies Measuring Other-Focused Concern as the Outcome

Four studies used an uncontrolled pre–post design, measuring the impact of an MBSR or MBCT course on empathy. Three studies using the Interpersonal Reactivity Index (IRI; Davis 1983) as an outcome measures did not find any changes in empathy (Beddoe and Murphy 2004; Galantino et al. 2005; Rimes and Wingrove 2011), whereas the study using the Jefferson Scale of Physician Empathy (Hojat et al. 2001) found a medium-size increase ($d=0.45$) in empathy (Krasner et al. 2009), leading to questions about the sensitivity of the IRI to change. For example, Beddoe and Murphy attributed the absence of change to a ceiling effect and reported that baseline levels of empathy in participating nurses were 40–50 % higher than in non-nursing populations.

The study by Krasner et al. found that changes in mindfulness were positively correlated with increases in the empathy subscale of 'perspective taking' ($r=.31$). This study was the only one that conducted follow-up assessments, at 12 and 15 months, which showed that the increase in empathy was maintained over time. However, the absence of control groups in all four studies obviously limits the conclusiveness of findings.

Shapiro et al. (1998) used a matched-randomised control design in which 78 medical and premedical students were assigned to an MBSR or WLC group. Results demonstrated that empathy, as measured by the Empathy Construct Rating Scale (La Monica 1981), increased in the mindfulness group compared with the control group. However, the MBSR

Table 1 Quantitative studies reviewed on MBIs with health professionals

Authors	N	Sample	Research design	Follow-up	Treatment group after drop out	Control group after drop out	Outcome measures	Home practice measured	Results
Rimes and Wingrove 2011	20	Clinical psychology trainees	Pre–post design	No	$n=20$; 8-week MBCT course for stress reduction		PSS, HADS, IRI, FFMQ, SCS, RRQ, MMQ	Yes	Increase in: mindfulness and self-compassion; decrease in: rumination; larger increase in self-compassion in first years; reduction in stress for first years only; reductions in stress correlated with reduction in rumination and anxiety and increase in empathic concern; amount of practice related to most changes; no changes in empathy,
Krasner et al. 2009	70	Primary care physicians	Pre–post design	12.15 months	$n=68$; 8-week course of 2.5 h in mindfulness, self-awareness exercises, interview skills, didactic material		FFMQ, MBI, JSPE, PBS, MMBF, POMS	No	Increase in: mindfulness and empathy; decrease in: burnout symptoms and mood disturbance; increase in mindfulness correlated with increase in empathy and decrease in tension, depression and anger
Moore 2008	17	First year clinical psychology trainees	Pre–post design	No	$n=10$; 4 sessions of 10-min mindfulness meditation	NA	PSS, KIMS, SCS, Feedback Questionnaire	No	Increase in: KIMS subscale 'Observe' and self-kindness; no impact on perceived stress
Shapiro et al. 2007	64	Master level counselling psychology students	Prospective, non-randomised cohort–controlled study	No	$n=22$; 10-week-long stress intervention, including 8 weeks of MBSR	$n=32$; 2 control courses of psychology topics	MAAS, PANAS, PSS, STAI, RRQ, SCS	Yes	Relative decrease in: perceived stress, negative affect, rumination, state and trait anxiety; relative increase in: positive affect, mindfulness and self-compassion; changes in mindfulness predicted changes in rumination, anxiety, stress and self-compassion
Shapiro et al. 2005	40	Physicians, nurses, social workers, physical therapists, psychologists	Randomised controlled study	No	$n=18/10$, 8-weeks MBSR (2-h sessions)	$n=20$ Wait list control	BSI, MBI, PSS, SLS, SCS	No	MBSR group showed a decrease in perceived stress and increase in life satisfaction and self-compassion, relative to control
Galantino et al. 2005	84	Hospital employees (including administrative and care staff)	Pre–post design	No	$n=69$; 8-week-long MBSR (2-h sessions)	NA	POMS_SF, MBI, IRI, salivary cortisol	No	Decrease in: emotional exhaustion; improved mood; no changes in empathy or cortisol levels
Beddoe and Murphy 2004	23	Undergraduate nursing students	Pre–post design	No	$n=16$; 8-week-long MBSR course		DSP, IRI,	Yes	Decrease in: anxiety; trends towards decrease in stress and over-identification with client's distress
Shapiro et al. 1998	78	Medical and premedical students	Matched-randomised controlled design	No	$n=36$, 8-week MBSR plus didactic material and mindful listening exercises	$n=37$	ECRS, SCL-90-R, STAI, INSPIRIT, Daily journal, evaluation packet	Yes	Decrease in: state and trait anxiety, psychological distress and depression; increase in empathy and spirituality, compared to control

