

# What is mindfulness-based therapy good for? Evidence, Limitations and Controversies

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Post-print deposited in [Curve](#) October 2016

**Original citation:**

Farias, M. , Wikholm, C. and Delmonte, R. (2016) What is mindfulness-based therapy good for? Evidence, Limitations and Controversies. The Lancet Psychiatry, volume 3 (11): 1012–1013. DOI: 10.1016/S2215-0366(16)30211-5

<http://www.sciencedirect.com/science/article/pii/S2215036616302115>

Elsevier

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COMMENT FOR LANCET PSYCHIATRY

What is mindfulness-based therapy good for? Evidence, Limitations and  
Controversies

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Authors' Contributions: all authors have contributed equally to the writing.

Conflict of Interest: We are not aware of any conflict of interest.

Funding source: None.

Ethics committee: Non-applicable.

What exactly is mindfulness meditation good for? For who and how does it work? Can it have adverse effects? A cursory glance at the mental health literature suggests that it can help with almost anything, but a deeper look reveals contradictory findings.

How good is the evidence for its benefits? A major meta-analysis of 163 studies focusing on psychological variables [1] suggests that mindfulness has a range of positive effects on mental health, such as changes in stress and negative emotions. A closer inspection, however, reveals that the majority of studies had methodological limitations (less than 10% used an active control group) and, most surprising, there seems to be no consistent longitudinal effect — meditating for a greater length of time is not associated with better psychological outcomes. This lack of a longitudinal effect has been confirmed by a meta-analysis of brain imaging studies: although mindfulness practice leads to structural brain changes these are confined to the first weeks of practice [2].

Evidence concerning the use of mindfulness based interventions (MBIs) for recurrent depression is more promising: across nine clinical trials, individuals who received a cognitive-based MBI had a lower chance of relapse within 60 weeks of follow up [3]. Yet, a mindfulness intervention was not more helpful than other form of mental health training, and the only study that tried to tease apart the effect of the meditation element from the psychoeducation training didn't find the meditation practice to be more effective than treatment as usual [4]. Another meta-analysis of 47 randomized clinical trials on the use of MBIs for mental health problems [5] confirmed moderate evidence of improved results for depression, as well as anxiety.

On the other hand, for variables one would expect mindfulness to have a strong effect on, such as stress and positive mood, there were only weak effects.

Turning to the second question: for who and how does mindfulness work? The answer to this is precarious and messy. There has been very little research on individual differences in mindfulness, probably because of a universalistic assumption that this technique develops a kind of self-awareness capacity that is innate to all humans. There are, however, indications that individuals with certain personality characteristics (openness to experience and agreeableness) will use mindfulness more frequently [6], and that MBIs are more effective for recurrent depression with patients who have suffered childhood trauma and abuse [4]. As to the mechanisms of how mindfulness works, there are a number of proposals, ranging from metaphysical self-awareness (realizing that the self is an illusion), to processes of self-regulation potentially mediated by improvements in attention and self-awareness, to psychobiological mechanisms of stress buffering. The theoretical proposals tend to follow the applications of mindfulness, so that researchers interested in stress reduction through MBIs will develop a model focusing on stress modulation, those interested in depression will focus on mechanisms associated with rumination and self-compassion and so on.

If mindfulness produces alterations in cognition and affect, the impact of which will vary according to personality and life history, may it also have the potential for adverse effects? Surprisingly, despite the hundreds of clinical studies now available, research on this topic is very limited, though there are indications of short and long-term adverse effects. An early study of the effects of intensive mindfulness retreats showed that the majority of experienced meditators, with over 4 years of regular practice, had at least one negative effect, varying from increases in

negative thoughts and anxiety to feelings of disorientation, confusion, lack of motivation and worsened interpersonal relations [7]. More recent experimental, clinical and qualitative studies show that even relatively short MBIs may lead to increases in stress, depression and the resurfacing of childhood traumas [8,9,10]. To whom is this more likely to happen? Common clinical sense would suggest that individuals with lower ego strength and with current or previous mental health problems are more likely to suffer adverse effects, but these are also the ones who are most likely to need a mental health intervention. It is also common sense that anyone with solid mental health training would be sensitive to noticing adverse effects in individuals undergoing mindfulness training. But with the popularity of mindfulness thousands of people without any mental health qualification are being trained to teach mindfulness, which in itself may fuel misguided applications and side effects.

The controversy surrounding potential adverse effects has led to a growing academic and public debate about the methodological and ethical frailties of the therapeutic applications of mindfulness. But there are other important questions that are being overlooked: why has this become so popular now? Does mindfulness appeal to the iPhone-distracted generation of millennials like psychoanalysis did to the repressed Victorians? Social scientists examining such questions are suggesting that mindfulness has become much more than an Eastern derived form of therapy; it is an ideology which purports to better everything and everyone, making a more compassionate, wise, peaceful and productive individual and society [11]. If they are right, if we envision mindfulness in such way we will inevitably fail as researchers and clinicians. The only way to establishing mindfulness as a truly evidence-based therapy is to temper enthusiasm and to focus on understanding how it works and when it should (or not) be used.

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