

The Role of a 10-Week Mindfulness-Based Cognitive Behavioral Therapy Intervention in Managing Depression, Anxiety, and Stress Among the Elderly: A Quasi-Experimental Study

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ABSTRACT

This study investigates the effectiveness of a 10-week Mindfulness-Based Cognitive Behavioral Therapy (MBCBT) intervention in reducing symptoms of depression, anxiety, and stress among elderly individuals. Psychological distress is increasingly prevalent in older adults, yet non-pharmacological interventions remain underutilized in geriatric care. Employing a quasi-experimental pre-post design, the study was conducted with a purposive sample of 55 elderly participants aged between 60 and 75 years, selected based on their scores on the Depression Anxiety Stress Scale-21 (DASS-21). The participants were categorized into three groups according to their dominant psychological concern—depression, anxiety, or stress. Each group underwent a structured 10-week MBCBT program combining mindfulness techniques and cognitive-behavioral strategies tailored to the needs of older adults. Post-intervention analysis revealed a significant reduction in DASS-21 scores across all three groups, indicating improved emotional regulation and mental well-being. The findings support the integration of MBCBT into community mental health programs for the elderly, offering a promising alternative to medication-based treatment.

Keywords: Mindfulness-Based CBT, Elderly Mental Health, Depression, Anxiety, Stress, Quasi-Experimental Study

INTRODUCTION

Mindfulness-Based Cognitive Behavioral Therapy (MBCBT)

Mindfulness-Based Cognitive Behavioral Therapy (MBCBT) is an integrated therapeutic approach that combines mindfulness practices with cognitive behavioral strategies. Mindfulness, originating from Buddhist traditions, involves the cultivation of present-moment awareness and non-judgmental acceptance of one's thoughts, feelings, and bodily sensations (Yang et al., 2024) (Douceirain & Benkirane, 2025). The cognitive-behavioral component, grounded in the work of Aaron Beck, emphasizes the identification and restructuring of maladaptive thought patterns and behaviors (Ye et al., 2024). MBCBT, by merging these two powerful approaches, aims to address the emotional and cognitive aspects of mental health, particularly in the management of mood disorders like depression, anxiety, and stress (Falahi et al., 2024). This intervention has been shown to enhance emotional regulation, reduce symptoms of psychological distress, and improve overall well-being (Sarrami Foroushani et al., 2024) (Pandya, 2025). While MBCBT has been widely used with various age groups, its application within geriatric populations is still emerging, with preliminary evidence suggesting its potential benefits in improving mental health outcomes among the elderly (Balish, 2025).

Introduction to Depression

Depression is a common and debilitating mental health condition characterized by persistent feelings of sadness, hopelessness, and a lack of interest or pleasure in daily activities. It is often accompanied by physical symptoms such as changes in appetite, sleep disturbances, and fatigue (Suwal et al., 2024). In the elderly population, depression is particularly concerning due to its potential to negatively affect overall functioning and quality of life (Tabei et al., 2025). As people age, they may face unique stressors, including physical decline, loss of loved ones, and social isolation, all of which can contribute to the onset of depressive symptoms (Cruz et al., 2025). Depression in older adults is frequently underdiagnosed and undertreated, as symptoms may be mistaken for normal aging processes or physical illness (Zhang et al., 2025). Cognitive-behavioral therapy (CBT) has long been recognized as an effective treatment for depression, and when combined with mindfulness practices, MBCBT offers a holistic approach that not only addresses negative thought patterns but also helps individuals develop greater emotional awareness and resilience (Yuniartika et al., 2024).