NA not applicable; *MBCT* Mindfulness-Based Cognitive Therapy; *MBSR* Mindfulness-Based Stress Reduction; *BSI* Brief Symptom Inventory (Derogatis 1993); *DSP* Derogatis stress profile (Derogatis 1987); *ECRS* Empathy Construct Rating Scale (La Monica 1981); *PSS* Perceived Stress Scale (Cohen et al. 1983); *FFMQ* Five Facet Mindfulness Questionnaire (Baer et al. 2006); *HADS* Hospital Anxiety and Depression Scale (Zigmond and Snaith 1983); *IRI* Interpersonal Reactivity Index (Davis 1980); *INSPIRIT* Index of Core Spiritual Experiences (Kass et al. 1991); *JSPE* Jefferson Scale of Physician Empathy (Hojat et al. 2001); *KIMS* Kentucky Inventory of Mindfulness Skills (Baer et al. 2004); *MAAS* Mindful Attention Awareness Scale (Brown and Ryan 2003); *MBI* Maslach Burnout Inventory (Maslach and Jackson 1986); *MMBF* Mini-markers of the Big Five Personality Factor Structure (Saucier 1994); *MMQ* Mechanisms of Mindfulness Questionnaire (in development, Rimes and Wingrove 2011); *PANAS* Positive and Negative Affectivity Schedule (Watson et al. 1988); *PBS* Physician Belief Scale (Ashworth et al. 1984); *POMS-SF* Profile of Mood States-Short Form (Derogatis 1977); *SLS* Satisfaction with Life Scale (Diener et al. 1985); *STAI* State Trait Anxiety Inventory (Spielberger 1983).

Table 2 Qualitative studies reviewed on MBIs

Authors	N	Sample	Intervention	Qualitative data	Method of analysis	Results—participants report:
McCollum and Gehart 2010	13	Trainee family therapists	Integrated teaching of mindfulness into clinical seminars, including mindfulness readings and meditations, 2.5-h-long weekly sessions over semester (15–30-min mindfulness practice per session).	Journal assignments over semester on impact of mindfulness course on professional work and personal life—only effects on clinical practice were examined in this study.	Thematic analysis from constructionist framework	Increase in: presence in sessions, awareness of self and client's experience, ability to use awareness in therapeutic relationship, remaining centred in distressing sessions, calmness, slowing down, awareness and distance from inner dialogue, boundaries between sessions, balance between doing and being mode, compassion and acceptance of self and others.
Chrisman et al. 2009	31	First and second year master level counselling students	15-week-long course over one semester, twice weekly, 2-h-long sessions (each including 75 min of mindfulness practice based on MBSR plus 15-min academic content plus qigong)	Journal assignment about qigong practice	Inductive content analysis	Increase in: awareness and acceptance of own experiences and body, self-compassion and confidence in relation to self and work with clients, awareness of body's needs, self-care in lifestyle, open attitude, focus/attention, presence with self/others, distance from negative thoughts, awareness of self-critic, being able to let go of control/being perfect.
Schure et al. 2008	33	First and second year master level counselling students	15-week-long course over one semester, twice weekly, 2-h-long sessions (each including 75 min of mindfulness practice based on MBSR plus 15-min academic content plus qigong)	Journal assignment about course experience	Inductive content analysis	Impact on relationships: increase in: awareness of relationship patterns (including countertransference), flexibility, awareness of impact of others on self.
Christopher et al. 2006	11	First and second year master level counselling students	15-week-long course over one semester, twice weekly, 2-h-long sessions (each including 75 min of mindfulness practice based on MBSR plus 15-min academic content plus qigong)	Focus group	Inductive content analysis	Impact on client work: more comfort with silences, more focus on relationship/process, improved coping with own anxiety in sessions, more presence in room, more able to help clients identify inner critics, more able to contain emotions.

Results of studies 2–4 are summarised as they reflect findings of the same intervention with overlapping samples (Christopher and Maris 2010)

intervention also included empathic listening exercises, so it remains unclear which component(s) promoted change. Furthermore, results are limited due to the absence of an active control group and follow-up.

