

## Mindfulness-Based Cognitive Therapy (MBCT) Enhancing Emotion Regulation In Adults: A Scoping Review

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### Abstract

Mental disorders are a growing public health concern, with emotional regulation playing a crucial role in maintaining psychological well-being. Mindfulness Based Cognitive Therapy (MBCT) is a structured intervention that combines mindfulness practices with cognitive therapy to enhance emotional regulation. This scoping review aims to analyze the effectiveness of MBCT in improving emotional regulation in adults and to identify the specific aspects most influenced by the intervention. Using the Arksey and O'Malley framework, a systematic search was conducted in the Scopus and Web of Science databases for studies published between 2015 and 2025. Four quantitative studies met the inclusion criteria. The findings show that MBCT improves several emotional regulation components, including impulse control, emotional awareness and clarity, acceptance of emotional responses, and reduction in rumination. These improvements contribute to better emotional stability and resilience among adults facing psychological distress. The review supports the use of MBCT as a comprehensive therapeutic approach that promotes adaptive emotional responses and long term mental health. MBCT has the potential to be implemented in both clinical and community mental health settings as a preventive and promotive strategy.

### Keywords

MBCT; Emotion Regulation; Adult.



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## 1. INTRODUCTION

Mental disorders are a significant concern faced by every country. In 2019, the World Health Organization (WHO) reported that one in eight individuals approximately 970 million people worldwide were living with a mental disorder (WHO, 2022). In Indonesia, data from the Basic Health Research (Riskesdas) indicated that around 19 million individuals aged over 15 years experience emotional disorders (Redaksi Sehat Negeriku, 2021). These figures highlight that mental disorders are among the most pressing health issues today, especially during the transition into adulthood.

Adulthood involves not only personal responsibilities such as self management, but also encompasses social, familial, and environmental roles. Each adult is expected to fulfill certain obligations based on prevailing societal values and norms (Ugargol & Bailey, 2021). However, the ability to meet these expectations is strongly influenced by one's mental health condition (Pandya & Bhangaokar, 2023).

Good mental health enables individuals to think clearly, make sound decisions, and act in accordance with their roles and social demands (Effah et al., 2024). In contrast, mental disorders such as depression, anxiety, or other emotional disturbances can hinder individuals from understanding, accepting, and carrying out their responsibilities effectively (de Lemos et al., 2021). One approach to enhancing mental health is by improving emotional regulation.

Emotional regulation refers to the process by which individuals manage their emotional experiences and expressions to achieve a desired emotional state or specific goal (Gross & Thompson, 2007) (Tamir & Gutentag, 2017). This process involves awareness, understanding, and the ability to express emotions in an adaptive and goal directed manner. Emotional regulation plays a vital role in psychological and physical well being, personal adjustment, and performance across various life contexts (Zysberg, 2023). It includes strategies such as cognitive reappraisal, expressive suppression, situation selection, situation modification, attentional deployment, and response modulation (Kim et al., 2015).

Emotional regulation can be improved through interventions such as Mindfulness Based Stress Reduction (MBSR) and Mindfulness Based Cognitive Therapy (MBCT). MBSR is widely used to manage stress, chronic pain, and anxiety. However, MBCT not only alleviates symptoms of depression and anxiety but also

equips individuals with skills to maintain emotional stability and prevent relapse (Marchand, 2013) (Hazlett-Stevens, 2022). MBCT places a stronger emphasis on long term mental health maintenance and the prevention of depressive episode recurrence (Loo & Salmon, 2024). By integrating mindfulness meditation with cognitive therapy, MBCT enhances cognitive flexibility and emotional regulation. The combination of mindfulness and cognitive therapy allows individuals to develop new ways of responding to difficult thoughts and emotions (Mackenzie & Kocovski, 2016).

The aim of this scoping review is to analyze the effectiveness of MBCT in enhancing emotional regulation in adults and to identify which aspects of emotional regulation are most influenced by MBCT intervention. While several studies have examined the effectiveness of MBCT on mental health, comprehensive reviews focusing on how MBCT affects various dimensions of emotional regulation in adults remain limited. The findings of this review are expected to serve as a reference for the development of MBCT based psychological interventions, particularly in strengthening emotional regulation in adulthood, and to provide a foundation for future research and evidence based mental health policies.