Introduction to Anxiety

Anxiety is a psychological condition that involves excessive worry, fear, and apprehension, often about future events or situations. In the elderly, anxiety can manifest in various forms, such as generalized anxiety disorder, social anxiety, and panic attacks. The aging process brings about changes in physical health, cognitive functioning, and social circumstances, which can increase the risk of developing anxiety disorders (Liu et al., 2025). Additionally, anxiety in older adults is frequently associated with chronic health conditions, medication use, and significant life transitions, such as retirement or the loss of a spouse. The symptoms of anxiety can severely impact daily functioning and overall well-being, leading to a reduced quality of life (Zhang et al., 2022). Cognitive-behavioral therapy (CBT) is an established treatment for anxiety, and when integrated with mindfulness practices, it helps individuals in the elderly population develop coping strategies to manage stressors and reduce their physiological and emotional response to anxiety-provoking situations (Piva et al., 2023). MBCBT is increasingly being explored as an effective intervention for elderly individuals, helping them cultivate present-moment awareness and challenge maladaptive thought patterns that contribute to anxiety (Yildirim et al., 2021).

Introduction to Stress

Stress refers to the psychological and physiological response to external pressures or demands, known as stressors. While stress is a normal part of life, chronic stress can have serious negative effects on both mental and physical health (Amicucci et al., 2021). In elderly populations, stress often arises from multiple sources, including age-related changes, chronic health conditions, caregiving responsibilities, and financial concerns (Beniusiene et al., 2024). Persistent stress can exacerbate existing mental health conditions, such as depression and anxiety, and contribute to the onset of physical health problems, including cardiovascular disease, hypertension, and compromised immune function. The experience of stress in older adults can be compounded by cognitive decline, leading to increased vulnerability and reduced ability to cope. MBCBT offers a promising intervention for managing stress in the elderly by teaching techniques to enhance emotional regulation, improve coping skills, and foster greater awareness of the present moment (Parandin, 2024). By addressing both the cognitive and emotional aspects of stress, MBCBT can help elderly individuals reduce their stress levels and improve their overall psychological well-being (Herdian et al., 2024).

Together, MBCBT serves as a comprehensive intervention that addresses the emotional and cognitive components of depression, anxiety, and stress among the elderly (Talukdar et al., 2024). As the population ages, there is an increasing need for effective, non-pharmacological treatment options for mental health challenges that commonly arise. By combining the strengths of mindfulness and cognitive-behavioral strategies, MBCBT provides a holistic approach that can help elderly individuals manage their emotional distress and improve their quality of life (Ahmed et al., 2024). The growing body of research on MBCBT suggests that it holds significant promise for addressing the mental health needs of older adults, and further studies are needed to validate its effectiveness in diverse elderly populations.

THEORETICAL FRAMEWORK

The theoretical framework for this study is grounded in the integration of Mindfulness-Based Cognitive Behavioral Therapy (MBCBT) and Cognitive Behavioral Theory (CBT). CBT, developed by Aaron Beck in the 1960s, posits that individuals' thoughts influence their emotions and behaviors, and by modifying negative thought patterns, emotional and behavioral responses can be altered. Mindfulness, rooted in Buddhist practices and popularized in psychological therapy by Jon Kabat-Zinn, involves focusing attention on the present moment with a non-judgmental awareness of thoughts, feelings, and bodily sensations.

When combined, MBCBT blends mindfulness techniques—such as meditation, body scanning, and mindful breathing—with cognitive restructuring techniques from CBT, aiming to improve emotional regulation, reduce maladaptive thinking, and foster a more balanced response to stressors. This combination is especially beneficial for elderly populations, as it enhances their ability to manage the cognitive and emotional challenges associated with aging, including the common psychological issues of depression, anxiety, and stress.

The application of this integrated approach is grounded in the Biopsychosocial Model, which emphasizes the interconnection of biological, psychological, and social factors in the development of mental health disorders. By addressing cognitive distortions (psychological), promoting emotional awareness (psychological), and considering age-related physiological changes (biological), MBCBT offers a holistic treatment for the elderly.

Additionally, the Stress-Vulnerability Model is also applicable to the elderly, recognizing that stress, compounded by age-related vulnerability, increases the risk of mental health issues. MBCBT's focus on mindfulness and cognitive restructuring aims to reduce the impact of stressors by fostering psychological well-being, thereby lowering the risk of depression and anxiety in elderly individuals.

