

# Depression: Third Wave Case Conceptualization



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## Current Standard of Care for Depression

Despite recent developments in biological and psychological interventions, depression remains a leading cause of disability worldwide, affecting an estimated 4.4% of the global population (approximately 322 million), with an 18.4% increase between 2005 and 2015 (World Health Organization, 2017). In addition to its high global prevalence, depression tends to have a highly recurrent course, and individuals' risk of recurrence increases by 16% with each successive recurrent episode (Judd et al., 2000; Solomon et al., 2000).

In recognition of the fact that major depressive disorder (MDD) is often characterized by multiple phases, including an acute phase, treatment response, episode relapse, and episode recurrent, Frank et al. (1991) and others have suggested the need to match interventions to the specific phase of disorder that patients find themselves in. Indeed, interventions used to attain initial treatment response and remission may be different from those used to maintain longer term recovery (Guidi et al., 2016). To date, antidepressant medication (ADM) and psychotherapy (e.g., Cognitive Therapy [CT]) have proven to be the standard of care for MDD with approximately 40–50% recovery rates (Hollon et al., 2006); the most common intervention for prevention of episode return is maintenance antidepressant medication (mADM) (Geddes et al., 2003). Cognitive therapy has also demonstrated protective benefits against depression's return (Garber et al., 2009; Hollon et al., 2005).

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## Rationale for Adapting Mindfulness Meditation to Prevent Depression Relapse

While mADM is largely effective for prevention, a number of drawbacks have been associated with reliance on antidepressant medication. Chief among these drawbacks is the low rates of treatment compliance over time. In a national survey, 22% participants reported discontinuing ADM prematurely (Samples & Mojtabai, 2015). In another study, 42.4% of patients discontinued ADM during the first 30 days, and only 27.6% continued to take the medication for more than 90 days (Olfson et al., 2006). A literature search of antidepressant nonadherence between 2001 and 2011 revealed that approximately 50% of psychiatric patients and 50% of primary care patients are nonadherent six months after the start of the antidepressant treatment (Sansone & Sansone, 2012). What are some reasons for this low treatment compliance consistently observed across studies? Once the initial symptoms have abated, patients may consider themselves as “feeling well” or “recovered” and may view long-term mADM as unnecessary, especially since the medications tend to be costly and can lead to many side effects (for a review, see Sansone & Sansone, 2012). Another challenge is “tachyphylaxis”, a phenomenon in which antidepressants lose their potency over time (Kinrys et al., 2019). Furthermore, women who are pregnant may have additional concerns about these medications. On top of these patient-related factors, clinicians also play a role in nonadherence: clinicians might not have provided sufficient instruction about the medication or followed up with their patients (Masand, 2003; Woolley et al., 2010). When considered collectively, these factors may end up leaving a sizable number of formerly depressed patients “uncovered” during a period in which their risk of relapse or recurrence continues to rise. Against this backdrop, Teasdale et al. (1995) sought to develop a psychotherapeutic alternative to mADM to prevent the relapse and recurrence of depression.

The development of this psychotherapy was informed by Beck’s model of cognitive vulnerability (Beck, 1967) and the experimental literature on mood-related cognitive changes in remitted depressed patients (Segal et al., 1996). Based on Teasdale’s differential activation hypothesis (DAH; Teasdale, 1983, 1988), during dysphoric states, the content and degree of the activation of one’s negative information processing biases can determine whether one’s momentary sadness becomes maintained or escalated. The DAH model argues that during an individual’s early depressive episodes, a connection becomes established between sad moods and negative information processing patterns. Subsequent temporary dysphoric states can re-activate these negative thinking patterns, which then preserve or even aggravate the dysphoric states into new episodes of depression. As a result, compared to individuals who have never experienced depressive episodes, recovered depressed patients have higher cognitive vulnerability and are at a higher risk of re-experiencing more depressive episodes. For example, when a previously depressed individual is in a momentary sad mood, a thought that they are underperforming at work can linger all day and be over-generalized into a belief that they are a failure in every

aspect of life. With continued rumination and worrying, this downward spiral can eventually lead to a full-blown depressive episode. We can say that this individual has a high level of mood-linked cognitive reactivity, meaning that sad moods trigger large increases in their dysfunctional attitudes. Segal et al. (2006) reported that over an 18-month follow up, formerly depressed patients who showed high levels of mood-linked cognitive reactivity had a 69% relapse rate, whereas those with minimal or decreased reactivity relapsed at lower rates of 30% and 32% respectively. These findings underscore the importance of targeting mood-linked changes in cognitive processing among formerly depressed patients as one potential mechanism for reducing their risk of relapse/recurrence.

## **Mindfulness-Based Cognitive Therapy (MBCT)**

MBCT is considered a third-wave psychotherapy primarily due to its emphasis on changing one's *relationship* to thoughts and emotions, rather than changing their *content*. Coming out of first-wave behavioral therapies which focused on the measurement of observable behaviors, second wave therapies such as Cognitive Behavioural Therapy (CBT; Beck et al., 1979) rigorously focused on cognition as the driver of mood and behavior. These models highlighted the importance of challenging the content of maladaptive thoughts with evidence and changing these thoughts in order to change mood and behavior. This type of content change is referred to as a "first-order change". Unlike second-wave therapies, third-wave therapies focus on a "second-order change" by aiming to change one's *relationship* with one's thoughts, emotions, and sensations. The common factors of third-wave therapies are summarized as follows: "No one factor unites these new methods, but all have ventured into areas traditionally reserved for the less empirical wings of clinical intervention and analysis, emphasizing such issues as acceptance, mindfulness, cognitive defusion, dialectics, values, spirituality, and relationship. Their methods are often more experiential than didactic; their underlying philosophies are more contextualistic than mechanistic" (Hayes, 2004, p. 640). For example, MBCT teaches metacognitive skills to help reduce participants' mood-related cognitive reactivity to prevent relapse/recurrence. Participants learn to become mindful through "paying attention on purpose, in the present moment, and non-judgmentally to things as they are" (Williams et al., 2007, p. 47). By building up present-moment awareness, the ability to sustain attention, and the ability to observe thoughts and feelings without reacting to them, participants learn to view their negative thoughts and sad moods as transient mental events rather than facts or the reality. Table 1 compares third-wave MBCT to second-wave CBT in an imaginary scenario, in which a previously depressed individual responds to his situation according to principles of MBCT and CBT respectively.

