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Mindfulness in psychotherapy: an introduction

Chris Mace

Abstract 'Mindfulness' has become a popular topic among psychological therapists. This introductory article explains what mindfulness is and how it can be developed, before exploring how it has been incorporated within psychoanalytic and cognitive-behavioural psychotherapies. These reflect general as well as specific presumed therapeutic actions. At present, variations in the way mindfulness is understood, taught and applied mean that it is too early to fully assess its potential. They demonstrate how the use of attention and awareness in therapy cuts across traditional divisions and where mindfulness in therapy is most in need of further investigation.

'Mindfulness' is a common translation of a term from Buddhist psychology that means 'awareness' or 'bare attention'. It is frequently used to refer to a way of paying attention that is sensitive, accepting and independent of any thoughts that may be present. The definitions quoted in Box 1 represent some different ways of expressing this. Although mindfulness can sound quite ordinary and spontaneous, it is the antithesis of mental habits in which the mind is on 'automatic pilot'. In this usual state, most experiences pass by completely unrecognised, and awareness is dominated by a stream of internal comment whose insensitivity to what is immediately present can seem mindless. Although most people knowingly experience mindfulness for very brief periods only, it can be developed with practice.

Box 1 Some definitions of mindfulness

Mindfulness is:

'facing the bare facts of experience, seeing each event as though occurring for the first time' (Goleman, 1988: p. 20)

'keeping one's consciousness alive to the present reality' (Hanh, 1991: p. 11)

'paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally' (Kabat-Zinn, 1994: p. 4)

'awareness of present experience with acceptance' (Germer, 2005: p. 7)

Differences can be discerned in how different practitioners use mindfulness. Some of these reflect the hazards of translation and others reflect long-standing ambiguities within Buddhist psychology (for an extended discussion see Mace, 2006b, 2007). One nuance that should not be overlooked, because it has implications for therapeutic practice, is evident from the way mindfulness can be used to denote self-awareness or self-consciousness as well as an awareness of what is immediately present. There is an important element of self-recollection in traditional Buddhist conceptions of mindfulness too, evident when the awareness of internal psychological events such as feelings and patterns of thought is promoted through deliberate verbal reflection, as in 'Now I am doing *x*, now I am feeling *y*'. Although this sort of internal commentary, and its emphasis on a central 'I', is not at the heart of modern conceptions (cf. Box 1) it helps in understanding how mindfulness sometimes gets confused with Fonagy *et al*'s (2002) concept of mentalisation. As a reflective capacity that is neatly summarised as 'mind-mindedness', or the capacity to discern whole mental states in others, mentalisation remains distinct from any of these conceptions of mindfulness because of what Brown & Ryan (2004) refer to as the latter's 'prereflexive' quality.

Although definitions such as those in Box 1 are not misleading, they can fail to convey the implications of being mindful. It might be hard to understand why, in ordinary circumstances, anybody should seek this sort of adjustment in awareness, other than for a relaxing mental recharge. One answer, in

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psychological terms, is that practising being mindful leads progressively to awareness of and freedom from mental conditioning. (There is some objective evidence for this from responses to projective tests: e.g. Brown & Engler, 1986.)

Interest in the potential health benefits of mindfulness has fuelled attempts to define its components more clearly through empirical research. These are in their infancy, but indicate that two components could be primary: a capacity to direct and maintain receptive awareness, and sustaining an accepting attitude towards all experience (Bishop *et al*, 2004). Studies of relatively inexperienced practitioners of mindfulness show such a high correlation between these aspects that it has been suggested the first alone might be taken as a marker of its depth (Brown & Ryan, 2003). However, recent tentative findings suggest that accumulating experience leads to a continuing deepening of non-reactivity once the capacity to maintain an open awareness develops to a consistent level (R. A. Baer, 2006, personal communication). Indeed, research continues to confirm that some facets of mindfulness emerge only with experience (Mace, 2006a), making it essential that length of practice is taken into account in experimental assessments.