OBJECTIVES OF THE STUDY

The primary objectives of this study are to examine the effectiveness of Mindfulness-Based Cognitive Behavioral Therapy (MBCBT) in reducing depression, anxiety, and stress among elderly individuals. Specifically, the study aims to:

1. Evaluate the impact of MBCBT on depression, anxiety, and stress levels in elderly participants.
2. Examine the differences in pre- and post-intervention scores on depression, anxiety, and stress within three distinct groups (Depression, Anxiety, Stress).
3. Investigate the role of MBCBT in improving overall mental health and well-being in elderly individuals.

The study will contribute to enhancing therapeutic approaches in geriatric mental health care, particularly for those facing multiple mental health challenges simultaneously.

Hypotheses

H₀₁: There will be no significant difference in the levels of depression, anxiety, and stress among elderly individuals before and after the 10-week Mindfulness-Based Cognitive Behavioral Therapy intervention.

H₀₂: There will be no significant improvement in the psychological well-being of elderly individuals, as measured by depression, anxiety, and stress, following the 10-week Mindfulness-Based Cognitive Behavioral Therapy intervention.

REVIEW OF LITERATURE

Mindfulness-Based Cognitive Behavioral Therapy (MBCBT) is an integrative therapeutic model that combines mindfulness practices with cognitive-behavioral techniques. This dual approach enhances emotional regulation, making it an effective intervention for treating conditions like depression, anxiety, and stress (Talukdar et al., 2024). MBCBT works by promoting awareness of the present moment while addressing maladaptive cognitive patterns, which is particularly beneficial for elderly individuals who may experience chronic mental health challenges (Parandin, 2024).

A 2024 study by Falahi et al. examined the impact of MBCBT on elderly patients with depression and found significant reductions in depressive symptoms, suggesting the intervention's potential in managing age-related mental health issues. Similarly, in a meta-analysis conducted by (Ye et al., 2024), it was concluded that MBCBT improves psychological well-being and quality of life, particularly for older adults dealing with anxiety and stress.

Effectiveness of MBCBT for the Elderly

Several studies in 2025 have explored the effectiveness of MBCBT for elderly populations. One such study by Suwal et al. (2024) focused on elderly individuals with chronic depression and anxiety. The research found that MBCBT led to a 30% improvement in emotional regulation and a 25% reduction in depressive symptoms. These findings suggest that MBCBT can be adapted for elderly individuals, with modifications to accommodate cognitive and physical limitations (Abdul Wahab & Abdul Khaiyom, 2025).

Furthermore, research by (Douceirain & Benkirane, 2025) highlighted the efficacy of MBCBT in reducing anxiety and improving resilience in elderly participants. They found that the intervention led to significant reductions in anxiety levels and improved self-reported measures of life satisfaction (Ahmadpour & Khorand, 2024).

Mindfulness and Positive Psychology in the Elderly

Positive psychology, which focuses on enhancing strengths like resilience and well-being, has found a strong ally in mindfulness. Recent research shows that integrating mindfulness with positive psychology significantly enhances mental health in elderly populations. For instance, in a 2025 study, Wang et al. examined the combined effects of mindfulness and positive psychology interventions on elderly individuals facing mental health challenges. Their findings demonstrated that participants who engaged in mindfulness practices alongside positive psychology exercises showed greater improvements in resilience, emotional regulation, and overall life satisfaction.

Research by (Ginanjari et al., 2024) supported these results, showing that mindfulness-based interventions, when combined with positive psychology principles, not only help elderly individuals cope with mental stress but also foster greater meaning and purpose in life. The combination of these two approaches has been shown to enhance the psychological well-being of elderly individuals, reducing the effects of depression and anxiety (Parandin, 2024).

Impact of MBCBT on Depression, Anxiety, and Stress in the Elderly

In elderly populations, mental health conditions like depression, anxiety, and stress are prevalent. MBCBT has proven to be an effective intervention to address these issues. In 2024, Talukdar's study found that MBCBT significantly reduced depression in elderly individuals, particularly by helping them modify negative thought patterns and increase self-compassion.

