

Common Mechanisms of Change in Mindfulness-Based Cognitive Therapy (MBCT) and Traditional Cognitive Behavioral Therapy (CBT): Implications for Therapeutic Effectiveness

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This research paper investigates the shared mechanisms of change between Mindfulness-Based Cognitive Therapy (MBCT) and the traditional form of Cognitive Behavioral Therapy (CBT), through the lens of the Research Domain Criteria (RDoC), aiming to understand their cross-dimensional therapeutic effectiveness in treating psychological disorders. While MBCT emphasizes mindfulness and acceptance, and CBT focuses on altering negative thought patterns, both therapies share key mechanisms of change that promote emotional regulation and resilience. Using RDoC's transdiagnostic perspective, this study highlights how MBCT and CBT influence cognitive systems, negative valence, and social processes to improve treatment outcomes across multiple psychological disorders. The study conducts an in-depth review of literature, including journal articles, books, and empirical studies, to identify and analyze these common therapeutic mechanisms. The findings reveal that both MBCT and CBT foster improvements in emotional regulation (RDoC domain: Negative Valence Systems), attentional bias modification (RDoC domain: Cognitive Systems), stress resilience (RDoC domain: Arousal/Regulatory Systems), improved self-awareness, and emotional granularity (RDoC domain: Cognitive Systems, offering potential application to therapeutic practices aligned with RDoC's transdiagnostic perspective. Keywords: Mechanism of Change, Transdiagnostic Approach, Mindfulness-Based Cognitive Therapy (MBCT), Cognitive Behavioral Therapy (CBT), Treatment Outcomes

Introduction

Cognitive Behavioral Therapy (CBT) has been a widely practiced therapeutic approach since the 1960s and was developed by Dr. Aaron T. Beck, with contributions by Albert Ellis in the 1950s through Rational Emotive Behavior Therapy (REBT), which served as a precursor to CBT¹. CBT focuses on thinking patterns resulting from our thoughts and beliefs and how those beliefs affect our emotions and responses. CBT aims to address negative thoughts and emotions by directly identifying and altering the negative thoughts and behaviors through cognitive restructuring and behavioral activation as its core mechanisms of change. Since the advent, CBT has broadened to development and inclusion of various other forms of therapies such as Acceptance and Commitment Therapy (ACT), Dialectical Behavior therapy (DBT), Mindfulness-Based Stress Reduction (MBSR), Mindfulness-Based Cognitive Therapy (MBCT), and Metacognitive Therapy (MCT). These therapeutic practices employ diverse techniques and methodologies to effectively tackle mental health issues, including anxiety and depression². These therapies, while rooted in the principles of CBT, introduce varied techniques and strategies to address mental health disorders.

Mindfulness-based Cognitive therapy (MBCT) is a form of

CBT that focuses on accepting the present moment without preset notions and judgments and living in the moment.³. Rather than looking at the specific trigger or negative emotion with an aim to alter them, MBCT focuses on altering the relationship with the thought itself by exploring mindfulness techniques for a more holistic approach towards attaining and maintaining positive outcomes⁴. MBCT was developed in 2002 by Zindel Segal, Mark Williams, and John Teasdale. The therapy primarily focused on using elements of cognitive therapy in combination with mindfulness practices to help address mental health conditions⁵.

The focus of this paper is to explore the common mechanisms of change in MBCT and traditional CBT with an objective to understand how these mechanisms contribute to therapeutic effectiveness in treating mental health disorders. This research is guided by the framework of the Research Domain Criteria (RDoC), which offers a comprehensive and transdiagnostic approach to understanding mental health disorders. The RDoC initiative, launched by the National Institute of Mental Health (NIMH), represents a new approach to investigating mental health disorders. Unlike traditional diagnostic systems such as the DSM, which categorize disorders based on observable symptoms, RDoC seeks to understand the underlying neurobiological behavioral processes that contribute

to mental health and illness. This transdiagnostic approach provides a more holistic view of psychological disorders, identifying commonalities across diagnostic categories. The RDoC framework is organized into six major domains such as Negative Valence Systems, Positive Valence Systems, Cognitive Systems, Social Processes, Arousal/Regulatory Systems, and Sensorimotor Systems. Each domain constructs and subconstructs that represent specific behavioral and neurobiological components.

One of the key advantages of the RDoC framework is its focus on transdiagnostic mechanisms, which are underlying processes that cut across traditional diagnostic boundaries. RDoC's transdiagnostic framework allows for the identification of mechanisms of change, such as emotional regulation and attentional control that are shared across disorders. This aligns with the goals of MBCT and CBT, both of which target core psychological processes that are relevant to a wide range of mental health conditions. This approach allows for a more nuanced understanding of mental health conditions and their treatment, emphasizing commonalities in the etiology and therapeutic processes across different disorders.

By leveraging RDoC's comprehensive and cross-dimensional approach, this research aims to identify common mechanisms of change in the MBCT and traditional CBT and understand how these mechanisms contribute to therapeutic effectiveness. Emotional regulation, a key mechanism in both MBCT and CBT, aligns with RDoC's Negative Valence Systems, which focuses on responses to aversive stimuli. Similarly, attentional bias modification is associated with the Cognitive Systems domain, which encompasses processes like attention and memory.

Additionally, attentional control spans both the Cognitive Systems and Arousal/Regulatory Systems, playing a key role in how individuals manage stress and maintain focus. RDoC's focus on cross-dimensional constructs provides a flexible framework for understanding how therapies like MBCT and CBT address shared mechanisms of change across a variety of mental health conditions. This allows for a more tailored approach to therapy, one that recognizes the complexity and heterogeneity of individual experiences with mental illness. For instance, CBT's cognitive restructuring help patients reduce negative valence by changing maladaptive thoughts, while MBCT's focus on mindfulness improves cognitive control and emotion regulation through sustained attention and non-reactivity.

Given the vast heterogeneity in patients' backgrounds and the high rates of comorbidity in psychological disorders, there is a pressing need to re-examine our therapeutic approaches to ensure they are as effective as possible for the largest numbers of people. The RDoC initiative recommends looking beyond the usual diagnostic categories to better understand and treat the underlying causes of the disorder, which can lead to more customized and effective treatments⁶.

The RDoC framework is particularly useful in understanding comorbid mental health conditions, which often involve overlapping symptoms and shared neurobiological pathways. By focusing on fundamental mechanisms like emotional regulation and cognitive control, MBCT and CBT offer flexible therapeutic strategies that can be applied to various disorders, addressing the root causes of emotional and cognitive dysfunctions.

Traditional CBT and MBCT are therapeutic practices adopted by mental health therapists to help improve mental health disorders such as depression, anxiety, phobias, and other post-traumatic stress disorders. The effectiveness of each of the therapies depends on multiple variables such as underlying health conditions e.g., diabetes⁷ and co-morbid mental health disorders such as obsessive-compulsive disorder⁸ that may already exist and how the patient responds (e.g., cognitive style, personality factors, cultural differences). While MBCT utilizes mindfulness practices to help treat mental health disorders³, traditional CBT approaches treatment differently by assisting individuals to identify and challenge negative thought patterns⁹.

