Review Article

Mindfulness-based cognitive therapy: history and mechanisms

Madeline Komar, Jordan Pepper, Irene Zhao, Angela Ziwei Lin, Rabia Tahir, Joy Du

McMaster University

Abstract

Mindfulness has become a popular term in the 21st-century zeitgeist. Researchers have attempted to establish that anyone can reap benefits from practicing mindfulness, ranging from healthcare professionals (HCPs) and business executives to patients experiencing florid psychosis. Given the abundance of research on mindfulness-based intervention, it would be prudent for HCPs to understand the proposed mechanism of action through which mindfulness-based therapy confers benefit. Therefore, this commentary article seeks to describe the history and mechanisms of change underlying Mindfulness-Based Cognitive Therapy (MBCT) as developed by Segal et al. in 1996.

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Corresponding author: Madeline Komar, madeline.komar@medportal.ca

Introduction and history

MBCT originated as a method of preventing relapses among patients with Major Depressive Disorder (MDD). In the 1990s, Segal, Williams, and Teasdale set out to develop a form of cognitive therapy to maintain patient well-being while in remission (1,2). The researchers were inspired by Beck's cognitive model of depression, which posited that negative thoughts could evoke negative mood states and maladaptive behaviours (1). Segal, Williams, and Teasdale then examined the reciprocal relation and investigated how negative mood states could evoke maladaptive thoughts and behaviours. They proposed that depressive relapses occur because low mood states reactivate maladaptive, automatic patterns of negative thinking and rumination among individuals with depression (1). Based on this model, the researchers explored ways to help individuals cope with low mood states and the accompanying negative thoughts (1). The group began exploring mindfulness as a tool for preventing relapse into depressive episodes after being exposed to the work of Jon Kabat-Zinn (1). Kabat-Zinn was inspired by Buddhist practices and taught individuals to accept their thoughts and feelings non-judgmentally. Segal, Williams, and Teasdale incorporated this practice into their MBCT program (1).

MBCT in practice

Core philosophy and key concepts

MBCT, as designed by Segal, Williams, and Teasdale, is an 8-session, group-based intervention program. Clients are encouraged to practice the mindfulness techniques they learn in sessions throughout the week so the practices become habitual (1). As described, MBCT is based on the idea that individuals with depression relapse because periods of low mood trigger ruminative thinking patterns (1). The core philosophy of MBCT emphasizes that teaching individuals to practice mindfulness will help patients better understand and flexibly respond to their emotions to avoid falling back into maladaptive thinking patterns during times of low mood (2,3). In MBCT, decentering is the process through which clients detach themselves from negative emotions and ruminative patterns of thinking (1). Decentering involves viewing emotions, thoughts, and bodily sensations as transient events rather than direct reflections of reality (4). The rationale is that a negative thought will cause distress if a client believes that thought is true. However, if a client understands that the thought is the product of a low mood state and is temporary, they will experience less distress (1). MBCT aims to increase individuals' awareness of their emotions, thoughts, and physical sensations so they can recognize when they are experiencing a negative mood state or are otherwise psychologically vulnerable to a depressive relapse (3).

Role of the therapist and client

The therapist facilitates clients' learning during MBCT (5). According to Segal, Williams, and Teasdale, therapists should have first-hand personal experience with mindfulness so they can better anticipate and respond to client difficulties with mindfulness-based activities, such as meditation or the body scan (1). Canby et al. used qualitative interviews to identify factors predicting therapeutic success following MBCT (6.) They found that clients benefit most when their MBCT instructor is kind and non-judgmental, as personal warmth helps the clients feel comfortable asking questions and sharing their thoughts (6). During MBCT, it is the responsibility of the client to commit to learning and practicing mindfulness-based techniques (1). Keeping an open mind helps clients engage in activities that are new to them, such as the body scan or guided meditation (1). Clients report positive outcomes following MBCT when there is a strong sense of rapport between group members (6). Clients need to take responsibility for integrating mindfulness practices into everyday life and completing assigned weekly activities outside of the sessions as instructed to obtain maximum benefit (7).

Overview of research

Mechanism of action

The theory underlying MBCT states that MBCT reduces depressive symptoms and the risk of depressive relapse by helping an individual identify negative mood states, allowing them the opportunity to shift into non-judgmentally observing negative thoughts rather than ruminating on them (1). Kuyken et al. found that prior to receiving MBCT, depressive thinking patterns were strongly associated with depressive symptoms (3). However, following MBCT, there was a decoupling of the relation between depressive thinking and depressive symptoms, suggesting that ruminative thought patterns were no longer evoking maladaptive emotions and behaviours (3). Other research indicates that MBCT reduces depressive symptoms by lessening tendencies towards rumination and worry, so that individuals in low mood states are less likely to fall back into maladaptive thinking patterns (4,7). Participation in MBCT has been associated with increased self-compassion, suggesting that MBCT helps individuals develop a non-judgmental attitude towards themselves (8). These findings support the prototyped theoretical model underlying MBCT.