Given that not all commentators agree on what is specific to mindfulness, and its capacity to vary according to individuals' experience, generalisations about neurobiological correlates have to be treated with caution. It does seem that development of the capacity to maintain a continuing non-verbal awareness of being aware has been associated with increased coherence of the electroencephalograph (EEG), and that bilateral slowing is commonly found during mindful meditation (Austin, 2006). More speculative findings concerning asymmetric prefrontal activation in new students of mindfulness remain to be confirmed (Davidson *et al*, 2003), but have interesting implications as they have also been associated with positive changes in affect.

Techniques for developing mindfulness

Some people develop mindfulness because pursuits such as regularly playing a musical instrument can foster it. However, it is usually learned through a mixture of guided instruction and personal practice. The techniques that are generally used (Boxes 2 and 3) can be divided into those that require periods of withdrawal from other activities to practise extended exercises (formal practices) and those that can be undertaken throughout the day, amid other activities (informal practices).

Box 2 Techniques for experiencing mindfulness

Formal practices

- Sitting meditations (attending to breathing, body sensations, sounds, thoughts, etc.)
- Movement meditations (walking meditation, mindful yoga stretches)
- Group exchange (led exercises, guided discussion of experience)

Informal practices

- Mindful activity (mindful eating, cleaning, driving, etc.)
- Structured exercises (self-monitoring, problem-solving, etc.)
- Mindful reading (especially poetry)
- Mini-meditations (e.g. the '3 minute breathing space')

Mindfulness and psychotherapy

Mindfulness places 'attention' at the heart of psychotherapy. Given that psychotherapy depends so heavily on the interaction between therapist and patient, it is remarkable how little prominence attention has received. Notable exceptions have included Freud, who believed psychoanalysts' attention to be essential to their practice. The psychoanalyst should maintain:

'evenly hovering attention ... all conscious exertion is to be withheld from the capacity for attention, and one's "unconscious memory" is to be given full play; or to express it in terms of technique, pure and simple: one has simply to listen and not to trouble to keep in mind anything in particular. Failure to do this risks "never finding anything but what he already knows"' (Freud, 1912: pp. 111–112).

An equally significant injunction of this kind can be found, appropriately, in the English psychoanalyst Wilfred Bion's *Attention and Interpretation*:

'the capacity to forget, the ability to eschew desire and understanding, must be regarded as essential discipline for the psycho-analyst. Failure to practise this discipline will lead to a steady deterioration in the powers of observation whose maintenance is essential. The vigilant submission to such discipline will by degrees strengthen the analyst's mental powers just in proportion as lapses in this discipline will debilitate them' (Bion, 1970: pp. 51–52).

The strictures of Freud and Bion are intended to sharpen the analyst's receptivity and acuity of observation, including the uncomprehending apprehension of features that would otherwise be

obliterated by the usual habits of the analyst's mind. Attention becomes important because training it helps the analyst to observe and to analyse more effectively.

While Bion was still formulating his views on psychoanalytic procedure, Karen Horney had made attention the cornerstone of the analyst's technique. She insisted that effective work reflects the quality of the analyst's attention, which should have three qualities: whole-heartedness, comprehensiveness and productiveness. The first two of these stand for the functions of self-forgetting and openness that are effectively prefigured in Freud and Bion. The third, however, introduces an additional element – how attention can 'set something going' for the patient in terms of their self-awareness and self-realisation (Horney, 1951: p. 189).

Box 3 Sample instructions for mindful breathing

- 1 Settle into a comfortable, balanced sitting position on a chair or floor in a quiet room.
- 2 Keep your spine erect. Allow your eyes to close.
- 3 Bring your awareness to the sensations of contact wherever your body is being supported. Gently explore how this really feels.
- 4 Become aware of your body's movements during breathing, at the chest, at the abdomen.
- 5 As the breath passes in and out of the body, bring your awareness to the changing sensations at the abdominal wall. Maintain this awareness throughout each breath and from one breath to the next.
- 6 Allow the breath simply to breathe, without trying to change or control it. Just noticing the sensations that go with every movement.
- 7 As soon as you notice your mind wandering, bring your awareness gently back to the movement of the abdomen. Do this over and over again. Every time, it is fine. It helps the awareness to grow.
- 8 Be patient with yourself.
- 9 After 15 minutes or so, bring the awareness gently back to your whole body, sitting in the room.
- 10 Open your eyes. Be ready for whatever's next.