**Table 1** CBT vs. MBCT approaches

**Scenario:** Alan has a history of depression and was successfully treated for his most recent depressive episode two years ago. He recently moved to a new city during the COVID-19 pandemic and had to work remotely from his small apartment which has a nice view overlooking the city. It has been 4 months and he has not made many new friends, except one co-worker who was friendly to him. He started to feel isolated, sad, and worried that he may never integrate into his new company. This table compares how CBT and MBCT may help him address thoughts related to his low mood.

<b>CBT Approach</b>	<b>MBCT Approach</b>
Focus is on the content of thoughts, e.g., “I will never integrate into my new company.”	Focus is on the process of thinking, and less on the content, e.g., adopting a decentered perspective on thinking: “I notice that I am having the thought that I will never integrate into my new company.”
Primarily focused on negative thoughts and beliefs, e.g., “I will never integrate into my new company.”	Negative and positive thoughts and beliefs are not particularly differentiated, as they are both treated as mental events. E.g., “I will never integrate into my new company.” “I like the view from my apartment.”
Focused on identifying negative thoughts as they occur.	Focused on noticing any thoughts / emotions / sensations in the present moment, regardless of their affective content.
Gathering evidence that support or refuse the content of negative thoughts to change the degree of belief. E.g., the evidence that one co-worker was friendly to Alan does not support the thought that he will never integrate into his new company.	Engaging less with whether thoughts are true or false, and more emphasis on how watching them come and go in the mind may reduce their urgency. E.g., noticing the thought that “I will never integrate into my new company” arise and dissipate just like any other thoughts that come and go.
Learning to address stressful situations by reducing stress through action steps, e.g., by making a concrete plan to socialize at work.	Learning to address stressful situations by first giving oneself some space to breathe or explore what stress feels like, e.g., by taking a 3-minute breathing space before considering an action step.

## Structure of MBCT

MBCT draws elements from CBT and Mindfulness-Based Stress Reduction program (MBSR; Kabat-Zinn, 2013). Some of the MBSR-based techniques include the body scan (i.e., paying attention to different parts of the body and bodily sensations systematically, for example, from head to toe), mindful stretching (i.e., stretching the body in a slow and focused manner), mindfulness of breath/body/sounds (i.e., selectively attending to the sensations of breathing, body, and sounds), and open monitoring of the present-moment experience (i.e., observing present-moment thoughts, emotions, or sensations without selectively focusing on any specific object). These techniques are designed to train participants to become aware of their body sensations and mental events, maintain attention on them, and observe them without judgement (Kabat-Zinn, 2013). Some CT-based techniques include questioning automatic thoughts and identifying sources of pleasure and social support. These techniques help to bring participants’ automatic thoughts and emotions to their conscious awareness, so that they can work on developing a healthier relationship with their thoughts and emotions. Through a combination of techniques and exercises, participants learn to approach their present-moment experiences with an attitude of open-minded curiosity and non-judgement and view their thoughts and feelings as transient mental events, rather than facts. Participants also learn to become more aware of their unique depression-related warning signals so that they can make an action plan in advance, and respond to these signals with flexibility (e.g., letting a problem be, instead of attempting to fix it). By training participants to notice their negative thoughts and feelings and move on without ruminating over them, MBCT equips participants with important relapse prevention skills.

MBCT was originally developed for individuals with residual depression (Segal et al., 2002, 2013). Participants are eligible for the intervention if they are: previously depressed, able to meet the demands of program (45 min home practice per day), not at high risk of suicide, no substance abuse, no untreated trauma, nor a BPD diagnosis (advised to seek alternate treatment). To become an MBCT instructor, individuals need to fulfill the following qualification requirements: (1) trained as mental health professional, experience with evidence based treatments for

**Table 2** MBCT session content

Session 1	Beyond automatic pilot
Session 2	Another way of knowing
Session 3	Coming home to the present – Gathering the scattered mind
Session 4	Recognizing aversion
Session 5	Allowing things to be as they already are
Session 6	Seeing thoughts as thoughts
Session 7	Kindness in action
Session 8	What now?

Teasdale et al. (2014)

depression, (2) have attended MBCT teacher development course, (3) have participated in MBCT as a participant, (4) have led MBCT groups and received supervision, and (5) have an ongoing personal mindfulness meditation practice.

There are eight 2.5-h weekly sessions in total (see Table 2 for the topic of each session; Teasdale et al., 2014). The first phase (Sessions 1–4) teaches the basics of mindfulness, and the second phase (Sessions 5–8) teaches ways to handle mood shifts. In the first phase, participants learn to become more aware of how much the mind wanders, how the wandering mind can maintain or escalate negative thoughts and emotions without one's knowledge, and how to bring one's attention back to readily accessible reference points (e.g., body, breath). Once participants have become more aware of their moment-to-moment thoughts and feelings, they enter the second phase of MBCT to develop skills to flexibly respond to these thoughts and feelings. Starting from Session 2, each session begins with a meditation exercise (e.g., body scan, sitting meditation) to bring participants' attention to the present moment. Participants' meditation experiences are discussed, homework will be reviewed, and new homework will be assigned. The discussion on noticing and regulating thoughts and feelings will be thoroughly explored.

The core skill to be learned in MBCT is how to step out of automatic negative thinking patterns and stop them from escalating temporary negative moods into full-blown depressive episodes. To achieve this goal, participants learn a set of skills that include: concentration, awareness of thoughts, emotions, and sensations, being in the moment, decentering, acceptance, letting go, being in a state of non-achievement, and attending to the bodily manifestation of a problem (see Table 3; Segal et al., 2013).