## **2. METHODS**

This scoping review followed the Arksey and O'Malley framework. The protocol development was guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses for Scoping Reviews (PRISMA-ScR) guidelines. The stages of the review included: (1) identifying the research question, (2) identifying relevant studies, (3) study selection, (4) data extraction, and (5) synthesis of results. The research questions were: (1) How effective is MBCT in enhancing emotional regulation in adults? and (2) Which aspects of emotional regulation are most influenced by MBCT?

### **Eligibility Criteria**

Eligibility criteria were determined based on Population, Concept, and Context elements. Included studies were quantitative designs (quasi-experimental and randomized controlled trials) targeting adult populations, applying Mindfulness-Based Cognitive Therapy (MBCT) as the intervention, and measuring outcomes related to emotion regulation. Studies were excluded if they (1) involved non-adult

populations, (2) used interventions other than MBCT, (3) did not report emotional regulation outcomes, or (4) were theoretical, descriptive, or without full-text access.

### **Information Sources**

Data were sourced from the Scopus and Web of Science databases. Articles published between 2015 and 2025 were included.

### **Search Strategy**

The search strategy was addressing the population (adults), intervention (Mindfulness Based Cognitive Therapy), outcomes (emotion regulation), and study design (quantitative studies, including experimental and quasi-experimental designs).

### **Selection Process**

The study selection process was conducted by six independent reviewers using Rayyan, a web-based systematic review management application. Initially, all identified records were imported into Rayyan, where automated and manual deduplication processes were performed to eliminate duplicates. Title and abstract screening were independently carried out by the first and second authors. Articles meeting the inclusion criteria were then extracted using a standardized data extraction template. Discrepancies in the extraction process were resolved through discussions between the third and fourth authors. The fifth and sixth authors reviewed the final extracted data and ensured that the thematic synthesis aligned with the research questions and overall objectives of the review. A total of 374 articles were initially retrieved from two databases: 248 from Scopus and 126 from Web of Science. After removing 30 duplicate records, 345 unique articles remained. Of these, 325 articles were excluded for being irrelevant to the topic. Following this initial screening, 20 articles remained and underwent further review based on their relevance to MBCT and emotional regulation in adults. This process resulted in the inclusion of four eligible articles for analysis.

### **Data Collection Process**

The data collection process was carried out independently by three reviewers, who extracted data from each included study using a pre-developed standardized

extraction form. The fourth, fifth and sixth reviewer verified the extracted data to ensure its accuracy and completeness.

## Results

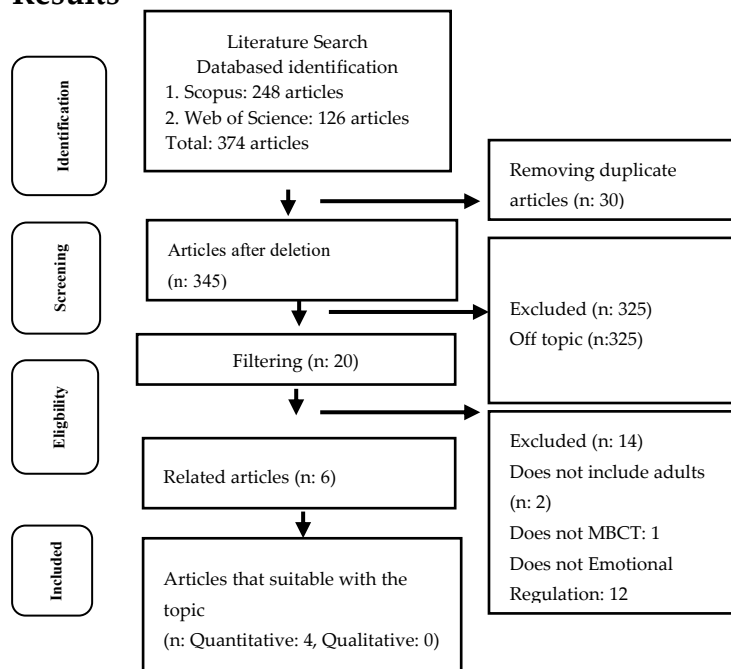


Figure 1. The PRISMA Flow Diagram is Depicting the Flow of Information through the Different Phases of the Scoping Review.