Both MBCT and traditional CBT have proven to be effective for managing mental health disorders, but they differ in their approach. MBCT focuses on mindfulness and acceptance of thoughts without actively trying to change them, aiming to prevent relapse in conditions like depression. In contrast, traditional CBT targets altering negative thought patterns and behaviors towards positive ones. While both aim for psychological well-being, MBCT emphasizes understanding and non-judgmental observation of thoughts, and traditional CBT seeks to utilize strategies to transform the thoughts and beliefs that serve as a trigger leading to a specific behavioral outcome such as anxiety or depression¹⁰. Mechanisms like emotional regulation are relevant across multiple RDoC domains. In Negative Valence Systems, emotional regulation helps mitigate responses to negative stimuli, while in the Positive Valence Systems, it enhances the capacity to sustain positive emotional states. Similarly, attentional control spans both the Cognitive systems and Arousal/Regulatory systems, playing a key role in how individuals manage stress and maintain focus. Hence, it is essential to understand the effectiveness of each therapy's therapeutic process to apply the most suitable treatment to achieve the optimal outcome for a potential or current patient.

A comparative analysis of the mechanism of change each therapy applies to achieve similar outcomes can help therapists enhance their understanding of how each therapy achieves similar outcomes. This insight can help therapists to more effectively tailor their approaches within the framework to best suit patients' needs and enhance therapeutic effectiveness. This paper aims to provide a comparative analysis of the mechanisms of change in MBCT and CBT through the lens of the RDoC framework. By doing so, it seeks to illuminate how both therapies, despite their different methodologies, contribute to therapeutic outcomes across a wide range of mental health

conditions.

Conceptual Model

Figure 1 displays the overarching theoretical concept/conceptual model that this paper discusses. By utilizing common mechanisms of change among two distinct therapies, in the response to seemingly different disorders, therapists can maximize their treatment. Figure 2 represents a model of this idea in the context of this paper. An MBCT therapist may choose to use mindfulness practices and the accepting of thoughts to treat what they may label as ‘anxiety’ in their patient and a CBT therapist may choose to use cognitive restructuring and behavioral activation to treat what they may label as ‘depression’ in their patient. Both therapists have come to this conclusion using whatever symptoms their patient may have displayed.

RDoC’s transdiagnostic perspective makes it such that these respective therapists are not treating just anxiety or depression, but are treating both, or more disorders, at the same time, as disorders, shouldn’t be treated as distinct. RDoC principles underscore the limitations of traditional diagnostic categories and the importance of a more individualized approach that cuts across these categories. Hence, the patients that both therapists are treating isn’t suffering from just one or the other, but both disorders simultaneously, and so, it would be looked favorably upon to utilize the common mechanism of change that both these therapies use in treating anxiety or depression so that this common mechanism of change can be used to treat both the anxiety and depression that the patient may have. Emotional regulation, attentional bias modification, and other mechanisms of change for example, are used to treat anxiety and depression separately, but using RDoC’s transdiagnostic perspective, these disorders aren’t separate. A patient doesn’t just have one or the other; they are suffering through both. So, if a patient may be suffering from both anxiety and depression, therapists could focus their therapy on the mechanisms of change that two distinct therapies share in treating the disorders the patient may have. If these mechanisms treat anxiety and depression in separate cases, and the patient has both, then these mechanisms can be used to treat anxiety and depression at once. Since emotional regulation and attentional bias modification is used to treat both depression and anxiety and the patient has both (according to RDoC’s approach) the therapy could be centered around these mechanisms of change to treat both disorders.

Methods

This literature review follows the Synthesis Without Meta-analysis (SWiM) framework, which is designed to facilitate the qualitative synthesis of research findings when formal meta-analysis is not feasible. SWiM emphasizes the importance of

systematically organizing and interpreting the data from multiple studies, allowing for a nuanced understanding of therapeutic practices without aggregating quantitative data.

Search Strategy: A systematic search was conducted in January 2024 using several online databases, including Google Scholar, APA PsycInfo, PubMed, ScienceDirect, Sage Publications, and ResearchGate. Initial search strings incorporated terms related to both MBCT and CBT, as well as relevant mechanisms of change. To refine the search, Boolean operators (AND, OR) were employed, resulting in a comprehensive set of articles focusing on therapeutic effectiveness and mechanisms of change. Key search terms included “Therapeutic Effectiveness of MBCT”, “Therapeutic Effectiveness of CBT”, “Mechanisms of Change of CBT”, “Mindfulness-Based Interventions”, “Cognitive Behavioral Interventions”, “Mental Health Treatments”, “Psychological Therapies”, “Cognitive Restructuring”, “Depression Relapse Prevention”, “Therapeutic Mechanisms”, “Mindfulness Practices”, etc. Online databases and platforms utilized for this search comprised of Google Scholar, American Psychology Association, Institute of Education Sciences website, PubMed, Psychology Today, Science Direct website, Sage Publications, and ResearchGate.

Inclusions Criteria: Peer-reviewed articles published within the last 5 to 7 years focusing on the therapeutic effectiveness of MBCT and CBT, their mechanisms of change, and empirical studies involving human subjects were included. Articles older than 10 years were also considered to establish a foundational understanding of each therapy, their relevance to the research topic and original contributions by scientists on the topic.

Exclusion Criteria: Studies that did not focus on MBCT or CBT, non-peer-reviewed articles, and those lacking empirical data were excluded. Additionally, studies not published in English were also excluded.

PICO Framework: The PICO framework was adopted in this literature review to systematically organize the relevant studies by focusing on the population studied, the interventions applied, and the outcomes observed, thus providing a clear structure to the comparison of mechanisms of change in MBCT and CBT.