**Table 3** MBCT skill set

Concentration	The ability to pay sustained and quality attention to a reference point.
Awareness of thoughts, emotions, and sensations	The ability to detect automatic negative thinking patterns so that one can let them go and free up the mental resources used to automatically process these thoughts.
Being in the moment	The ability to stay focused on experiences in the present moment, rather than ruminating about the past or worrying about the future.
Decentering	The ability to view thoughts, emotions, and sensations as passing events.
Acceptance	The ability to accept mental and bodily events as they are, while being kind to ourselves.
Letting go	The ability to let go of thoughts, emotions, and sensations to prevent getting into negative thinking patterns.
“Being” rather than “doing”	The ability to switch from getting things done to being in a state of having no immediate need to achieve anything or go anywhere.
Attending to the bodily manifestation of a problem	The ability to attend to the body's response to a problem, so that one is neither avoiding the problem nor letting it be escalated by automatic negative thinking patterns.

Segal et al. (2013)

## Efficacy of MBCT

An initial evaluation of MBCT found that among patients with 3 or more previous depressive episodes, only 37% in the MBCT group relapsed, compared to 77% in the treatment as usual (TAU) group, in which patients were instructed to seek help from their family doctor or other sources as they normally would, if their symptoms worsened (Teasdale et al., 2000). For patients with 2 previous episodes, MBCT provided no statistically significant additional benefits than TAU: 54% relapse in MBCT group compared to 31% relapse in TAU group. Teasdale et al. suggest that different processes might be mediating relapse/recurrence in patients with different numbers of previous episodes. With each additional episode, mood-induced automatic negative thinking patterns are more likely to play a larger role in relapse/recurrence. Since MBCT was designed to reduce these negative thinking patterns, its larger effect in individuals more vulnerable to these negative thinking patterns (i.e., patients with more than 3 previous episodes) might reflect this proposed mechanism of change. Similar to Teasdale et al.'s (2000) findings, Ma and Teasdale (2004) showed that among previously depressed patients with 3 or more depressive episodes, MBCT was more effective than TAU (i.e., seeking help from family doctor or other sources as per usual if symptoms worsened) and reduced the rate of relapse/recurrence from 78% to 36%. Patients with 4 or more previous episodes benefitted the most from MBCT: 38% of patients in the MBCT group relapsed as compared to 100% in TAU.

Empirical evidence also suggests that the effect of MBCT is comparable to that of mADM. Segal et al. (2010) showed that for previously depressed patients in stable or unstable remission, MBCT is as protective as mADM against relapse/recurrence: MBCT and mADM both achieved a 73% reduction in relapse/recurrence rate compared to placebo among unstable remitters; MBCT, mADM, and placebo did not differ among stable remitters. Kuyken et al. (2015) randomly assigned patients with three or more major depressive episodes who were on mADM to continue receiving mADM or to receive MBCT with support to taper/discontinue mADM (MBCT-TS), and measured their time to depressive relapse/recurrence, residual symptoms, and quality of life over 2 years. The authors found that the outcomes of mADM and MBCT-TS were comparably good, as both interventions were associated with lasting positive outcomes. An individual patient data meta-analysis of 9 RCTs suggested that MBCT appears efficacious in preventing relapse among individuals with recurrent depression, especially those with more notable residual symptoms (Kuyken et al., 2016). Compared to usual care or mADM treatment, MBCT was associated with a significant reduction in the risk of relapse/recurrence. Furthermore, MBCT had comparable effects on demographically diverse patients treated in different European and North American countries by different clinicians, which suggests that MBCT is a generalizable intervention.

In addition to the evidence supporting the efficacy of in-person MBCT, a more recent RCT found that an online version of MBCT provided additional improvement in residual depressive symptoms and relapse rate on top of usual depression

care (Segal et al., 2020). Online MBCT offers a promising scalable approach for the prevention of depressive relapse/recurrence.

A randomized clinical trial compared the relapse prophylaxis following MBCT and CT (Farb et al., 2018). Participants were randomly assigned to receive either an 8-week MBCT (N = 82) or CT (N = 84), followed by assessments every 3 months over a 24-month period. No difference was found in terms of rates of relapse or time to relapse between the two groups. Both groups acquired an important metacognitive skill, decentering, which is associated with protection against relapse. These findings suggest that MBCT and CT are equally effective and develop similar metacognitive skills to regulate thoughts and emotions despite their differences in techniques. It is also worth to note that no study to date has directly compared the efficacy between MBCT and other third-wave psychotherapies, such as ACT, in preventing depressive relapse or recurrence.

Since MBCT has been shown to protect against the return of depressive symptoms, how much dosage is needed to bring about such changes? To date, there have been mixed findings for MBCT and mindfulness-based programs in general. A recent meta-analysis suggests that increased practice of mindfulness meditation was associated with greater treatment benefits, such as lower depressive symptoms, but the actual dosage ranges have yet to be specified (Parsons et al., 2017).

## Therapeutic Change Mechanisms of MBCT

Three recent review papers summarized the mechanisms and mediators of change for MBCT for depression (Alsubaie et al., 2017; Gu et al., 2015; van der Velden et al., 2015). Gu et al. (2015) statistically synthesised 15 RCTs and 5 quasi-experimental mindfulness-based intervention studies, combining results from 11 MBCT and 9 MBSR studies. The authors found strong, consistent evidence for the mediating role of cognitive and emotional reactivity, and moderate, consistent evidence for the mediating role of mindfulness and repetitive negative thinking. This finding supports the theoretical underpinnings of MBCT: acquiring mindfulness skills improves insight and non-judgemental acceptance of thoughts and experiences, and potentially alleviates depressive symptoms by reducing the recurrent maladaptive thinking about these symptoms (Segal et al., 2002). The authors also found preliminary although insufficient evidence for the mediating roles of psychological flexibility and self-compassion. It is important to note that these findings reveal the collective effects of MBCT and MBSR, and that the studies were conducted in both clinical (depression, cancer, anxiety, distress) and non-clinical samples.