It may be no accident that Horney had some contact with Buddhism at the time of formulating how, in addition to helping the analyst function as a trained observer, the extension of attention towards the patient can be therapeutic in itself. Two other analytic writers who successfully integrated Buddhist understanding in their work have provided clarifications about 'bare attention'. Mark Epstein writes 'It is the fundamental tenet of Buddhist psychology that this kind of attention is, in itself, healing' (Epstein, 1996: p. 110). And Nina Coltart applies this directly to psychoanalysis:

'the teaching of Buddhism is what is called *bhavana* or the cultivation of the mind with the direct aim of the relief of suffering in all its forms, however small; the method and the aim are regarded as indissolubly interconnected; so it seems to me logical that neutral attention to the immediate present, which includes first and foremost the study of our own minds, should turn out to be our sharpest and most reliable therapeutic tool in psychoanalytic technique since there, too, we aim to study the workings of the mind, our own and others, with a view to relieving suffering' (Coltart, 1993: p. 183).

Epstein and Coltart also illustrate quite different ways of introducing mindful awareness to psychoanalytic psychotherapy. Coltart did nothing overtly to change the rules of analytic procedure with her patients. She recognised that the quality of her own close attention affected the atmosphere and activity of her sessions, commenting on how they would acquire the quality of a meditation as she worked intuitively in a way she likens to Bion's ideal (Coltart, 1998: p. 177).

Epstein has long put analytic thinking, particularly that of Winnicott, in the service of what he refers to as Buddhist psychotherapy. This is reflected in his attitude to technique. He likens his role to that of a coach who teaches people how to venture into their unexperienced feelings. The methods he uses differ from patient to patient, and can include instruction in meditation (Epstein, 1998).

Quite distinct ways of incorporating mindfulness within psychotherapy have arisen within the cognitive-behavioural tradition over the past 15 years. Cognitive psychology and Buddhist psychology are in broad agreement about the dependence of emotional disturbance on pervasive patterns of thinking and perception. In contrast to most psychodynamic therapies, recent cognitive-behavioural treatments tend to be designed as interventions for people with a specific set of clinical needs or disorder, rather than as a broad-range therapy. These aims have informed the design of a flood of new 'mindfulness-based' interventions, a sample of which is listed in Box 4.

Box 4 Mindfulness in the cognitive-behavioural tradition

- Mindfulness-based stress reduction (Kabat-Zinn, 1990)
- Mindfulness-based cognitive therapy (Segal *et al*, 2002)
- Mindfulness-based eating awareness training (Kristeller & Hallett, 1999)
- Dialectical behaviour therapy (Linehan, 1993)
- Acceptance and commitment therapy (Hayes *et al*, 1999)

Mindfulness-based stress reduction

Although Kabat-Zinn has always stated that mindfulness-based stress reduction (MBSR; Kabat-Zinn, 1990) is not a therapy (he feels that patients should assume continuing responsibility for their own health), its influence on overtly therapeutic interventions has been profound. The technique was developed for use in general hospitals with patients suffering from conditions that may be painful, chronic, disabling or terminal. These individuals' levels of anxiety and depression decreased following participation in an MBSR programme (Reibel *et al*, 2001). Over the course of eight weekly sessions, alongside psychoeducation about the nature of stress and its amplification through habitual reactions, patients receive instruction and practice in the 'body scan' and sitting and movement meditations. Its group format (up to 30 patients concurrently) encourages discussion. Continuing practice of the exercises is expected as each is introduced. Instructors are required to have extended personal experience of the techniques concerned, which they call upon in guiding patients through them.