Table 2. Mindfulness-Based Cognitive Therapy (MBCT) Enhancing Emotion Regulation in Adults

No	Author, Year, Country	Title	Design and Sample	Key Findings
1	(Deckersbach et al., 2021), USA	<i>Mindfulness-Based Cognitive Therapy for Nonremitted Patients with Bipolar Disorder</i>	Quantitative, 12 adults	MBCT improved mood, emotional regulation, and well-being in patients with bipolar disorder.
2	(Sala et al., 2018), France	<i>Preliminary Results of Mindfulness-Based Cognitive Group Therapy in Social Phobic Patients</i>	Quantitative, 9 adults (aged 27–55)	MBCT led to improvements in emotional regulation.
3	(Hosseini et al., 2016), Iran	<i>Effectiveness of MBCT and Metacognition Therapy on</i>	Quantitative, 36 pregnant	MBCT significantly improved emotion

No	Author, Year, Country	Title	Design and Sample	Key Findings
		<i>Depression Symptoms, women</i>		regulation during pregnancy.
		<i>Core Self-Evaluation, and Emotion Regulation Difficulties in Pregnant Women</i>		
4	(Razavizadeh Tabadkan et al., 2019), Iran	<i>Effectiveness of MBCT on Ruminative Thoughts, Perceived Stress, and Emotion Regulation Difficulties in Women with Type 2 Diabetes</i>	Quantitative, 30 adult women	MBCT reduced negative thoughts and improved emotional regulation in women with type 2 diabetes.

### Theme 1: Effectiveness of MBCT in Enhancing Emotion Regulation in Adults

The study by (Hosseinian et al., 2016) demonstrated that MBCT significantly improved emotional regulation in adult women experiencing depression during pregnancy. Multivariate analysis showed a notable decrease in emotion regulation difficulty scores from pretest ( $M = 25.33$ ) to posttest ( $M = 16.25$ ), with sustained effects at two-month follow-up ( $M = 17.91$ ). (Deckersbach et al., 2021) further supported these findings in adults with non-remitted bipolar disorder. MBCT improved mindfulness capacity, reduced residual depressive symptoms and attention issues, and enhanced psychological well being and social functioning. The Emotion Reactivity Scale scores decreased from 41.80 to 35.40 after therapy, and further to 32.90 at follow-up, indicating significant improvement in managing emotional intensity and sensitivity.

(Sala et al., 2018) MBCT was found to reduce maladaptive thinking patterns that heighten emotional reactivity. Participants developed a non judgmental attitude toward internal experiences, a core skill in emotional regulation, allowing them to respond more calmly and mindfully. (Razavizadeh Tabadkan et al., 2019) highlighted MBCT's effectiveness in reducing emotional distress and repetitive negative thinking. By cultivating present-moment awareness and acceptance of internal experiences, MBCT provided participants with adaptive and constructive regulation strategies, reinforcing emotional stability in adulthood.

## **Theme 2: Emotion Regulation Aspects Most Influenced by MBCT**

Across all four studies, MBCT consistently influenced key domains of emotional regulation. Notable improvements were found in:

- **Impulse Control:** MBCT helped individuals better manage impulses when experiencing negative emotions, as indicated by post-intervention score reductions. Participants were less reactive and more restrained during emotional distress.
- **Emotional Awareness and Clarity:** MBCT increased participants' ability to recognize and understand their emotional states, which is essential for effective regulation.
- **Non-Judgment of Inner Experience:** In the second study, MBCT strengthened the ability to accept thoughts and feelings without self-criticism. Higher scores in this domain reflected a healthier, more accepting relationship with emotions.
- **Reduced Rumination and Worry:** MBCT decreased ruminative thinking and worry, common barriers to adaptive regulation. This was especially evident in the third study, where rumination was significantly reduced ( $d = 0.92$ ), and non-judgment scores improved ( $d = 0.42$ ).
- **Acceptance of Emotional Responses:** The fourth study showed enhanced acceptance of negative emotions, reducing resistance and defensiveness during emotional stress. This component is essential for building emotional resilience.