- Population: Adults diagnosed with mental health disorders, particularly depression and anxiety.
- Intervention: Mindfulness-Based Cognitive Therapy (MBCT) and Cognitive Based Therapy (CBT)
- Comparison: Comparative analysis between MBCT and CBT regarding their mechanisms of change.
- Outcome: The effectiveness of each therapeutic approach in enhancing health outcomes, including measures of emotional regulation, self-awareness, and relapse prevention

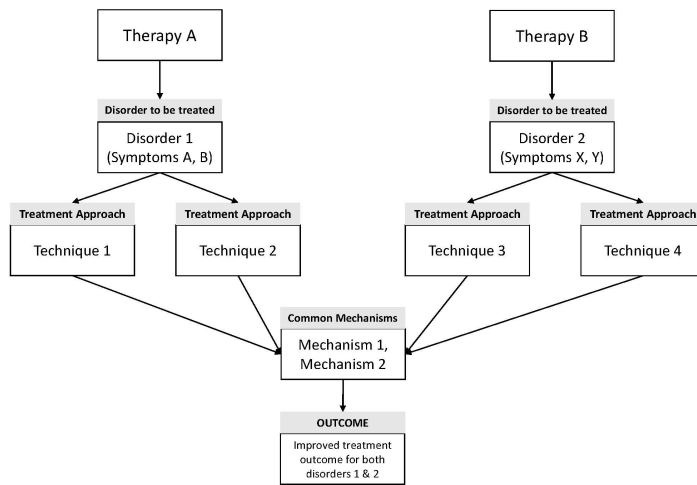


Figure 1: Theoretical Conceptual Model of Common Mechanisms in MBCT and CBT

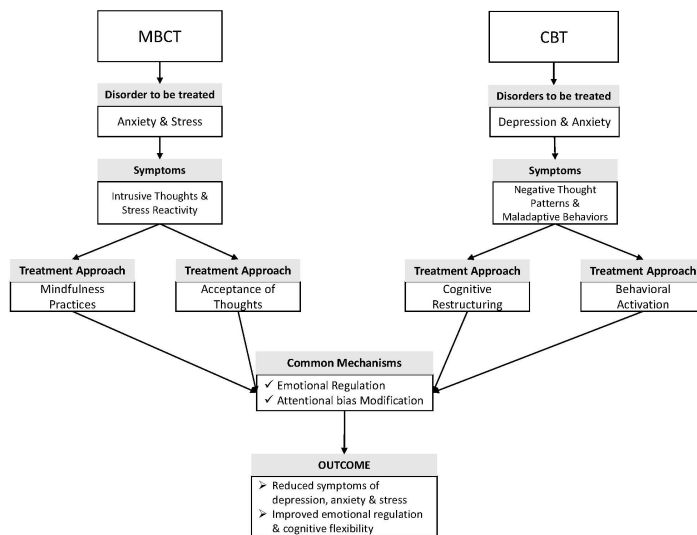


Figure 2: Application of Shared Mechanisms in MBCT and CBT Therapy

Selected articles were analyzed qualitatively, focusing on identifying and contrasting the mechanisms of change in MBCT and CBT. The SWiM framework guided the synthesis of findings, allowing for a thematic comparison of the literature. Each study's contribution to understanding therapeutic effectiveness was narratively summarized, highlighting both distinct and shared mechanisms of change.

While the SWiM framework provides a structured approach to synthesis, it is important to acknowledge the inherent limitations of qualitative analysis, including potential biases in study selection and interpretation. This review aimed to mitigate these issues by employing a rigorous selection process and ensuring a broad representation of perspectives in the literature.

Ultimately, this literature review seeks to elucidate the shared and distinct mechanisms of change in MBCT and CBT, employing a systematic approach that facilitates a deeper understanding of their therapeutic effectiveness as guided by the SWiM framework.

Mindfulness-Based Cognitive Therapy (MBCT)

Mindfulness-Based Cognitive Therapy primarily focuses on using elements of cognitive therapy in combination with mindfulness practices to help address mental health disorders. Mindfulness enables individuals to break free from harmful or reflexive patterns by teaching them to observe their emotions, thoughts, and immediate experiences neutrally, without judgment, to an immediate reaction¹¹.

MBCT explores mindfulness techniques for a more holistic approach towards attaining and maintaining positive outcomes. It is best suited for self-critical people who ruminate a lot by constantly chewing over things that have happened to them in the past and have a strong feeling of worthlessness and loneliness. It is especially suitable for people at risk of depressive relapse as MBCT has an additive benefit to usual care¹².

MBCT uses mindfulness practices (e.g., accepting, present moment awareness, cognitive defusion, mindfulness of thought and mindfulness of emotions) as its core mechanism to cultivate present moment awareness and non-judgmental observation of thoughts and feelings. It also draws on cognitive therapy exercises to help recognize negative thought patterns, which serve as a secondary mechanism, along with some education about depression or stress. The heightened awareness of one's bodily sensations and thoughts in the present moment helps individuals be more mindful and manage the signs of relapse.

Effectiveness of MBCT: Mechanisms and Examples

1. **Acceptance:** Accepting the present moment without preset notions or judgments allows individuals to experience their thoughts and feelings without immediate reaction. This helps reduce the power of negative emotions and thoughts,

leading to decreased anxiety and depressive symptoms. For example, a participant practicing acceptance learns to acknowledge their feelings of sadness without labeling them as bad or trying to change them immediately. Over time, this reduces the intensity of their emotional distress.

2. **Present Moment Awareness (Non-Judgmental Observation):** This involves learning to observe the current moment without judgment. By staying present, individuals avoid getting caught up in past regrets or future worries, which are common in depression and anxiety. This shift in focus helps reduce rumination and fosters a sense of calm and clarity. For instance, during a mindfulness exercise, an individual might focus on their breathing and notice each breath without trying to control it or judge it. This practice helps ground them in the present and reduces anxious thoughts about the future.
3. **Mindfulness of Thought (Decentering):** Decentering involves acknowledging and being aware of thoughts as passing events rather than facts. This mechanism helps individuals detach from their thoughts, reducing the tendency to identify with negative thinking patterns. It helps in seeing thoughts as transient mental events, which diminishes their impact. For example, when a negative thought such as "I am worthless" arises, the individual recognizes it as just a thought, not a reality. This reduces the emotional pain associated with such thoughts and prevents them from spiraling into deeper depression.
4. **Mindfulness of Emotions (Emotional Regulation):** This involves being aware of emotions and appreciating what we have right now rather than focusing on unmet desires. Emotional regulation through mindfulness helps individuals understand and manage their emotional responses better. By recognizing and accepting their emotions, individuals can respond to them more thoughtfully rather than reactively, leading to improved emotional stability. For example, an individual feels a surge of anger but, through mindfulness, acknowledges the emotion and lets it pass without acting on it impulsively. This leads to better control over emotional responses and reduces conflict and stress.
5. **Cognitive Defusion (Reduction in Rumination):** Cognitive defusion involves slowing down the mental chatter and taking a pause from constant thinking. This mechanism helps individuals step back from their thoughts, which reduces the tendency to ruminate. By breaking the cycle of continuous negative thinking, cognitive defusion alleviates symptoms of depression and anxiety. For example, when an individual starts to worry excessively about a mistake they made, cognitive defusion techniques

Mechanisms of change in MBCT:

Mechanism	Description
Acceptance	Accepting the present moment without preset notions or judgements and just living in it.
Present Moment Awareness (Non-Judgmental Observation)	Learning not to judge the current moment or situation and simply being present in the moment rather than thinking about it and reacting.
Mindfulness of Thought (Decentering)	Acknowledging and being aware of our thoughts.
Mindfulness of Emotions (Emotional Regulation)	Being aware of emotions and appreciating what we have right now rather than what we want.
Cognitive Defusion (Reduction in Rumination)	Slowing down the chatter of the mind, taking a pause rather than constantly being in an unending loop of thoughts and beliefs, and learning to take a break from always being busy.

help them to observe the worry without getting entangled in it, thus breaking the cycle of rumination.