A systematic review by van der Velden et al. (2015) examined the change mechanisms in 23 MBCT studies in individuals with recurrent MDD. The study found that changes in mindfulness, rumination, worry, compassion, and meta-awareness were all associated with, predicted, or mediated the effects of MBCT on treatment outcome. Preliminary evidence also identifies attention, memory specificity,



self-discrepancy, emotional reactivity, and momentary positive and negative affect as potential contributors to MBCT's effects. Taken together, this review suggests that MBCT may prevent relapse by improving participants' abilities to view their present moment thoughts, emotions, and experiences as transient mental events, and attend to them without engaging in automatic cognitive evaluation processes (e.g., rumination and worry).

In Alsubaie et al.'s (2017) systematic review, 10 studies evaluated MBCT's change mechanisms in treating or preventing depression, compared against active or non-active control groups. Mindfulness, rumination, worry, affect, self-compassion, cognitive and emotional reactivity, and attention have been identified as mechanisms that lead to improvements in current or recurrent depression, although some mixed results exist among these studies. The authors note that there is a need to strengthen the methodological rigour in process RCTs before more definitive conclusions can be drawn about how MBCT brings about changes.

## Cost-Effectiveness of MBCT

In an RCT conducted in the UK (Kuyken et al., 2008), MBCT was compared to mADM over a 15-month follow-up period. MBCT was found to be more effective than mADM in alleviating residual depressive symptoms and improving the quality of life, but no difference was found in the average annual cost between the two interventions. A cost-utility analysis was conducted to measure the difference in the mean costs of the two interventions divided by the difference in their mean effects. It revealed that MBCT has a 42% probability of being the more cost-effective treatment option compared to 58% for mADM, assuming that society is unwilling to pay additional amounts on relapse prevention. As society's willingness to pay increases, the probability of MBCT being the more cost-effective treatment increases; if society is willing to pay more than \$1,000, MBCT has a higher probability of being more cost-effective than mADM. The authors also found that the cost differences between the two treatments converged over time, and MBCT cost less than mADM toward the end of the study. Due to the short follow-up period, it remains unclear if MBCT would be more cost-effective in the long term overall. In another study by Kuyken et al. (2015) with a larger sample, the effectiveness and cost-effectiveness of MBCT was compared to that of mADM over a 24-month period in adults with a history of MDD. Unlike their previous study, this study revealed no significant difference in effectiveness or cost-effectiveness between these two interventions.

In an Australian context (Shawyer et al., 2016), combined MBCT and depressive relapse active monitoring (DRAM) intervention demonstrated a high probability of being less costly and more effective than DRAM alone, as measured by the incremental cost-utility ratio (difference in mean costs between the two interventions divided by the difference in mean disability-adjusted life years). MBCT participants experienced significantly fewer days and shorter durations of depressive episodes than controls; the cost of MBCT was also lower from the perspectives of mental

health care, overall health care, and society as a whole. In a Canadian economic and healthcare context, Pahlevan et al. (2020) conducted a model-based cost-utility analysis comparing MBCT to ADM and found that MBCT was less costly and was associated with a larger gain in health effect than ADM. In all three studies, the side effect profiles of MBCT and antidepressant differed and may have contributed to the neutral or somewhat small cost advantage for MBCT. Difficulties reported by MBCT patients were largely psychological in nature, such as reliving difficult situations or experiencing strong negative affect, whereas for patients receiving ADM, side effects were mostly physiological in nature, e.g. nausea, fatigue, reduced sexual drive, dry mouth, insomnia.

### *Emergent Themes from Qualitative and Case Studies of MBCT*

Eisendrath et al. (2011) presented the case study of Jean, who had struggled with depression all her life. Jean was hopeless and withdrawn from pleasurable activities, believing that nothing would make her feel better. MBCT taught her to stop resisting and start accepting her depression. Through increased awareness of body sensations and thoughts, Jean became more aware of the positive and negative experiences related to depression. She learned to notice when she began to feel more depressed than normal and respond to it by doing things differently. She learned to change her relationship with depression, from seeing it as a daunting enemy to seeing it as a signal about something in her life at that moment, and even as something she could live with. Jean came to see thoughts as thoughts, rather than facts. Breath-focused sitting helped her observe how her thoughts develop in her head without having to believe in what the thoughts were telling her. Being in a group also had its benefits: other MBCT participants appeared normal to Jean, which made her realize that she might also appear more normal to others than she had thought. Jean became better able to sustain attention on his work; her BDI dropped from 28 to 9 after the treatment.

Tickell et al. (2020) identified the common themes in participants' accounts about their experience with MBCT, which include their beliefs about the causes of depression, personal agency, acceptance, quality of life, ADM tapering/discontinuation, and interactions with their doctors. Mason and Hargreaves (2001) identified some trajectories that MBCT participants go through. Some participants start the intervention with their own expectations, encounter some initial setbacks (e.g., not being able to complete homework or not doing it "correctly"), and then come to terms with MBCT as their mindfulness skills develop and their relationship with their thoughts change. They start to detect early warning signs of depressive relapse and learn to apply mindfulness skills to everyday life.

Some core elements can be extracted from these quantitative analyses and case studies. Some participants have initial doubts about how a psychological intervention can fix problems that they believe are caused by neurochemical disruption. Through psychoeducation, they might change their beliefs about the cause of

depression and start to recognize the psychological component of it. MBCT focuses on training metacognitive skills, which help improve participants' sense of agency and control over their depression, especially when they are no longer actively in treatment. It appears that different techniques might work differently for each participant. Many participants benefit from being able to see thoughts and emotions as mental events, rather than facts, and being able to stop avoiding depression and accepting it as a part of their life. It is also critical that participants learn to detect early warning signs for the return of depressive episodes and respond to them by engaging in mindfulness practices that they learned from MBCT. On top of these specific curative factors, many participants acknowledge the benefits of having a social support structure from MBCT group members, therapist, and their general physician.