The results of this scoping review indicate that MBCT contributes significantly to the enhancement of emotion regulation in adults. These findings reinforce the notion that mindfulness-based interventions, particularly MBCT, hold considerable potential in promoting mental health by fostering more adaptive emotional management and responses. MBCT has also been shown to effectively reduce rumination. (Cladder-Micus et al., 2019) noted that MBCT not only alleviates depressive symptoms but also decreases the frequency of maladaptive repetitive thoughts by increasing awareness of automatic thinking patterns. Improvements in the dimensions of nonjudging of inner experience and non-acceptance of emotional responses, as highlighted in the reviewed studies, suggest that MBCT operates not only on the surface of emotional reactions but also targets deeper cognitive mechanisms (Loo & Salmon, 2024). Based on the synthesis of four analyzed studies and supported by current literature, MBCT can be regarded as a comprehensive intervention to strengthen emotion regulation capacity in adults. Skills developed

through MBCT such as present moment awareness, emotional acceptance, and the ability to disengage from automatic reactions are essential components in building emotional resilience and promoting long term mental well being (Do et al., 2025).

### 3. CONCLUSION

MBCT has been proven effective in enhancing emotion regulation among adults, particularly those experiencing psychological disorders such as depression, bipolar disorder, and chronic emotional distress. Analysis of four studies consistently demonstrates that MBCT strengthens impulse control, enhances emotional awareness and clarity, and fosters non judgmental acceptance of emotional experiences. Moreover, MBCT significantly reduces tendencies toward rumination and recurrent negative thinking, contributing to more adaptive and stable emotional responses. Overall, MBCT represents a comprehensive and applicable approach to improving adult mental health through the development of constructive emotion regulation skills. Its implementation is recommended as part of both clinical interventions and promotive preventive programs across various healthcare and community settings.

### REFERENCES

- Cladder-Micus, M. B., Becker, E. S., Spijker, J., Speckens, A. E. M., & Vrijzen, J. N. (2019). Effects of Mindfulness-Based Cognitive Therapy on a Behavioural Measure of Rumination in Patients with Chronic, Treatment-Resistant Depression. *Cognitive Therapy and Research*, 43(4), 666–678. <https://doi.org/10.1007/s10608-019-09997-8>
- de Lemos, H. P. S., Matos, C. S. S., & de Aguiar, M. C. M. (2021). IMPACT OF DEPRESSION IN THE LABOR LIFE OF PATIENT WITH DEPRESSIVE DISORDER. *Revista Brasileira de Neurologia e Psiquiatria*, 25(3), 3–18. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85171436996&partnerID=40&md5=0866ddeb03a8a9b2b055e367d061590>
- Deckersbach, T., Hölzel, B. K., Eisner, L. R., Stange, J. P., Peckham, A. D., Dougherty, D. D., Rauch, S. L., Lazar, S., & Nierenberg, A. A. (2021). Mindfulness-Based Cognitive Therapy for Nonremitted Patients with Bipolar Disorder. *CNS Neuroscience and Therapeutics*, 18(2), 133–141. <https://doi.org/10.1111/j.1755-5949.2011.00236.x>
- Do, H. S., Lee, J., Yu, H., Lee, C. W., Hur, H. J., Lim, J., Kang, H. S., Park, J., Ha, T. H., & Myung, W. (2025). Relationship between emotion regulation skills, resilience, depression and anxiety symptom severity in patients with mood disorders and