Neurobiological Mechanisms

Research using functional magnetic resonance imaging (fMRI) to conduct neuroimaging of the brain have shown how practicing mindfulness meditation leads to alteration in neural activity within the amygdala, a region often associated with symptoms of depression. Regular mindfulness exercises such as meditation can also lead to neuroplasticity changes in the brain, leading to better emotional regulation and reduced rumination. Moreover, there has been research evidence showing how consistent mindfulness meditation alters brain function and reorganization of the neural network, with reports of corollary increases in self-awareness, present-centeredness, and overall psychological well-being, as well as decreases in depressive feelings such as sadness¹³. MBCT’s mechanism of change aims to improve mental well-being holistically by altering an individual’s relationship with negative thought patterns¹⁴. MBCT seeks to achieve this by applying mindfulness techniques such as guided meditation or increasing awareness of the thoughts happening. Practicing non-judgmental acceptance of the present moment itself, in turn, leads to a change in the overall perspective toward the given situation or thought.

Cognitive Behavioral Therapy (CBT)

Cognitive Behavioral Therapy (CBT) is a widely practiced form of psychotherapy that has been around since the 1960s. It focuses on helping individuals identify the underlying negative thought patterns impacting their emotions leading to mental disorders such as anxiety or depression and how one can directly challenge and change that thought, resulting in positive behavioral outcomes.

CBT is based on the principles of Rational Emotive Behavioral Therapy (REBT) that Dr. Albert Ellis established in the 1950s¹ and works on the ABC (Action, Belief, Consequences) model where Action refers to the set of Triggers

or Activating Events or Situations that can lead to generation of a Belief that in turn results in a Consequence which refers to how one behaves or thinks or feels in a certain way as a result of that belief¹⁵. In other words, CBT is based on the premise that how we think influences how we feel and how we behave, which in turn influences the choices we make. Hence, it focuses on the use of cognitive processes and strategies in shaping how one can view the same situation differently using different thought processes and perspectives with an aim to bring about a shift or change in our response from negative to a more positive one.

Effectiveness of CBT: Mechanisms and Examples

1. **Cognitive Reappraisal:** Changing the way a person interprets a situation to alter its emotional impact. This helps reduce emotional distress and improve mood, decreasing symptoms of anxiety and depression. For example, in clinical practice, a patient with social anxiety disorder might be guided to reinterpret their fear of social interactions. Instead of viewing a social gathering as a potential for embarrassment, they are encouraged to see it as an opportunity to practice social skills. This reappraisal reduces anxiety and improves social functioning. A study using fMRI observed increased connectivity between the amygdala and various prefrontal cortex areas responsible for higher cognitive functions during cognitive reappraisal, highlighting the neural basis for improved emotional regulation.
2. **Cognitive Restructuring:** Identifying, challenging, and changing negative thought patterns into more positive ones. This process helps individuals alter dysfunctional thinking patterns that contribute to emotional distress, thereby reducing symptoms of depression and anxiety. For instance, a patient suffering from depression might be guided to recognize and challenge their automatic negative thought of "I am worthless." Through cognitive restructuring, this

Mechanisms of Change in CBT:

Mechanism	Description
Cognitive Reappraisal	Changing the way a person interprets a situation to alter its emotional impact.
Cognitive Restructuring	Identifying, challenging, and changing negative thought patterns into more positive ones.
Behavioral Activation	Increasing ability to cope with stress and challenges by developing effective problem-solving strategies.
Problem-solving Skills Training	Enhancing ability to cope with stress and challenges by developing effective problem-solving strategies.
Self-Monitoring	Enhancing self-awareness by tracking thoughts, emotions, and behaviors.

thought can be replaced with a more balanced one, such as "I have value and can achieve my goals," leading to improved mood and reduced depressive symptoms. Studies have shown significant reductions in negative thought patterns and improvements in overall emotional well-being through this method.

3. **Behavioral Activation:** Encouraging engagement in activities that improve mood and counteract withdrawal and inactivity. By engaging in activities that are pleasurable or meaningful, individuals can improve their mood and reduce depressive symptoms. This approach helps disrupt the cycle of inactivity and negative mood associated with depression. For example, a patient who used to enjoy gardening might be encouraged to start with small, manageable gardening tasks. Over time, this increases their activity level and improves their mood. A systematic review found behavioral activation to be consistently superior to control groups and comparable to other psychological treatments for depression, reducing relapse rates and improving mood.
4. **Problem-Solving Skills Training:** Enhancing the ability to cope with stress and challenges by developing effective problem-solving strategies. Developing problem-solving skills helps individuals manage stress more effectively, leading to reductions in anxiety and depression. For example, a patient with generalized anxiety disorder might be taught problem-solving skills to address their worries. They might learn to break down a problem into smaller, manageable parts, brainstorm possible solutions, and evaluate the potential outcomes. This structured approach helps reduce feelings of being overwhelmed and improves their ability to cope with stress. Clinical studies have shown that skills training in problem-solving enhances coping strategies and improves mental health outcomes.
5. **Self-Monitoring:** Tracking one's own behaviors, thoughts, and emotions to identify patterns and triggers for negative symptoms. This awareness helps individuals understand

the links between their thoughts, behaviors, and emotions, allowing them to make more informed changes to their behavior and thought processes. For example A patient with panic disorder might keep a daily log of their panic attacks, noting the context, thoughts, and feelings associated with each episode. This self-monitoring helps the patient and therapist identify patterns and triggers, enabling the patient to develop strategies to manage and reduce the frequency of panic attacks. Self-monitoring is a foundational element in CBT that enhances treatment outcomes by increasing self-awareness and providing valuable insights for both the therapist and the patient.

Conceptual Framework and Cognitive Techniques

CBT process focuses on how we conceptualize the underlying thoughts that trigger a behavior. There are three levels of cognition: core beliefs, dysfunctional assumptions, and negative automatic thoughts that serve as a framework to analyze a person's mental health disorder¹⁶. By applying cognitive techniques such as collaborative empiricism and problem-oriented approach, where the therapist and client work together to examine the evidence for and against certain beliefs, traditional CBT can be effective in treating various psychiatric conditions¹⁷.

CBT targets specific thinking patterns that result in certain behaviors. It does this by identifying the negative or irrational thought patterns, challenging them, and replacing them with realistic and constructive ones, leading to a more balanced perspective. The replaced thoughts ultimately result in changed behaviors and feelings, helping address conditions such as depression and anxiety.

Neurobiological Mechanisms

Past research has shown how CBT influences the brain's neural pathways by enhancing prefrontal control over subcortical structures. This alteration in brain function helps shifting the emotions from negative to more positive¹⁸.