Mindfulness-based cognitive therapy

Mindfulness-based cognitive therapy (MBCT; Segal *et al*, 2002) adds training in specific cognitive skills to the framework of MBSR. Although very similar in content to MBSR it is usually taught in smaller groups. In MBCT, the training in mindfulness places marginally less emphasis on bodily movement and incorporates a '3 minute breathing space' – a very brief, transportable routine for rapidly restoring a mindful attitude that effectively bridges formal and informal practices. Instead of stress education, exercises for the monitoring and analysis of dysfunctional thinking and its specific relationship to mood are included. Although it is being increasingly used as a treatment intervention,

MBCT was originally developed as a prophylactic intervention for use with people with an established history of relapsing depression. Its demonstrable effectiveness in reducing the frequency of relapse in people who had had three or more depressive episodes has been attributed to a capacity to prevent chronic depressive ruminations from maintaining this vulnerability (Teasdale *et al*, 2000).

Mindfulness-based eating awareness training

Mindfulness-based eating awareness training (MB-EAT) represents an extension of MBSR and MBCT designed for people with binge eating disorder. The resulting programme is usually longer than 8 weeks, and is premised on mindfulness practice reversing the lack of awareness of bodily and internal states that has been commonly observed among people with eating disorders. In practice, Kristeller & Hallett (1999) have found restoration of sensitivity to feelings of satiety to be therapeutically essential. A complementary goal with this population has been to provide a means of living with prominent guilt feelings. For this reason meditations designed to foster feelings of forgiveness are a key component of the programme. (Here modern practice is replicating traditional Buddhist training, where meditations to develop concentration and mindfulness are often interspersed with others that develop positive social emotions such as loving kindness or compassion.)

Dialectical behaviour therapy

Dialectical behaviour therapy (DBT) takes a didactic approach to 'mindfulness skills training' for patients in groups, alongside individual therapeutic work. Compared to MBSR and MBCT, the teaching of mindfulness in DBT is more remedial in character and is arguably suited for people with more evident difficulties in maintaining attention. It is fitting that DBT is used primarily with people diagnosed with borderline personality disorder,[†] who are frequently deficient in this respect. The mindfulness skills that are taught divide into two sets: the 'what' skills of observing, describing or participating and the 'how' skills of being non-judgemental, 'one-mindful' and effective as attention is deployed. A variety of exercises are used and patients are encouraged to try them as they go about their usual business rather than in extended formal practices such as meditation.

[†]Readers might like to refer to Robert Palmer's 2002 article 'Dialectical behaviour therapy for borderline personality disorder' (*Advances in Psychiatric Treatment*, 8, 10–16). This can be accessed free from <http://apt.rcpsych.org>. Ed.

Box 5 Exercise to help cognitive defusion

This exercise is to help you see the difference between looking at your thoughts and looking from your thoughts. Imagine you are on the bank of a steadily flowing stream, looking down at the water. Upstream some trees are dropping leaves, which are floating past you on the surface of the water. Just watch them passing by, without interrupting the flow. Whenever you are aware of a thought, let the words be written on one of the leaves as it floats by. Allow the leaf to carry the thought away. If a thought is more of a picture thought, let a leaf take on the image as it moves along. If you get thoughts about the exercise, see these too on a leaf. Let them be carried away like any other thought, as you carry on watching.

At some point, the flow will seem to stop. You are no longer on the bank seeing the thoughts on the leaves. As soon as you notice this, see if you can catch what was happening just before the flow stopped. There will be a thought that you have 'bought'. See how it took over. Notice the difference between thoughts passing by and thoughts thinking for you. Do this whenever you notice the flow has stopped. Then return to the bank, letting every thought find its leaf as it floats steadily past.

Unlike MBSR instructors and MBCT therapists, DBT therapists are not expected to have or to maintain personal practice of mindfulness, although many do. The understanding and quality of mindfulness that is offered through this approach can vary significantly in practice. Although mindfulness occupied a pivotal position in the original formulation of the model, this appears to be reducing as it becomes more widely used.

Acceptance and commitment therapy

Acceptance and commitment therapy (ACT; Hayes *et al*, 1999) is based on a radical behavioural analysis of patients' difficulties. Following this, appropriate therapeutic strategies are selected from a full and varied menu. They fall under six main headings, four of which are acknowledged to be 'mindfulness functions': 'contact with the present moment', 'acceptance', 'cognitive defusion' and 'self as context'. The first two correspond to the receptive awareness and to the suspension of judgement that have been key to modern conceptions of mindfulness. The third, cognitive defusion, a

deliberate dis-identification from thoughts, is the expected outcome of a series of exercises that focus directly on patients' relationship to their thoughts. Box 5 gives an example of a practical exercise that a therapist might introduce for this. In practice, this would be followed by the therapist's detailed examination of the patient's experience to underline the intended lesson.