Qualitative Studies

Four qualitative studies explored the experience of MBI participants. Three studies were conducted by the same research group (Christopher and Maris 2010), examining the effects of a 15-week-long course, including mindfulness practice, Qigong exercises, and didactic material, on counselling students. The authors used content analysis on data from a focus group and journal assignments. Another study used thematic analysis on diaries of family therapy trainees about their experience of an MBI on their clinical practice (McCollum and Gehart 2010). The studies identified a perceived increase in participants' self-awareness, self-compassion, and compassion towards others, including clients. Participants in all studies reported benefits for their clinical practice, such as an increased presence in sessions, tolerance to sit with silences, and an increased ability to focus on interpersonal processes and the client's experience.

Drawing on Yardley's (2000) validity criteria for qualitative studies, all studies showed sensitivity to the context, in particular to the position of trainees. For example, all authors reflected on the ethical challenge that mindfulness was being offered to trainees in the context of an evaluated training programme which researchers were actively involved with. All studies showed 'commitment', in that they demonstrated an in-depth engagement with the material and sufficient transparency with regards to the process of analysis, and provided a number of quotes to ground identified themes in the data. However, the generalizability of results from qualitative studies is limited. Moreover, the interventions either consisted of multiple components (i.e. meditation and qigong) or were embedded in clinical seminars; thus, findings might not be transferable to other MBIs.

Summary

Most of the quantitative studies reviewed used an uncontrolled design, self-report measures, self-selected samples, and had no follow-up assessments. Furthermore, some studies had small sample sizes. These methodological limitations constrain the validity and generalizability of the results. Despite these limitations, the studies do provide encouraging evidence that MBIs may increase self-compassion in healthcare professionals. Furthermore, the mixed evidence with regard to the effect of MBIs on other-focused concern may be partly due to ceiling effects in this population, which highlights the importance of ensuring that measures are sufficiently sensitive to change

(Bishop et al. 2004; Hick and Bien 2008; Tirch 2010). The findings from the qualitative studies are consistent with the possibility that MBIs improve self-compassion and other-focused concern, though are limited in their generalizability. The evidence base would benefit from being extended by research addressing the methodological limitations discussed.

Literature Review: the Effect of Loving-Kindness-Based Interventions

To briefly recap, loving-kindness can be described as an unconditional love without desire for people or things to be a certain way, and an ability to accept all parts of ourselves, others, and life (Salzberg 1995). From a Buddhist psychology perspective, loving-kindness can be cultivated through loving-kindness meditation (LKM), and if loving-kindness is directed towards our own suffering then self-compassion can arise, while if it is directed towards the suffering of others then compassion for them can develop. Drawing on this tradition, there is growing interest in the scientific literature concerning the effects of loving-kindness meditation (e.g. Shapiro and Carlson 2009). The literature concerning the effectiveness of LKM in relation to cultivating self-compassion and other-focused concern will now be reviewed.

Method

A literature search using the search term 'loving-kindness' in different spellings was carried out to obtain studies that evaluated LKM or LKM-based courses. The databases PsycINFO, Assia, Web of Science, the British Nursing Index, Medline and the Cochrane library were searched up until week 3 in October 2011. No studies were found that focused solely on a healthcare professional sample. Therefore, we decided to include research involving other samples, on the grounds that it might be possible to tentatively generalise findings from these to our population of interest. Studies were included if they evaluated the impact of LKM on self-compassion or other-focused concern. In addition, a peer reviewer of this article identified a relevant in press study.

Findings

In an RCT with psychology students, Weibel (2007) found that four sessions of LKM resulted in an increase in self-compassion and compassion for others, relative to control. The study benefited from a randomised controlled design and 2-months follow-up, which showed that changes in self-compassion were maintained. The design of the study

suffered from a lack of an active control group, and perhaps from the use of a relatively new measure of compassion for others (Sprecher and Fehr 2005).

In an experimental laboratory study, Hutcherson et al. (2008) showed that a brief loving-kindness exercise increased positive feelings and feelings of connectedness towards strangers. Although the findings further support the notion of LKM as a practice for increasing social connectedness and compassion for others (Salzberg 1995), their external validity is perhaps limited due to the artificial laboratory setting.

Results from a neurophysiological study suggest that LKM is related to an increased empathic response to social stimuli and an increased ability for perspective taking (Lutz et al. 2008). However, the study compared people experienced in LKM with novice meditators; therefore, differences between the two groups may have been due to other factors.

The most robust examination of LKM comes from an RCT in which Fredrickson et al. (2008) examined their broaden-and-build-theory. The authors proposed that LKM increases positive emotions, which in turn increase personal resources and wellbeing. Results supported the model, in that individuals participating in a 7-week LKM course experienced an increase in positive emotions over time, which predicted an increase in resources, including mindfulness, self-acceptance, received social support, and positive relations with others. These resources, in turn, predicted life satisfaction and reductions in depressive symptoms. A follow-up study showed that resources gained were maintained 15 months after the intervention (Cohn and Fredrickson 2010).