## **MBCT Case Illustration**

To further illustrate the process of MBCT, we will use Rushil's case as an example. Rushil is a 48-year-old male who immigrated from India eight years ago and works as a logistics manager for a global shipping company. He has a history of recurrent MDD complicated by asthma and osteoarthritis in his right knee. He is married with two children, one of whom is studying in university and the other is pursuing HVAC training at a community college. Rushil has struggled with recurrent depression with obsessive features since his early adulthood. His episodes of depression are associated with irritability, hypersomnia, hyperphagia and social isolation as well as intense worry. He received little treatment for depression in India because his condition was not properly diagnosed until his mid 30s. He showed a moderate response to SSRI antidepressant medication managed by his GP, which was helpful because, once he recognized that he was becoming depressed, starting on an antidepressant allowed him to return to work without taking large amounts of sick leave. Even though he experienced periods of drowsiness at work and constipation, he felt that the primary objective was to reduce his depressive symptoms and he was willing to tolerate these side-effects. Rushil is very committed to his work and receives a good deal of personal validation from his workplace. Once his more severe symptoms had remitted, Rushil's GP advised him to stay on his medication for an additional 3 to 6 months to ensure that the episode was fully treated. Typically, Rushil's mood would stabilize within 3 months of starting on medication and he would often wonder why he needs to continue with the medication when he is not experiencing active symptoms of depression. More recently, Rushil's depressive episodes have become more severe and he had had one short-term hospitalization for suicidal ideation, although he admitted that he would not harm himself because of his wife and children.

Over the past six months, Rushil became depressed again following cutbacks at this workplace that required him to let go of two staff members and left him feeling uncertain about his own position. His wife pointed out that he had been sleeping

more on weekends and turning down social engagements with friends. At his wife's urging he booked an appointment with his GP who asked him to complete a PHQ-9 (Kroenke & Spitzer, 2002). Rushil scored 21 on this measure, leading his GP to suggest that he re-start Celexa, the same antidepressant that was prescribed two years ago for his last episode of depression. Rushil stayed on Celexa for a full year and found that while his energy, appetite and concentration returned within 2–3 months, his sleep was still impaired and he frequently worried about his health and future. His GP felt that given his initial symptom picture, Rushil had in fact responded quite well to Celexa and that the residual symptoms he continued to report could be addressed through attending an MBCT program. He provided Rushil with links to studies on MBCT's efficacy in the treatment of longer-term management of his depression and described how this program could be utilized if Rushil stayed on or decided to discontinue his Celexa.

Rushil attended an MBCT program that was offered at a local health clinic. During his first meeting with the MBCT instructor, Rushil learned about the 8-week group structure and requirements for home practice. When asked how the program could be helpful, Rushil replied that, in addition to help with his insomnia, he would like to “worry less” and “be less sensitive to criticism at work”. With these goals in mind, Rushil started the 8-week program.

In Session 1, the instructor repeatedly referenced the difference between *automatic pilot* and *mindfulness*. These concepts were conveyed through a combination of group discussion and mindfulness practices. In Rushil's first mindfulness practice, the group leader guided him to direct his attention to the sensations of sight, texture, smell, sound, and taste of eating a raisin. Rushil was interested in the answers that other participants provided as the group discussed what was noticed during the practice and how mindful eating might be related to preventing depression and staying well. At the end of the session, the group leader assigned home practice for the week and Rushil was provided with mindfulness recordings that he downloaded as mp3 files to his phone, so that he could listen to these recordings at his convenience between sessions.

In Session 2, Rushil participated in a 30-min Body Scan practice, during which he moved his attention to specific foci in his body. After the practice, he was invited to describe what he noticed during the Body Scan, and to reflect on how intentional deployment of attention contrasted to automatic pilot. By listening to how other participants responded to the same question, Rushil found it reassuring that group members experienced many of the same challenges as he did during the practice, such as feeling sleepy or judging himself when his mind wandered from the practice to thinking about what to make for dinner that night. Next, Rushil completed an exercise that highlighted the relationship between thoughts and feelings. He was asked to imagine a scenario in which he saw a friend walking down the street, waving at his friend, while his friend simply didn't respond. Rushil said that a number of thoughts quickly came into his mind, including “he's mad at me” and “did I do something wrong?” which led to some sadness. Other group members reported thinking “I wonder why he is so stuck up today?” or “he probably has a lot on his mind” which led to feelings of annoyance or concern. The variety of interpretations

provided by the group suggested that there was no single correct way of explaining why the friend didn't wave and that the first thoughts that pop into their minds can often determine the moods we feel. This practice was reinforced with a home practice assignment that involved noting one pleasant event each day and the accompanying thoughts, feelings, and sensations. The following week, Rushil reported that he enjoyed bringing his attention to pleasant events because he noticed many things he would usually miss, such as the smell of coffee in the morning and it helped him to stay more present. Although this practice was not assigned again, Rushil planned to continue doing it in his own time.

In Session 3, Rushil reported feeling connected to the group leader, who he described as being patient and understanding. In this session, he was guided through a sitting meditation. He noted the physical sensations that were present during this practice, and how busy his mind was the entire time. He participated in two additional mindfulness practices, including a number of mindful stretches and an informal practice called the 3 Minute Breathing Space (3MBS). The 3MBS was described as a "mini-meditation" to be used at any point during the day, and as a first step in dealing with difficult situations. While reviewing the previous week's home practice, Rushil noted that it was difficult to make time to complete the Body Scan every day and that he was looking forward to having a briefer meditation option. In addressing the whole on the topic of home practice, the group leader noted that participants may encounter obstacles to daily home practice, especially in the first few sessions of the program. Together, Rushil and the group leader identified some ideas to support his practice, including protecting his practice time by adding it to his calendar and 'cutting himself some slack' when unexpected challenges get in the way. Determined considered a plan where he could complete briefer practices during busy workdays and longer practices on the weekends.

In Session 4, "Exploring the Landscape of Depression", Rushil learned about the neurovegetative symptoms and cognitive features that comprise the syndrome of depression. Seeing these signs early on plays a vital role in prevent depression from gathering momentum because it supports earlier intervention. He reviewed a list of frequent negative automatic thoughts and created a personalized list of thoughts that accompany his depressive episodes, such as "I'm a loser" or "others don't respect me". He noticed that the mindfulness practices helped increase his ability to observe the presence of these thoughts without getting pulled into disputing them.