The fourth function, self as context, is characteristic of acceptance and commitment therapy, referring to a shift of perspective in which the patient is encouraged to check and reject assumptions about the substantiality and continuity of the experienced self. The therapy is intended for flexible adaptation to a wide range of clinical problems (and therapist preferences). Because its exercises are often elaborate yet intended to be used across situations, they do not always fit easily into the formal/informal framework of Box 1. If the repertoire of exercises does not match a particular clinical need, or a patient's preferences, the therapist is encouraged to devise an alternative. Throughout, means are adjusted to goals. There is no requirement for therapist or patient to undergo formal meditation as a means to any of the mindfulness functions, although they are free to do so.

Mindfulness and psychological distress

In what ways do these different therapeutic uses of mindfulness positively affect mental health? It is clear from the above that different approaches have different aims. Traditional mindfulness practice was expected to lead to differences at the level of being, in a way that is compatible with the optimistic formulations found in psychoanalytic conceptions of a 'true self'. The whole tendency of cognitive-behavioural practice has been to formulate goals that are more specific, problem-oriented and measurable. We might adopt this in summarising some of the specific applications to which mindfulness-based therapies have been applied (Box 6).

Box 6 Specific applications of mindfulness-based interventions

- Mood (anxiety, depression)
- Intrusions (ruminations, hallucinations, memories)
- Behaviours (bingeing, addiction, self-harm, violence)
- Problems of relating (attitudes, empathy)
- Problems of self (self-consciousness, self-hatred)

It is already impossible within an introductory article to review methods and outcomes for all the permutations of interventions and applications. Moreover, there is a growing tendency for treatment packages to be designed that combine elements of, say, MBSR with exercises from acceptance and commitment therapy. The list in Box 6 does suggest that, if mindfulness-based interventions are truly effective across these different applications, there may be differences in how mindfulness is beneficial.

The use of mindfulness to reduce subjective anxiety appears to be an example of facilitated exposure that aims to reverse affective avoidance by strengthening the capacity to face and investigate warded-off fears while maintaining an open and accepting attitude (Roemer & Orsillo, 2002). The application of MBCT in relation to depressive ruminations is hypothesised to bring about a general switch in 'mental mode'. Accordingly, mindfulness brings about a 'decentring' in relation to each successive experience that is incompatible with the chain reactions characteristic of the ordinary mental mode. If depressive ruminations no longer receive the kind of reactive attention that allows them to amplify, the negative mood changes that are usually consequent on this will be prevented (Segal *et al*, 2002: p. 75). The expectation that MB-EAT relies on an increased capacity to recognise internal bodily cues has been mentioned already. Like the Segal *et al* hypothesis, it has also received some support from process measures during clinical trials. However, much of the explanation of apparent effects of mindfulness must remain speculative at this stage, and alternative accounts often exist. For instance, when mindfulness within DBT has been associated with a reduction in impulsive behaviour, this has been attributed both to an improved capacity to participate with awareness of all the processes that lead up to an action (e.g. Linehan, 1993: p. 63) and to greater acceptance of the painful negative emotions that otherwise trigger impulsive actions (e.g. Welch *et al*, 2006: p. 122).

Caveat

It must not be assumed that all of the clinical consequences of mindfulness practice are necessarily positive or therapeutic. Attrition during trials of mindfulness-based interventions is rarely explored and the whole question of side-effects is underresearched. Possible unintended effects that are known to be exacerbated during intensive training retreats include restlessness, anxiety, depression, guilt and hallucinosis (Albeniz & Holmes, 2000; Mace, 2006a).