These studies did not identify any changes in compassion for others. However, compassion was measured by one item only, which the authors acknowledged might have lacked validity. Another limitation of the studies is the absence of an active control group. It is further noteworthy that results showed an initial drop in positive emotions, which did not improve until week 3. These findings suggest that practising LKM might not be of immediate benefit and may perhaps be challenging at first, but nevertheless appears worthwhile in the medium and longer term.

Recently, Kristin Neff and Christopher Germer have developed a Mindful Self-Compassion programme that follows a similar structure to MBSR and includes both LKM and compassion-focused variants of this. Their evaluation of this course is ongoing, but pilot RCT findings are encouraging, showing post-course increases in self-compassion and compassion for others, along with other benefits (Neff 2012).

Some potential challenges for participants engaging in LKM have been identified in other research. For example, an experimental study found that while some people showed a brain response associated with positive emotions to a brief LKM, others did not, in particular those with a tendency to ruminate (Barnhofer et al. 2010). Another experimental study found that, contrary to their hypothesis, LKM resulted in an increase in a supposedly maladaptive belief that happiness is related to the achievement of specific targets in life, which has been shown to be related to depression (Crane et al. 2010). Although these studies have limitations, such as the use of only one 15-min long LKM exercises, the findings resonate with clinical impressions that some individuals initially struggle to engage with LKM (Barnhofer et al. 2010) and interventions used in compassion-focused therapy (Gilbert 2009).

Recent studies have shown that highly self-critical individuals exhibit a physiological threat response when trying to be more self-compassionate (Longe et al. 2010; Rockliff et al. 2008). Gilbert (2009) has hypothesised that compassion-focused interventions may trigger feelings of grief about the lack of feeling loved and cared for in childhood, and that individuals may hold negative beliefs about compassion (e.g. 'I don't deserve it').

A qualitative study examining the experience of trainee therapists taking part in a six-session long LKM course has further strengthened the observation that engaging in LKM can be experienced as emotionally challenging, for at least some participants (Boellinghaus, under review). At the same time, the trainee therapists reported becoming more compassionate towards themselves and others, and experiencing benefits for their clinical work.

In summary, there is encouraging initial evidence that LKM, or courses including LKM and related practices, can have positive benefits, including increasing self-compassion and other-focused concern. Some participants seem to find engaging in LKM more of a challenge than others, though, at least for some, these initial challenges may be offset by subsequent gains. This tentatively suggests that pre-course suitability assessments and providing a safe learning environment may be particularly important in relation to LKM courses.

Clearly, these findings can only be tentatively generalised to healthcare professionals, since none of the samples were specific to this population. Nevertheless, so long as it is assumed that clinicians are not at ceiling in terms of self-compassion and other-focused concern, it seems plausible to hypothesise that the findings would generalise, and further research employing a clinician sample would appear warranted.

Conclusions

Interventions that support clinicians to cultivate self-compassion and other-focused concern have the potential to help strengthen their relationships with clients, reduce their chances of empathetic distress fatigue and burnout,

and maintain their wellbeing. Despite methodological limitations, the studies reviewed here offer some support to the hypothesis that MBIs can increase self-compassion in healthcare professionals. However, the evidence with regard to the effect of MBIs on other-focused concern is more mixed, perhaps in part due to ceiling effects in this population. Future research, employing more sensitive measures, would be beneficial.

Turning to LKM, there is encouraging preliminary evidence that LKM, or courses including LKM and related practices, can increase self-compassion and other-focused concern. LKM studies including a clinician sample have not yet been published. However, it would be perhaps surprising if similar effects were not seen in such samples. As well as extending the evidence base to healthcare professionals, future research could usefully seek to identify the characteristics of people who find LKM challenging and the supports necessary to safely teach them LKM. In addition, more robust, larger-scale RCTs would be helpful in adding to the evidence base in relation to both MBIs and LKM for clinicians, and it would be interesting to see whether self-compassion and other-focused concern act as mediators between these interventions and client and clinician outcomes.

If, in due course, the developing evidence base provides more robust support for the effectiveness of MBIs and LKM in generating self-compassion and other-focused concern, it would be helpful to accelerate and expand the introduction of these interventions into healthcare professionals' training courses and work-based settings.

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