One study, in particular, worked to understand how cognitive reappraisal, a key strategy in emotion regulation within CBT, can modulate an individual's emotional responses to stimuli

and influence the brain's activity. The study used fMRI scans to observe a notable increasing connectivity between the Amygdala, a region involved in emotional processing, and various prefrontal cortex areas responsible for higher cognitive functions¹⁹. This study highlights how specific neural pathways and connections in the brain are activated and altered during the mental process of managing emotions.

Through mechanisms like cognitive restructuring and behavioral activation, CBT utilizes therapeutic techniques (e.g., collaborative empiricism, cognitive reappraisal, skills training, exposure therapy, behavior experiments) to facilitate emotional regulation and resilience, fostering long-term mental health improvements.

Comparing Mechanisms of Change

The concept of 'mechanisms of change' refers to the underlying processes through which therapeutic techniques help bring about the positive changes in addressing and managing mental health disorders. By comparing the mechanisms of change between MBCT and traditional CBT, we are trying to better understand the therapeutic effectiveness of these therapies and how these may work to help manage mental health challenges of individual clients. The following sections explore the shared and distinct mechanisms between MBCT and traditional CBT. By being able to examine these mechanisms of change, we are aiming to have a deeper understanding of how effective these therapeutic practices can be.

Shared Mechanisms: This section explores mechanisms of change or therapeutic processes that both MBCT and traditional CBT may share. While emotional regulation processes are central to both therapies, it is important to note that the strategies or techniques used by these two therapies can be different. For example, Traditional CBT often uses cognitive restructuring (which can have downstream effects on emotion regulation), whereas MBCT uses mindfulness practices.

Emotional Regulation: As a mechanism of change, emotional regulation involves the process by which an individual learns to be able to recognize and control their negative emotions and response²⁰. MBCT and CBT techniques help regulate patients' emotions by assisting them in understanding their feelings better (e.g., insight) and, in turn, controlling their reactions towards them (e.g., behavior). In MBCT, this is achieved by employing mindfulness techniques such as creating self-awareness and non-judgmental observation of the moment itself. This helps disengage from the negative thought patterns resulting in improved emotional regulation and helps build resilience against depressive symptoms²¹, while CBT helps achieve this by utilizing cognitive restructuring technique that helps individuals identify, challenge and change unhelpful thought patterns to more positive ones.

Attentional Bias Modification (Focus Shifting): Attention Bias Modification involves the process by which an individual's mind is trained to shift focus between stimuli²². In the case of

anxiety or mood disorders, this can take the form of redirecting attention from a negative stimulus (e.g., a worry thought) towards a more neutral or positive stimulus with an objective to be able to reduce the negative thought patterns²². MBCT employs mindfulness meditation practices to achieve this by focusing on the present and having non-judgmental awareness²³. Traditional CBT utilizes cognitive restructuring to identify negative thought patterns and apply therapeutic techniques to alter the negative thinking patterns contributing to distressed behaviors²⁴.

Stress Resilience (distress tolerance): Stress resilience, as a mechanism of change, utilizes therapeutic techniques to help individual's better cope and increase their tolerance in managing stress and other mental health challenges or disorders²⁵. The process of change that MBCT supports utilizes mindfulness techniques such as awareness and acceptance of the present moment and learning to practice mindfulness using meditation to notice the thoughts without judging them. This skill development requires some level of learning and practice¹⁰. Hence, skill development and practice are also essential aspects to promote the benefits of this mechanism of change. Similarly, traditional CBT utilizes a different set of coping strategies and problem-solving skills, focusing on identifying and challenging irrational thoughts (cognitive restructuring), resulting in positive outcomes for managing behavioral disorders such as addiction²⁶. Therapeutic outcomes can greatly be influenced by introducing coping strategies and skills at the right moment. Early stages might focus on building trust and understanding, while later stages may involve more intensive skill development and application²⁷.

Improved self-awareness: Improved self-awareness refers to an individual's ability to effectively recognize and understand their responses to stimuli (e.g., negative thoughts and behaviors). Improved self-awareness and insight can then lead to increases in accurate prediction of and control over difficult and/or negative emotions and related behaviors. MBCT helps foster mindfulness practices which help individuals to better understand, and then manage, their responses²⁸. The fundamental principles of traditional CBT, on the other hand, are based on developing insight into the interrelatedness of thoughts, emotions, and behaviors. This increase in awareness, then, lends itself to employing techniques for change (e.g., cognitive restructuring) to improve mood and resilience³.

Emotional granularity: Emotional granularity is about precisely differentiating and categorizing one's emotional experiences, enabling individuals to distinguish between closely related emotional states, such as feeling "angry" versus "frustrated"²⁹. In traditional CBT, targeted cognitive interventions can help identify and distinguish between feelings more clearly. In MBCT, it helps mindfulness by encouraging a deeper understanding of emotions, like recognizing the subtle differences between "calm" and "content"³⁰. Understanding our

emotions in detail is a common mechanism of change in both mindfulness and cognitive therapy, helping us develop more effective coping strategies and emotional response²⁹.

Distinct Mechanisms: This section explores mechanisms of change or therapeutic processes that are distinct to MBCT and Traditional CBT. MBCT helps manage mental health disorders and unfavorable behavioral symptoms by combining mindfulness techniques in addition to traditional CBT strategies. Mechanisms of change unique to MBCT are explored below:

Decentering: One of the core mechanisms of change unique to MBCT is decentering. It involves changing the relationship with the thought itself. Rather than judging the thought, decentering, as a mechanism of change, allows one to view the thought as a temporary feeling without judgment³¹. By utilizing the technique of focusing on the present movement and mindfulness meditation one learns to foster non-judgmental awareness and recognition of the thoughts and emotions. For example, a therapist may recommend a patient who ruminates a lot about his past relationship failures to practice mindfulness meditation with focus on the breath and as the ruminative thoughts arise the patient learns to just notice them and gradually bring back the attention to focusing on the breath.

Mindfulness: Unlike traditional CBT strategies, the MBCT therapeutic process utilizes mindfulness techniques such as non-judgmental observation of the thoughts, self-guided and group meditation, body scan exercises and trying to incorporate eastern therapeutic practices. These strategies aim to transform our relationship with our thoughts, encouraging acceptance rather than alteration, and promote a more holistic lifestyle. Mindfulness meditation helps one to be more in touch with one's sensory feelings and teaches us to be in the present moment/activity mindfully³². For example, eating mindfully where your senses are involved in the entire eating process, such as enjoying the smell of the food, sitting in a calm, comfortable environment where you can focus on your experience of eating, savoring the way food tastes in your mouth and eating slowly rather than rushing it.