The therapeutic future of mindfulness

Recognising the importance of how attention is used in psychotherapy cuts across divisions between the cognitive-behavioural and psychodynamic approaches that have been considered here (and others also). The challenges it poses are both theoretical and practical. We have seen how a mindful therapy can have distinctive goals, as well as novel ways of conceptualising what therapeutic success depends upon. Informing these is a psychological understanding based on a view of individualism, and of how people affect one another, that is different from those underpinning most established therapeutic models.

Therapy in practice

The practical challenges differ according to therapists' current practices and attitudes in ways that have also been illustrated. Some psychodynamic psychotherapists have changed the way they advise and instruct patients in order to help them develop mindfulness, but others have not. Some cognitive-behavioural psychotherapists have changed the way they attend to their own inner feelings in order to work mindfully with patients, but others have not. In general, some therapists will relish challenges of these kinds and others will not, ensuring that enthusiasm for mindfulness-based interventions is likely to be balanced by considerable scepticism. Although much remains to be worked out at theoretical and practical levels, the future of mindfulness-based therapies is likely to depend on demonstrations of their distinct, effective and lasting contributions that other clinicians cannot ignore.

Building an evidence base

It is evident that there are many possible ways of incorporating mindfulness within psychotherapeutic practice – certainly more than it has been possible to discuss here. This diversity, coupled with the important fact that a state of consciousness such as mindfulness is both silent and invisible when it is active, is likely to complicate attempts to demonstrate independent clinical effects that can confidently be attributed to mindfulness and nothing else. Without objective corroboration of when a therapist or patient is mindfully aware, it is difficult for comparative studies of treatment effects to be persuasive that mindfulness represents a discriminating variable between groups and/or mediates any observed changes. Although worthwhile attempts are continuing to

refine measures of mindfulness, these are limited by the lack of a consistent yet comprehensive operational definition. Ideally this would be sensitive to differing degrees of attainment and supported by reliable neurophysiological markers.

In the meantime, studies of the outcome and process of mindful psychotherapies are necessarily limited in their scope and interpretation. It may be important to remember too that none of the therapeutic applications of mindfulness that have been investigated to date has a unique claim on its potential, in the way a new drug treatment might be designed to fulfil a particular requirement. Even when drugs are created for specific purposes, they have a habit of revealing other, unexpected and sometimes more beneficial uses than those they were developed for – as well as new and unsuspected side-effects. The present situation, in which the rapid growth of new, often manualised, mindfulness-based therapies is being accompanied by controlled studies that are restricted to consideration of a very narrow range of quantified outcomes, presents a paradox. It lies in the contrast between the restrictiveness of this methodology and what mindfulness is already taken to be – a receptive state of awareness in which any and all experiences are accepted without automatic judgement.

Realisation of the potential range and modes of action of mindfulness in therapeutic settings may therefore mean that currently favoured methods of investigation need to be complemented by others. These would pay far more detailed and inclusive attention to what happens within and between therapists and patients in terms of awareness during therapeutic sessions. At present, the clinical and research literature appears to lack a single case study that explores this in real depth. Continuing attempts to establish the role of mindfulness in psychotherapy seem likely to benefit from a more careful approach to its description.

Declaration of interest

None.

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MCQs

1 Mindfulness can be developed during:

- a dishwashing
- b yoga
- c sleep
- d intoxication
- e running.

2 Mindfulness practice can promote:

- a more sustained attention
- b the nirvana complex
- c desynchronisation on the EEG
- d asymmetric frontal lobe activation
- e restlessness.

3 Mindfulness is an important concept in:

- a Islam
- b Bion's psychoanalysis
- c early Buddhism
- d dialectical behaviour therapy
- e rational emotive therapy.

4 Mindfulness may have therapeutic effects by:

- a reducing impulsivity
- b preventing psychosis

- c impairing memory
- d exposure
- e distraction.

5 Acceptance and commitment therapy:

- a is usually undertaken in groups
- b is a form of behavioural therapy
- c is a specific treatment for trauma
- d typically involves meditation
- e emphasises empathy training.

MCQ answers

1	2	3	4	5
a T	a T	a F	a T	a F
b T	b F	b F	b F	b T
c F	c F	c T	c T	c F
d F	d T	d T	d T	d F
e T	e T	e F	e T	e F