Therapeutic Efficacy

Given that MBCT was originally developed as a method of preventing depressive relapse, there has been extensive research examining the therapeutic efficacy of MBCT as a treatment for depression (7, 9). Eisendrath et al. found that participation in an 8-week adjunct MBCT program decreased the severity of depressive symptoms in a randomized control trial comparing outcomes among patients with pharmacotherapy versus pharmacotherapy and MBCT (9). According to a

meta-analysis from Khoury et al. (10), MBCT is as effective as cognitive behavioural therapy (the current gold standard for MDD) or medications in treating depression. MBCT produces clinically significant benefits among adult patients struggling with depression and anxiety (10). Among a clinical sample of adolescents with depressed mood, MBCT reduced depressive symptoms and ruminative thought patterns while increasing quality of life (11). In a qualitative case study of 11 adolescents, teenagers reported being very satisfied with the use of MBCT as a treatment method and endorsed that the use of mindfulness skills helped them cope with low mood states (11). Mindfulness-based interventions also reduced depressive symptoms among elderly adults (12). Together, these results suggest that MBCT can improve outcomes for various age groups with depressive symptoms (9,11,12).

Bihari et al. conducted semi-structured interviews with patients undergoing MBCT and found that in addition to reducing depressive symptoms, MBCT contributes to improved social and emotional well-being (7,13). For example, depressed individuals reported improvements in the quality of their interpersonal relationships following MBCT, including improvements in conflict resolution and maintaining meaningful connections even while experiencing personal distress (13). A systematic review and meta-analysis of the mechanisms underlying mindfulness-based interventions indicated that MBCT increases well-being while reducing stress and emotional reactivity when faced with everyday challenges (7).

Researchers have also examined the efficacy of MBCT as a treatment for other physical and psychiatric disorders. A systematic review of randomized controlled trials utilizing MBCT by Fjorback et al. found that MBCT helps individuals cope with pain and stress from chronic illness (14). They reported that mindfulness may provide benefits to patients with cancer, chronic pain, and neurodegenerative conditions such as multiple sclerosis by enhancing emotional resilience and coping strategies. However, larger trials with clearly defined treatment groups and outcomes are needed (14). MBCT has also been shown to reduce anxiety and depressive symptoms among patients with bipolar disorders, although MBCT does not seem to influence manic symptoms (15,16). MBCT additionally represents a promising treatment method for individuals with health anxiety disorders, social anxiety disorders, and post-traumatic stress disorder (15-17). However, further research is necessary to evaluate the degree to which MBCT benefits these populations (16).

Limitations

A commonly identified issue within the literature on MBCT is that most studies fail to utilize an active control group when evaluating MBCT (4,15,16,18). Symptoms among a sample of individuals who received MBCT are often compared to symptoms among individuals who were part of a wait-list controlled condition (15,18). This experimental design is less helpful for clinicians seeking to understand if MBCT is better or equivalent to existing therapies rather than being better than no treatment, as in the wait-list condition. Additionally, individuals undergoing MBCT may expect some symptom improvement due to their active participation in therapy, whereas individuals in wait-list conditions likely expect their symptoms to worsen in the absence

of treatment, potentially inflating the observed effectiveness of MBCT (15,18). Research comparing symptoms following MBCT versus an active control condition, such as an educational group, would help researchers more accurately evaluate the therapeutic benefits of MBCT compared to other structured group supports (15). Additionally, most studies fail to describe the qualifications and training of the practitioners providing MBCT (10). This directly influences the quality of their client's experience and contributes to inconsistencies seen in the literature on MBCT (5). Accordingly, future research should report on the qualifications and training of the therapists providing MBCT to remedy this issue (10).

Assumptions and biases of the theory

The theory underlying MBCT also assumes that the causes of depression and depressive relapse are internal rather than external (1). According to Segal, Williams, and Teasdale's cognitive model, depression occurs when a negative mood state triggers maladaptive thought patterns, and MBCT focuses on helping individuals accept negative emotions and escape maladaptive thought patterns (1). The theory underlying MBCT ignores how environmental stressors can contribute to depression and consequently fails to stress the importance of empowering individuals to change their environment or life situation.

Conclusion

Though it is not without criticism, MBCT is a widely used treatment during maintenance periods after depressive episodes and as a second-line treatment for acute episodes. It may also confer benefits to patients with non-psychiatric conditions in managing their overall well-being and reducing the distress associated with physical illness. Importantly, psychotherapists wishing to employ MBCT should be aware of its limitations; the therapy currently overlooks the role of environmental factors in triggering and maintaining depressive episodes and fails to account for individual personality differences that contribute to discrepancies in outcomes following treatment. Future directions for research on MBCT should involve larger trials with long-term follow-up, well-defined treatment groups, and stricter parameters on the MBCT itself, as well as the therapeutic provider responsible, to provide more rigorous evidence on its benefits for patients with both psychiatric and physical illnesses.

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