Acceptance: Acceptance is a core mechanism of change in MBCT. Instead of trying to change the negative thoughts or feelings, the process teaches us to accept the situation as-is. By practicing this acceptance individuals learn to embrace the feelings. This acceptance shifts our minds and how we perceive the behavior or feeling in the moment. This acceptance and mindfulness practice of just observation of the thought leads to reduced rumination and better self-regulation of our emotional well-being³³.

Reduction in Rumination: Reduction of rumination is the mechanism of change that aims to help an individual reduce the tendency to overthink and worry about negative thoughts. Studies have indicated that patients who have adopted MBCT skills such as meditation, self-awareness, and non-judgmental observation of one's thoughts have been shown to have increased

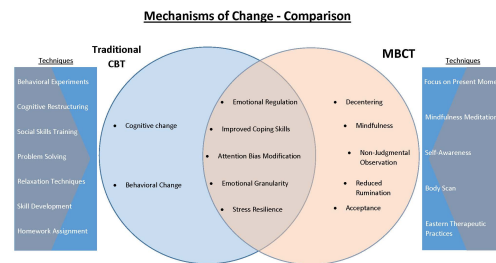


Figure 3: Comparison of Mechanisms of Change in MBCT and Traditional CBT

mindfulness and reduction in brooding (a type of rumination) and negative thinking, which in turn has shown to have reduced depressive symptoms³⁴.

Non-Judgmental Observation: Another core mechanism of change in MBCT that emphasizes on the importance of observing the thought itself without any judgements. It involves paying attention to the thoughts and emotions and the bodily sensations that one might feel as a result of those thoughts. This helps individuals identify such thought patterns and their response towards them. By learning not to judge the current moment and taking the present moment as-is rather than thinking about it and reacting, it teaches us to acknowledge and be aware of our emotions and thoughts and appreciate what we have right now rather than what we want³⁵. CBT aims to help manage mental health issues by trying to alter harmful thoughts and behaviors by applying several strategies. While there may be some common mechanisms of change, such as emotional regulation, shared between MBCT and CBT, it is essential to highlight the ones unique to CBT to understand their suitability and therapeutic effectiveness better.

Cognitive Change: Cognitive change is the core mechanism of change distinct to Traditional CBT. It focuses on identifying negative thought patterns and applying techniques such as cognitive restructuring to change them into more positive ones²⁴. Since Traditional CBT is based on the cognitive model of identifying negative emotions or thought patterns and trying to change them, the process of cognitive restructuring aims to alter that emotional state by altering them through the process of cognitive restructuring.

Behavioral Change: Another core and distinct mechanism of change in Traditional CBT where strategies and techniques such as behavioral experiments and skills training are used to change behavioral response to negative thoughts and emotions³⁶.

Figure 3 illustrates the unique and shared mechanisms of change in Mindfulness-Based Cognitive Therapy (MBCT) and

Traditional Cognitive Behavioral Therapy (CBT). The right circle represents mechanisms distinct to MBCT, and the left circle represents mechanisms distinct to traditional CBT. The overlapping area highlights the common mechanisms of change shared between the two.

Explanation and analysis

This Venn diagram visually represents the distinct and overlapping strategies used by MBCT and Traditional CBT therapeutic practices. By understanding the shared mechanism of change, therapists can offer a more holistic approach by combining the mechanisms of change between MBCT and CBT for better clinical outcomes.

Discussion

The comparison of MBCT and Traditional CBT highlights the importance of understanding their mechanisms of change, the therapeutic techniques each employs. Both MBCT and CBT are widely regarded as effective approaches for treating a range of mental health disorders, yet they differ in their techniques and applications. The term 'mechanisms of change' encompasses the cognitive, emotional, and behavioral processes that facilitate therapeutic progress. Understanding these mechanisms is essential, as they illuminate how specific techniques within therapies like MBCT and CBT lead to symptom alleviation and improved mental health outcomes. By dissecting these mechanisms, we can uncover the nuances of each therapeutic approach and their combined potential to address complex mental health challenges. This, in particular, has been evidenced in various clinical trials showing efficacy where both MBCT and Traditional CBT can help alleviate symptoms for patients suffering from disorders like chronic depression and anxiety^{2, 3, 10}. By focusing on specific mechanisms of change, such as emotional regulation, attentional control, and cognitive restructuring, MBCT and CBT offer structured approaches that address mental health conditions in complementary ways. MBCT integrates mindfulness practices to develop present-moment awareness and non-judgmental observation of thoughts and feelings, while CBT focuses on cognitive restructuring to challenge and modify distorted thinking patterns.

In MBCT, techniques such as body scans, mindful breathing, and self-inquiry foster present-moment awareness and promote a non-judgmental stance toward thoughts and feelings. This mindfulness practice contrasts with CBT's focus on cognitive restructuring, where techniques like thought records and Socratic questioning are employed to identify and modify distorted thinking patterns. By elaborating on these techniques, we gain a clearer understanding of how they align with the broader mechanisms of change.

Traditional CBT focuses on cognitive restructuring and exposure techniques, which have been shown to significantly reduce anxiety symptoms across multiple trials^{3,4}. MBCT emphasizes mindfulness and acceptance strategies, leading to significant reductions in anxiety symptoms⁴. Client context, including factors such as cultural background, personal history, and the nature of their mental health challenges, plays a crucial role in the effectiveness of therapeutic mechanisms. Understanding the client's unique situation allows therapists to tailor interventions that not only align with the general principles of MBCT and CBT but also resonate with the client's lived experiences. This contextual sensitivity can enhance engagement and promote more meaningful therapeutic outcomes.

Furthermore, the comparative effectiveness of these therapies has been studied in various contexts. For instance, MBCT and CBT have both been effective in treating generalized anxiety disorder (GAD), panic disorder, and comorbid depression/anxiety. The studies reviewed indicate that while both therapies reduce symptoms, they do so through different mechanisms: MBCT through mindfulness and cognitive flexibility, and CBT through cognitive restructuring and behavioral activation¹⁰.

Numerous studies underscore the efficacy of MBCT and CBT across a variety of mental health conditions. For example, research has shown that MBCT significantly reduces the risk of relapse in individuals with recurrent depression by fostering emotional resilience and adaptive coping strategies. In contrast, CBT has demonstrated robust effectiveness in treating anxiety disorders through cognitive restructuring and exposure techniques. By synthesizing these findings, we can appreciate how distinct mechanisms contribute to the overall success of each therapy.

The transdiagnostic approach highlights the shared features across different psychological disorders, emphasizing the common mechanisms of change inherent in both MBCT and CBT. This perspective not only allows for more comprehensive treatment strategies but also encourages therapists to adopt a broader view of client symptoms, facilitating targeted interventions that address underlying cognitive and emotional processes. For instance, employing the Unified Protocol can streamline therapy for clients with comorbid conditions, ensuring that therapeutic efforts remain focused on the mechanisms that underpin their difficulties³⁷.