- non-clinical participants: a mediation model. *European Archives of Psychiatry and Clinical Neuroscience*. <https://doi.org/10.1007/s00406-025-02050-8>
- Effah, R., Ioannidis, K., Grant, J. E., & Chamberlain, S. R. (2024). Exploring decision-making performance in young adults with mental health disorders: a comparative study using the Cambridge gambling task. *Psychological Medicine*, 54(9), 1890–1896. <https://doi.org/10.1017/S0033291724000746>
- Gross, J. J., & Thompson, R. (2007). Emotion regulation: Conceptual foundations. In J. Gross (Eds.) *Handbook of Emotion Regulation* (Issue July, pp. 3–24).
- Hazlett-Stevens, H. (2022). Mindfulness-Based Interventions for Clinical Anxiety and Depression. In *Biopsychosocial Factors of Stress, and Mindfulness for Stress Reduction* (pp. 201–223). [https://doi.org/10.1007/978-3-030-81245-4\\_9](https://doi.org/10.1007/978-3-030-81245-4_9)
- Hosseinian, S., Shahtaheri, E., Ebrahimi, M., Mahdavi, A., & Sepahvandi, M. A. (2016). Effectiveness of mindfulness-based cognitive therapy and metacognition therapy on reduction of symptoms of depression, core self-evaluation and emotion regulation difficulties in pregnant women with depression. *Acta Medica Mediterranea*, 32(SpecialIssue5), 2033–2037.
- Kim, M. Y., Bigman, Y., & Tamir, M. (2015). Emotional Regulation. In *International Encyclopedia of the Social & Behavioral Sciences: Second Edition* (pp. 452–456). <https://doi.org/10.1016/B978-0-08-097086-8.25055-1>
- Loo, J. L., & Salmon, P. (2024). Mindfulness-Based Cognitive Therapy. In *Tasman's psychiatry, Fifth Edition* (pp. 3717–3735). [https://doi.org/10.1007/978-3-030-51366-5\\_75](https://doi.org/10.1007/978-3-030-51366-5_75)
- Mackenzie, M. B., & Kocovski, N. L. (2016). Mindfulness-based cognitive therapy for depression: Trends and developments. *Psychology Research and Behavior Management*, 9, 125–132. <https://doi.org/10.2147/PRBM.S63949>
- Marchand, W. R. (2013). Mindfulness Meditation Practices as Adjunctive Treatments for Psychiatric Disorders. *Psychiatric Clinics of North America*, 36(1), 141–152. <https://doi.org/10.1016/j.psc.2013.01.002>
- Pandya, N., & Bhangaokar, R. (2023). Equal But Different: Views on Gender Roles and Responsibilities Among Upper-Class Hindu Indians in Established Adulthood. *Journal of Adult Development*, 30(1), 145–155. <https://doi.org/10.1007/s10804-022-09417-4>
- Razavizadeh Tabadkan, B. Z., Jajarmi, M., & Vakili, Y. (2019). The effectiveness of mindfulness-based cognitive therapy on ruminative thoughts, perceived stress and difficulties in emotion regulation of women with type 2 diabetes. *Iranian Journal of Psychiatry and Clinical Psychology*, 24(4), 370–383. <https://doi.org/10.32598/ijpcp.24.4.370>
- Redaksi Sehat Negeriku. (2021). *Kemenkes Beberkan Masalah Permasalahan Kesehatan Jiwa di Indonesia*. 07 Oktober. <https://sehatnegeriku.kemkes.go.id/baca/rilis-media/20211007/1338675/kemenkes-beberkan-masalah-permasalahan-kesehatan-jiwa-di-indonesia/>
- Sala, L., Camart, N., Derval, A., & Rambaud, D. (2018). Preliminary results of

- mindfulness-based cognitive group therapy (MBCT) in social phobic patients. *Annales Medico-Psychologiques*, 176(5), 495–500. <https://doi.org/10.1016/j.amp.2017.06.003>
- Selcuk, A. A. (2019). A Guide for Systematic Reviews: PRISMA. *Turkish Archives of Otorhinolaryngology*, 57(1), 57–58. <https://doi.org/10.5152/tao.2019.4058>
- Tamir, M., & Gutentag, T. (2017). Desired emotional states: their nature, causes, and implications for emotion regulation. *Current Opinion in Psychology*, 17, 84–88. <https://doi.org/10.1016/j.copsyc.2017.06.014>
- Ugargol, A. P., & Bailey, A. (2021). Reciprocity between older adults and their caregivers in emigrant households of Kerala, India. *Ageing and Society*, 41(8), 1699–1725. <https://doi.org/10.1017/S0144686X19001685>
- Zysberg, L. (2023). Understanding emotion regulation. In *Understanding Emotion Regulation*. <https://doi.org/10.52305/PIFQ8273>