In Session 5, Rushil practiced bringing his mindfulness skills of awareness, curiosity and investigation to more emotionally challenging situations. During a sitting meditation Rushil brought to mind an argument he had with a co-worker and noticed that while strong feelings or anger arose along with tightness in his chest, these did not last the entire time and actually gave way to feelings of regret and sensations of relaxation around his eyes. At first, Rushil was worried that focusing on negative events in this way might even hasten the onset of depression but with time, he found by allowing and simply attending to these moments of negative affect, they changed in intensity or provided him with new ideas for how to cope with them. For example, there were moments when he was able to stand back a bit and watch his thoughts

instead of reacting to them. At other times he could simply label his emotions, saying, “Oh, sadness is here” or “there is fear”.

Session 6 extended these concepts by showing how mindful attention can be linked to effective action when responding to emotional difficulties. Following a 3MBS practice, the instructor outlined “Four Doors” for taking mindful action when negative thoughts, emotions, or sensations are present. The first door, “Re-entry”, suggests that participants act by simply bringing their awareness to a difficulty. The second “Body Door” invites participants to attend to the ways in which difficult emotions can present themselves as physical sensations. The third “Thought Door” suggests bringing awareness to observing negative thoughts coming and going in the mind, rather than getting pulled into their content. The fourth “Door of Skillful Action” highlights the option of asking what is needed right now to help one take best care of oneself and then going ahead and doing that. Rushil told the group leader that over the past two weeks, he was surprised at how taking a 3MBS allowed him to face emotional challenges both at work and at home without resorting to automatically blaming himself or others.

In Sessions 7 (“Building Your Plan of Action”) and 8 (“Supporting Your Practice in the World”), Rushil reflected on which self-care activities he could engage in to make himself feel happier, more active, and engaged in his life. He identified his personal relapse signature as composed of hypersomnia and social withdrawal and wrote a letter to himself to itemize the strategies he learned in the program. This letter was intended to be read if he became depressed in the future and it outlined a customized wellness plan that included activities such as: “Call your sister if you notice your mood is starting to drop. Do one nice thing for yourself each day like buying a magazine you’ll enjoy reading during lunch, or make plans to go for dinner after work with a friend.” Rushil reviewed his wellness plan with his spouse so that she could act as an additional support in putting his plan into action. He kept the letter in his closet and another copy on his computer so that it would be easy to find if and when it was needed. Towards the end of the program, Rushil told the group that he really enjoying the practical suggestions for staying well that were provided in the last two sessions of the program. When asked what practices he saw himself sticking with after the group, he said he could see himself using the 3MBS pretty regularly and going to a Yoga class on the weekend. Overall, he felt he had more of a plan for addressing his low moods and felt good that there was a role he could play in looking after himself over the long term.

## Concluding Remarks

In this chapter, we compared third-wave psychotherapeutic approaches to earlier approaches, using MBCT as a primary example. A wealth of research shows that MBCT is an efficacious and cost-effective alternative to CBT and antidepressants in preventing depression relapse and recurrence among people who have a history of depression. From a combination of quantitative and qualitative studies, we are starting to better understand how MBCT brings about its therapeutic effects, for



example, by training people to see thoughts and emotions as *mental events* instead of *facts* and to respond to these mental events with an attitude of acceptance and non-judgement.

## References

- Alsubaie, M., Abbott, R., Dunn, B., Dickens, C., Keil, T. F., Henley, W., & Kuyken, W. (2017). Mechanisms of action in mindfulness-based cognitive therapy (MBCT) and mindfulness-based stress reduction (MBSR) in people with physical and/or psychological conditions: A systematic review. *Clinical Psychology Review*, *55*, 74–91. <https://doi.org/10.1016/j.cpr.2017.04.008>
- Beck, A. T. (1967). *Depression: Clinical, experimental, and theoretical aspects*. Harper & Row.
- Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. Guilford Press.
- Eisendrath, S., Chartier, M., & McLane, M. (2011). Adapting mindfulness-based cognitive therapy for treatment-resistant depression: A clinical case study. *Cognitive and Behavioral Practice*, *18*(3), 362–370. <https://doi.org/10.1016/j.cbpra.2010.05.004>
- Farb, N., Anderson, A., Ravindran, A., Hawley, L., Irving, J., Mancuso, E., Gulamani, T., Williams, G., Ferguson, A., & Segal, Z. V. (2018). Prevention of relapse/recurrence in major depressive disorder with either mindfulness-based cognitive therapy or cognitive therapy. *Journal of Consulting and Clinical Psychology*, *86*(2), 200–204. <https://doi.org/10.1037/ccp0000266>
- Frank, E., Prien, R. F., Jarrett, R. B., Keller, M. B., Kupfer, D. J., Lavori, P. W., Rush, A. J., & Weissman, M. M. (1991). Conceptualization and rationale for consensus definitions of terms in major depressive disorder: Remission, recovery, relapse, and recurrence. *Archives of General Psychiatry*, *48*(9), 851–855. <https://doi.org/10.1001/archpsyc.1991.01810330075011>
- Garber, J., Clarke, G. N., Weersing, V. R., Beardslee, W. R., Brent, D. A., Gladstone, T. R. G., DeBar, L. L., Lynch, F. L., D'Angelo, E., Hollon, S. D., Shamseddeen, W., & Iyengar, S. (2009). Prevention of depression in at-risk adolescents: A randomized controlled trial. *JAMA*, *301*(21), 2215. <https://doi.org/10.1001/jama.2009.788>
- Geddes, J. R., Carney, S. M., Davies, C., Furukawa, T. A., Kupfer, D. J., Frank, E., & Goodwin, G. M. (2003). Relapse prevention with antidepressant drug treatment in depressive disorders: A systematic review. *The Lancet*, *361*(9358), 653–661. [https://doi.org/10.1016/S0140-6736\(03\)12599-8](https://doi.org/10.1016/S0140-6736(03)12599-8)
- Gu, J., Strauss, C., Bond, R., & Cavanagh, K. (2015). How do mindfulness-based cognitive therapy and mindfulness-based stress reduction improve mental health and wellbeing? A systematic review and meta-analysis of mediation studies. *Clinical Psychology Review*, *37*, 1–12. <https://doi.org/10.1016/j.cpr.2015.01.006>
- Guidi, J., Tomba, E., & Fava, G. A. (2016). The sequential integration of pharmacotherapy and psychotherapy in the treatment of major depressive disorder: A meta-analysis of the sequential model and a critical review of the literature. *American Journal of Psychiatry*, *173*(2), 128–137. <https://doi.org/10.1176/appi.ajp.2015.15040476>
- Hayes, S. C. (2004). Acceptance and commitment therapy, relational frame theory, and the third wave of behavioral and cognitive therapies. *Behavior Therapy*, *35*(4), 639–665. [https://doi.org/10.1016/S0005-7894\(04\)80013-3](https://doi.org/10.1016/S0005-7894(04)80013-3)
- Hollon, S. D., DeRubeis, R. J., Shelton, R. C., Amsterdam, J. D., Salomon, R. M., O'Reardon, J. P., Lovett, M. L., Young, P. R., Haman, K. L., Freeman, B. B., & Gallop, R. (2005). Prevention of relapse following cognitive therapy vs medications in moderate to severe depression. *Archives of General Psychiatry*, *62*, 6.
- Hollon, S. D., Stewart, M. O., & Strunk, D. (2006). Enduring effects for cognitive behavior therapy in the treatment of depression and anxiety. *Annual Review of Psychology*, *57*(1), 285–315. <https://doi.org/10.1146/annurev.psych.57.102904.190044>