Integrating mindfulness practices from MBCT with cognitive restructuring techniques from CBT may enhance therapeutic outcomes. For instance, therapists might encourage clients to engage in mindfulness exercises before challenging their negative thought patterns. This approach allows clients to observe their thoughts without immediate judgment, making it easier to apply cognitive restructuring techniques effectively. Such integrative strategies can lead to greater flexibility in thought processes and emotional responses. By seeing what

these therapies do, therapists can focus their treatments more on the shared mechanisms. This involves conducting in-depth assessments at the beginning of therapy to understand symptoms and clinical concerns that span across various diagnostic labels. To maximize the benefits of both MBCT and CBT, clinicians can implement the following strategies:

- **Assessment:** Conduct thorough initial assessments to identify shared mechanisms affecting the client's mental health.
- **Tailored Interventions:** Develop personalized treatment plans that integrate mindfulness techniques with cognitive restructuring tailored to the client's specific challenges.
- **Skill Development:** Facilitate skill development sessions focusing on both mindfulness practices and cognitive skills, allowing clients to practice in a supportive environment.
- **Feedback Loops:** Utilize ongoing feedback mechanisms to assess the effectiveness of integrated interventions, allowing for real-time adjustments to treatment approaches.

As mental health treatment continues to evolve, future research should explore the synergies between MBCT and CBT, particularly in diverse populations and settings. Understanding how shared mechanisms can be optimized for specific disorders will pave the way for innovative therapeutic models that harness the strengths of both approaches, ultimately enhancing client outcomes in mental health care.

To provide clinicians with practical guidance on how to integrate the shared mechanisms of MBCT and CBT into their therapeutic work, the following recommendations outline concrete steps that may enhance treatment outcomes in clinical settings.

Recommendation 1: Integrating MBCT for Depression Relapse Prevention In clinical practice, MBCT has been particularly effective in preventing depression relapse by fostering mindfulness and emotional resilience. By training clients to decenter from their thoughts and engage in present-moment awareness, therapists can help individuals reduce the cognitive patterns that contribute to recurring depressive episodes.

Example:

- **Client Profile:** A 45-year-old woman with a history of recurrent major depressive episodes. Despite several rounds of traditional CBT, she continues to experience depressive relapses, particularly during periods of high stress.
- **Therapeutic Approach:** After completing traditional CBT, the therapist introduces MBCT to help the client develop mindfulness skills. In session, the therapist teaches the client mindfulness meditation and encourages her to observe her negative thoughts without judgment. Over the

course of therapy, the client learns to decenter from her thoughts, noticing them as transient mental events rather than objective truths.

- **Outcome:** By integrating mindfulness techniques into her daily routine, the client experiences fewer episodes of rumination, reduces her emotional reactivity to stress, and maintains long-term emotional stability.

Recommendation 2: Combining MBCT and CBT for Anxiety Disorders Clinicians can integrate MBCT and CBT to treat anxiety disorders by combining mindfulness practices with traditional cognitive restructuring techniques. This hybrid approach not only addresses the cognitive patterns that contribute to anxiety but also enhances the client's ability to observe and manage their anxiety in the moment.

Example:

- **Clinical Scenario:** A client with generalized anxiety disorder (GAD) presents with excessive worry and difficulty managing anxious thoughts.
- **Therapeutic Intervention:** The therapist uses cognitive restructuring to challenge and reframe the client's catastrophic thinking patterns. Simultaneously, the therapist introduces mindfulness practices, such as a "body scan" meditation, to help the client notice when anxiety is present and practice non-judgmental awareness of bodily sensations. The combination of these two approaches enables the client to address anxious thoughts both cognitively and somatically, reducing overall anxiety.
- **Outcome:** The client reports that mindfulness helps her recognize when anxiety is emerging, while cognitive restructuring allows her to intervene before her anxious thoughts spiral out of control.

Recommendation 3: Using MBCT in Group Therapy for Stress Reduction MBCT is especially effective in group therapy settings, where participants can practice mindfulness techniques together and support each other's progress. Group-based MBCT programs offer clients a structured space to develop emotional regulation skills while fostering a sense of community and shared learning.

Example:

- **Group Setting:** A therapist leads an 8-week MBCT program for clients with high levels of work-related stress. During each session, the group engages in guided meditation practices and discusses how mindfulness techniques can be applied to daily life.
- **Therapeutic Practice:** One key exercise involves a "3-minute breathing space," where clients are taught to check in with their thoughts, emotions, and bodily sensations

throughout the day. This practice helps clients notice stress as it arises and respond more skillfully, rather than reacting impulsively.

Outcome: Group members report a greater sense of control over their stress responses and develop stronger emotional regulation skills. They also appreciate the sense of community and shared experience that the group format provides.

Recommendation 4: Combining Emotional Regulation Techniques to enhance emotional regulation, clinicians can guide clients through a two-step process of mindfulness practice followed by cognitive restructuring. By first becoming aware of their emotions in a non-judgmental manner and then challenging the thoughts that fuel these emotions, clients can develop more adaptive responses to distress.

Example:

- Strategy: For clients struggling with emotional dysregulation, therapists can introduce a combination of mindfulness and cognitive restructuring exercises.
- Step 1: Use mindfulness techniques, such as focusing on the breath, to help the client develop awareness of their emotional triggers without immediately reacting to them.
- Step 2: Follow up with cognitive restructuring, guiding the client to examine the automatic thoughts that arise in response to their emotions. Teach the client to challenge these thoughts and replace them with more balanced perspectives.
- Step 3: Encourage the client to practice these techniques during emotionally charged situations, both in-session and in their daily life, to improve emotional regulation.

Recommendation 5: Skill-Building sessions to develop Mindfulness and Cognitive Flexibility. Skill-building sessions that integrate mindfulness and cognitive flexibility techniques can significantly improve clients' ability to manage negative thoughts and emotions. By focusing on both awareness and cognitive shifts, therapists can foster long-term change in clients' thought patterns and emotional responses.

Example:

- Session Objective: Help clients with depressive symptoms develop cognitive flexibility and mindfulness.
- Skill-Building Activity: During a 60-minute session, the therapist introduces a mindfulness exercise called "noting," where clients practice labeling their thoughts and feelings without getting caught up in them. After the mindfulness practice, the therapist engages the clients in cognitive flexibility training by introducing thought-challenging exercises, encouraging them to consider alternative perspectives to their automatic negative thoughts.

- Outcome: Over time, clients report greater cognitive flexibility and resilience, noting that they are better able to "step back" from their negative thinking and engage with their emotions in a more balanced way.

Recommendation 6: Integrating MBCT and CBT for Trauma Treatment for clients with trauma histories, combining MBCT's grounding mindfulness techniques with CBT's cognitive restructuring can offer a powerful dual approach. Mindfulness helps clients manage hyperarousal, while cognitive restructuring allows them to address the negative beliefs often associated with trauma.

Example

- Trauma Therapy Application: A client with post-traumatic stress disorder (PTSD) struggles with intrusive thoughts and hyperarousal.
- Therapeutic Intervention: The therapist incorporates mindfulness techniques from MBCT to help the client ground themselves during moments of hyperarousal. Concurrently, cognitive restructuring is used to help the client address the maladaptive beliefs they have developed as a result of their trauma. By integrating both approaches, the client learns to observe their trauma-related thoughts with less distress and gradually modify their core beliefs.
- Outcome: Over the course of therapy, the client reports fewer intrusive thoughts, a reduction in trauma-related hyperarousal, and a more balanced outlook on their trauma history.

Recommendation 7: Homework Assignments for Mindfulness and Cognitive Restructuring Homework assignments that incorporate both mindfulness practices and cognitive restructuring exercises can enhance therapy outcomes by encouraging clients to apply these techniques consistently in their everyday lives.

Example:

- Mindfulness Assignment: Ask the client to practice a 10-minute body scan meditation each day and record their observations about how mindfulness impacts their emotional state.
- Cognitive Restructuring Assignment: Ask the client to complete a thought record, identifying a distressing situation, recording the automatic thoughts it triggered, and challenging these thoughts by considering alternative interpretations.
- Outcome: These assignments reinforce the skills learned in-session and encourage clients to apply both mindfulness and cognitive techniques to their daily lives, thereby promoting ongoing therapeutic growth.

Limitations and future considerations

A significant limitation of this study is a lack of empirical evidence to support these findings. This stems from the fact that a therapist's identification of common mechanisms between two therapies and basing their therapy on this common mechanism has never been done or investigated before. The essential idea of this paper is highly theoretical.

Moreover, this study does not examine the effect that these common mechanisms have on specific mental health disorders. This study was done with the understanding that these therapies are effective in treating all disorders, so any mechanism that they have individually or shared would impact all mental disorders relatively the same, in the sense that the patient responds positively to the treatment.

Additionally, this study does not examine the effect of these common mechanisms on specific demographics or cultures, which can be studied in the future. It must be emphasized that this study was done to answer the questions: "If different therapies are equally effective in treating certain disorders, then what, if anything, do both these therapies do and what would this imply for therapy?" By identifying these commonalities we can understand that such a 'universal' mechanism of change could serve as a foundation for therapeutic practices. Furthermore, considering that this common mechanism comes from two distinct therapies, it has the potential to simultaneously address multiple disorders within a person.

While every effort was made to include the most recent peer-reviewed articles from the last five years, it was also necessary to include articles older than 10 years. These older articles provided foundational understanding of key terms, concepts and perspectives on the specific topics being researched, contributing significantly to the theoretical framework of this paper.

This study also hopes to open up new possibilities within the broad field of psychology, specifically in 'combining therapies', or understanding and utilizing the common mechanisms of change between and across therapies. This research represents the first step in exploring an untapped area in the world of psychology. Therefore, it would be looked favorably upon if clinical trials adhering to IRB guidelines were conducted to test the ideas represented in this paper. Such trials could either support or refute the theory presented in this paper. If supported, various other therapies could be examined to find common mechanisms to create more efficient practices. If this theory is refuted, further analysis could be conducted to understand why.

Strengths

Despite these limitations, this paper's reliance on peer-reviewed articles adds integrity, validity, and reliability to the findings and conclusions. The selection of articles was strategic focusing on

the ones that most reliable research to understand and compare the mechanisms of MBCT and CBT. Seminal works by founders like Aaron Beck for CBT and Zindel Segal for MBCT were chosen to provide a historical and foundational understanding of these therapies. Additionally, key studies such as Kristine Trettø Sverre's work on the efficacy of MBCT and CBT for depression were analyzed to highlight the effectiveness and shared mechanisms. This approach allowed for comprehensive analysis of the therapies and their mechanisms, integrating both traditional and modern perspectives. This enriched the research by offering a detailed understanding of how these therapeutic practices operate individually and collectively, directly supporting the paper's objective of exploring their shared mechanisms of change. Furthermore, the transdiagnostic approach suggest commonalities between many disorders such as mood and anxiety disorders, indicating more overlap than distinction³⁸. This perspective supports and encourages the comparative analysis of MBCT and CBT, suggesting their shared mechanisms could address a broader range of disorders. Understanding the commonalities allow therapists to alleviate multiple disorders simultaneously.

Historically, randomized controlled trials (RCTs) have demonstrated the use of manualized treatment for specific disorders (e.g., depression, addiction). For example, Kuyken et al., specifically targeted depressive relapses with MBCT¹², whereas Alavi et al., found CBT effective for treating addiction and anxiety disorders³⁹. Identifying common mechanisms shared by both therapies, such as emotion dysregulation and cognitive distortion suggests that treatments can be tailored to multiple issues. The transdiagnostic approach recognizes that patients often exhibit symptoms across traditional disorder boundaries and shared mechanism can play a considerable role by alleviating both issues⁴⁰. A research conducted by Frostadottir and Dorgee (2019) demonstrates that patients who underwent MBCT, focusing on mindfulness and emotional regulation, showed significant reduction in rumination, depression, and anxiety, particularly at follow-up. Similarly, those who received CFT therapy, emphasizing self-compassion and cognitive flexibility, showed significant reductions in rumination, depression, and stress, with improvements in mindfulness and self-compassion observed across both therapies. This highlights the strength of the transdiagnostic approach, where shared mechanisms like mindfulness and self-compassion contribute to the efficacy of different therapeutic interventions, leading to substantial improvements in patient outcomes.

Conclusion

This paper presents the shared and distinct mechanisms of change in MBCT and CBT, emphasizing their therapeutic effectiveness in treating mental health disorders. The study to

understand these therapies' common and distinct mechanisms of change, guided by the Research Domain Criteria (RDoC) framework, reveals a nuanced understanding of their shared mechanisms and differences, highlighting the potential for integrative therapeutic approaches.

The integrative approach presented by this paper can profoundly impact potential patients' lives. The shared mechanisms of change, such as emotional regulation and attentional bias modification, can serve as foundational strategies for individuals seeking to manage their mental health more effectively. By recognizing and applying the common mechanisms of change between the therapies, individuals can be more prepared to approach life's difficulties outside the therapists' or clinical professionals' offices.

In conclusion, this research paper provides a comprehensive review of the common mechanisms of change in MBCT and CBT, emphasizing their potential for enhancing therapeutic effectiveness. Through a detailed analysis of the mechanisms of change of both therapies, the paper highlights shared mechanisms such as emotional regulation, attentional bias modification, and improved self-awareness. All of these can provide a more holistic and effective treatment strategy for various therapeutic patients. This paper suggests that utilizing the common mechanisms across seemingly disparate therapies can increase clinical utility, benefiting the lives of patients with varied presentations of psychopathology.

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