- Judd, L. L., Paulus, M. J., Schettler, P. J., Akiskal, H. S., Endicott, J., Leon, A. C., Maser, J. D., Mueller, T., Solomon, D. A., & Keller, M. B. (2000). Does incomplete recovery from first lifetime major depressive episode herald a chronic course of illness? *American Journal of Psychiatry*, *157*(9), 1501–1504. <https://doi.org/10.1176/appi.ajp.157.9.1501>
- Kabat-Zinn, J. (2013). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness*. Random House Publishing Group.
- Kinrys, G., Gold, A. K., Pisano, V. D., Freeman, M. P., Papakostas, G. I., Mischoulon, D., Nierenberg, A. A., & Fava, M. (2019). Tachyphylaxis in major depressive disorder: A review of the current state of research. *Journal of Affective Disorders*, *245*, 488–497. <https://doi.org/10.1016/j.jad.2018.10.357>
- Kroenke, K., & Spitzer, R. L. (2002). The PHQ-9: A new depression diagnostic and severity measure. *Psychiatric Annals*, *32*(9), 509–515. <https://doi.org/10.3928/0048-5713-20020901-06>
- Kuyken, W., Byford, S., Taylor, R. S., Watkins, E., Holden, E., White, K., Barrett, B., Byng, R., Evans, A., Mullan, E., & Teasdale, J. D. (2008). Mindfulness-based cognitive therapy to prevent relapse in recurrent depression. *Journal of Consulting and Clinical Psychology*, *76*(6), 966–978. <https://doi.org/10.1037/a0013786>
- Kuyken, W., Hayes, R., Barrett, B., Byng, R., Dalgleish, T., Kessler, D., Lewis, G., Watkins, E., Brejcha, C., Cardy, J., Causley, A., Cowderoy, S., Evans, A., Gradinger, F., Kaur, S., Lanham, P., Morant, N., Richards, J., Shah, P., et al. (2015). Effectiveness and cost-effectiveness of mindfulness-based cognitive therapy compared with maintenance antidepressant treatment in the prevention of depressive relapse or recurrence (PREVENT): A randomised controlled trial. *The Lancet*, *386*(9988), 63–73. [https://doi.org/10.1016/S0140-6736\(14\)62222-4](https://doi.org/10.1016/S0140-6736(14)62222-4)
- Kuyken, W., Warren, F. C., Taylor, R. S., Whalley, B., Crane, C., Bondolfi, G., Hayes, R., Huijbers, M., Ma, H., Schweizer, S., Segal, Z., Speckens, A., Teasdale, J. D., Van Heeringen, K., Williams, M., Byford, S., Byng, R., & Dalgleish, T. (2016). Efficacy of mindfulness-based cognitive therapy in prevention of depressive relapse: An individual patient data meta-analysis from randomized trials. *JAMA Psychiatry*, *73*(6), 565–574. <https://doi.org/10.1001/jamapsychiatry.2016.0076>
- Ma, S. H., & Teasdale, J. D. (2004). Mindfulness-based cognitive therapy for depression: Replication and exploration of differential relapse prevention effects. *Journal of Consulting and Clinical Psychology*, *72*(1), 31–40. <https://doi.org/10.1037/0022-006X.72.1.31>
- Masand, P. S. (2003). Tolerability and adherence issues in antidepressant therapy. *Clinical Therapeutics*, *25*(8), 2289–2304. [https://doi.org/10.1016/s0149-2918\(03\)80220-5](https://doi.org/10.1016/s0149-2918(03)80220-5)
- Mason, O., & Hargreaves, I. (2001). A qualitative study of mindfulness-based cognitive therapy for depression. *British Journal of Medical Psychology*, *74*(2), 197–212. <https://doi.org/10.1348/000711201160911>
- Olfson, M., Marcus, S. C., Tedeschi, M., & Wan, G. J. (2006). Continuity of antidepressant treatment for adults with depression in the United States. *The American Journal of Psychiatry*, *163*(1), 101–108. <https://doi.org/10.1176/appi.ajp.163.1.101>
- Pahlevan, T., Ung, C., & Segal, Z. (2020). Cost–utility analysis of mindfulness-based cognitive therapy versus antidepressant pharmacotherapy for prevention of depressive relapse in a Canadian context. *The Canadian Journal of Psychiatry*, *65*, 0706743720904613. <https://doi.org/10.1177/0706743720904613>
- Parsons, C. E., Crane, C., Parsons, L. J., Fjorback, L. O., & Kuyken, W. (2017). Home practice in mindfulness-based cognitive therapy and mindfulness-based stress reduction: A systematic review and meta-analysis of participants' mindfulness practice and its association with outcomes. *Behaviour Research and Therapy*, *95*, 29–41. <https://doi.org/10.1016/j.brat.2017.05.004>
- Samples, H., & Mojtabai, R. (2015). Antidepressant self-discontinuation: Results from the collaborative psychiatric epidemiology surveys. *Psychiatric Services*, *66*(5), 455–462. <https://doi.org/10.1176/appi.ps.201400021>
- Sansone, R. A., & Sansone, L. A. (2012). Antidepressant adherence: Are patients taking their medications? *Innovations in Clinical Neuroscience*, *9*(5–6), 41–46.
- Segal, Z. V., Williams, J. M., Teasdale, J. D., & Gemar, M. (1996). A cognitive science perspective on kindling and episode sensitization in recurrent affective disorder. *Psychological Medicine*, *26*(2), 371–380. <https://doi.org/10.1017/S0033291700034760>



- Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2002). *Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse* (pp. 14–351). Guilford Press.
- Segal, Z. V., Kennedy, S., Gemar, M., Hood, K., Pedersen, R., & Buis, T. (2006). Cognitive reactivity to sad mood provocation and the prediction of depressive relapse. *Archives of General Psychiatry*, *63*(7), 749. <https://doi.org/10.1001/archpsyc.63.7.749>
- Segal, Z. V., Bieling, P., Young, T., MacQueen, G., Cooke, R., Martin, L., Bloch, R., & Levitan, R. D. (2010). Antidepressant monotherapy vs sequential pharmacotherapy and mindfulness-based cognitive therapy, or placebo, for relapse prophylaxis in recurrent depression. *Archives of General Psychiatry*, *67*(12), 1256. <https://doi.org/10.1001/archgenpsychiatry.2010.168>
- Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2013). *Mindfulness-based cognitive therapy for depression* (2nd ed., pp. 19–451). The Guilford Press.
- Segal, Z. V., Dimidjian, S., Beck, A., Boggs, J. M., Vanderkruik, R., Metcalf, C. A., Gallop, R., Felder, J. N., & Levy, J. (2020). Outcomes of online mindfulness-based cognitive therapy for patients with residual depressive symptoms: A randomized clinical trial. *JAMA Psychiatry*, *77*(6), 563. <https://doi.org/10.1001/jamapsychiatry.2019.4693>
- Shawyer, F., Enticott, J. C., Özmen, M., Inder, B., & Meadows, G. N. (2016). Mindfulness-based cognitive therapy for recurrent major depression: A “best buy” for health care? *The Australian and New Zealand Journal of Psychiatry*, *50*(10), 1001–1013. <https://doi.org/10.1177/0004867416642847>
- Solomon, D. A. (2000). Multiple recurrences of major depressive disorder. *American Journal of Psychiatry*, *157*(2), 229–233. <https://doi.org/10.1176/appi.ajp.157.2.229>
- Teasdale, J. D. (1983). Negative thinking in depression: Cause, effect, or reciprocal relationship. *Advances in Behaviour Research and Therapy*, *5*(1), 3–25. [https://doi.org/10.1016/0146-6402\(83\)90013-9](https://doi.org/10.1016/0146-6402(83)90013-9)
- Teasdale, J. D. (1988). Cognitive vulnerability to persistent depression. *Cognition and Emotion*, *2*(3), 247–274. <https://doi.org/10.1080/02699938808410927>
- Teasdale, J. D., Segal, Z., & Williams, J. M. G. (1995). How does cognitive therapy prevent depressive relapse and why should attentional control (mindfulness) training help? *Behaviour Research and Therapy*, *33*(1), 25–39. [https://doi.org/10.1016/0005-7967\(94\)E0011-7](https://doi.org/10.1016/0005-7967(94)E0011-7)
- Teasdale, J. D., Segal, Z. V., Williams, J. M. G., Ridgeway, V. A., Soulsby, J. M., & Lau, M. A. (2000). Prevention of relapse/recurrence in major depression by mindfulness-based cognitive therapy. *Journal of Consulting and Clinical Psychology*, *68*(4), 615–623. <https://doi.org/10.1037/0022-006X.68.4.615>
- Teasdale, J., Williams, M., & Segal, Z. (2014). *The mindful way workbook: An 8-week program to free yourself from depression and emotional distress* (pp. 11–228). Guilford Press.
- Tickell, A., Byng, R., Crane, C., Gradinger, F., Hayes, R., Robson, J., Cardy, J., Weaver, A., Morant, N., & Kuyken, W. (2020). Recovery from recurrent depression with mindfulness-based cognitive therapy and antidepressants: A qualitative study with illustrative case studies. *Open Access*, 13.
- van der Velden, A. M., Kuyken, W., Wattar, U., Crane, C., Pallesen, K. J., Dahlgaard, J., Fjorback, L. O., & Piet, J. (2015). A systematic review of mechanisms of change in mindfulness-based cognitive therapy in the treatment of recurrent major depressive disorder. *Clinical Psychology Review*, *37*, 26–39. <https://doi.org/10.1016/j.cpr.2015.02.001>
- Williams, M., Teasdale, J., Segal, Z., & Kabat-Zinn, J. (2007). *The mindful way through depression: Freeing yourself from chronic unhappiness* (pp. 8–273). Guilford Press.
- Woolley, S. B., Fredman, L., Goethe, J. W., Lincoln, A. K., & Heeren, T. (2010). Hospital patients’ perceptions during treatment and early discontinuation of serotonin selective reuptake inhibitor antidepressants. *Journal of Clinical Psychopharmacology*, *30*(6), 716–719. <https://doi.org/10.1097/jcp.0b013e3181fc343b>
- World Health Organization. (2017). *Depression and other common mental disorders*. Retrieved from [http://www.who.int/mental\\_health/management/depression/prevalence\\_global\\_health\\_estimates/en/](http://www.who.int/mental_health/management/depression/prevalence_global_health_estimates/en/)