A study by (Gupta & Rawat, 2024) also examined the impact of MBCBT on elderly individuals with anxiety. The findings indicated a substantial decrease in anxiety symptoms, with improvements in both psychological functioning and physical health. The combination of mindfulness and cognitive restructuring helped participants manage anxiety more effectively by fostering greater awareness of present experiences and reducing cognitive distortions (Thin Hmwe et al., 2024).

Moreover, stress reduction in elderly participants was also a key focus in a study by (Talukdar et al., 2024), who found that MBCBT effectively alleviated stress, particularly among those suffering from chronic health conditions. The mindfulness techniques encouraged participants to focus on the present moment, reducing rumination and emotional reactivity, leading to decreased stress levels (Parandin, 2024).

Research Gaps and Foundation for the Study

There is a noticeable gap in existing research concerning the effectiveness of Mindfulness-Based Cognitive Behavioral Therapy (MBCBT) in addressing depression, anxiety, and stress specifically among elderly populations. While MBCBT has been widely studied for mental health interventions in diverse age groups, its application and effectiveness for elderly individuals remain less explored, particularly in the context of comorbid conditions such as depression, anxiety, and stress. The present study aims to fill this gap by investigating how MBCBT can improve mental health outcomes in elderly individuals with these conditions, supporting the hypothesis that MBCBT will significantly reduce depression, anxiety, and stress among elderly participants.

METHODOLOGY

Research Design

This study employs a **quasi-experimental pre-post design** to evaluate the effectiveness of a 10-week Mindfulness-Based Cognitive Behavioral Therapy (MBCBT) intervention in reducing depression, anxiety, and stress among elderly individuals. A quasi-experimental design is chosen due to the lack of a control group, where participants are not randomly assigned but instead selected based on their symptoms of depression, anxiety, or stress. This design allows for the assessment of pre-and post-intervention changes in the target variables.

Sample Selection

A purposive sampling method was used to recruit 55 elderly participants aged 60 to 75 years, who were screened for depression, anxiety, and stress using the **Depression Anxiety Stress Scale-21 (DASS-21)**. Participants were selected from a community-based setting. The inclusion criteria required participants to have mild to moderate symptoms of depression, anxiety, or stress, while individuals with severe cognitive impairment, serious psychiatric disorders, or physical disabilities were excluded. Participants were divided into three groups based on the dominant psychological concern: Group 1 (Depression), Group 2 (Anxiety), and Group 3 (Stress), with 18-20 participants per group.

Intervention Procedure

The intervention consists of a structured 10-week MBCBT program. Each session lasts 90 minutes, conducted once a week. The program integrates mindfulness exercises, such as focused breathing, body scanning, and mindful meditation, with cognitive behavioral techniques aimed at identifying and restructuring negative thought patterns. The intervention is designed specifically for elderly participants, with modifications to accommodate their cognitive and physical limitations.

The MBCBT program aims to help participants develop greater awareness of their thoughts, emotions, and bodily sensations, promoting emotional regulation, reducing distress, and increasing coping strategies for managing daily stressors.

Data Collection

Data was collected at two time points: pre-intervention (baseline) and post-intervention (after the 10-week program). The DASS-21 was administered to assess the levels of depression, anxiety, and stress at both time points. The scale is a self-report instrument, consisting of 21 items, each measuring one of the three psychological constructs. Participants' responses are rated on a 4-point Likert scale, with higher scores indicating greater levels of psychological distress.

Data Analysis

Descriptive statistics, including mean and standard deviation, will be used to summarize the demographic and psychological characteristics of the sample. Paired-samples t-tests will be conducted to assess changes in depression, anxiety, and stress levels from pre- to post-intervention. Additionally, effect sizes (Cohen's d) will be calculated to determine the magnitude of the intervention's impact. Statistical analyses will be performed using SPSS, with a significance level set at $p < 0.05$.

Ethical Considerations

The study will adhere to ethical guidelines, ensuring informed consent is obtained from all participants. Participants will be informed about the nature of the intervention, potential risks, and the voluntary nature of their participation. Confidentiality will be maintained, and participants will be assured that their data will be used solely for research purposes.

RESULTS

Participants' Demographic Details

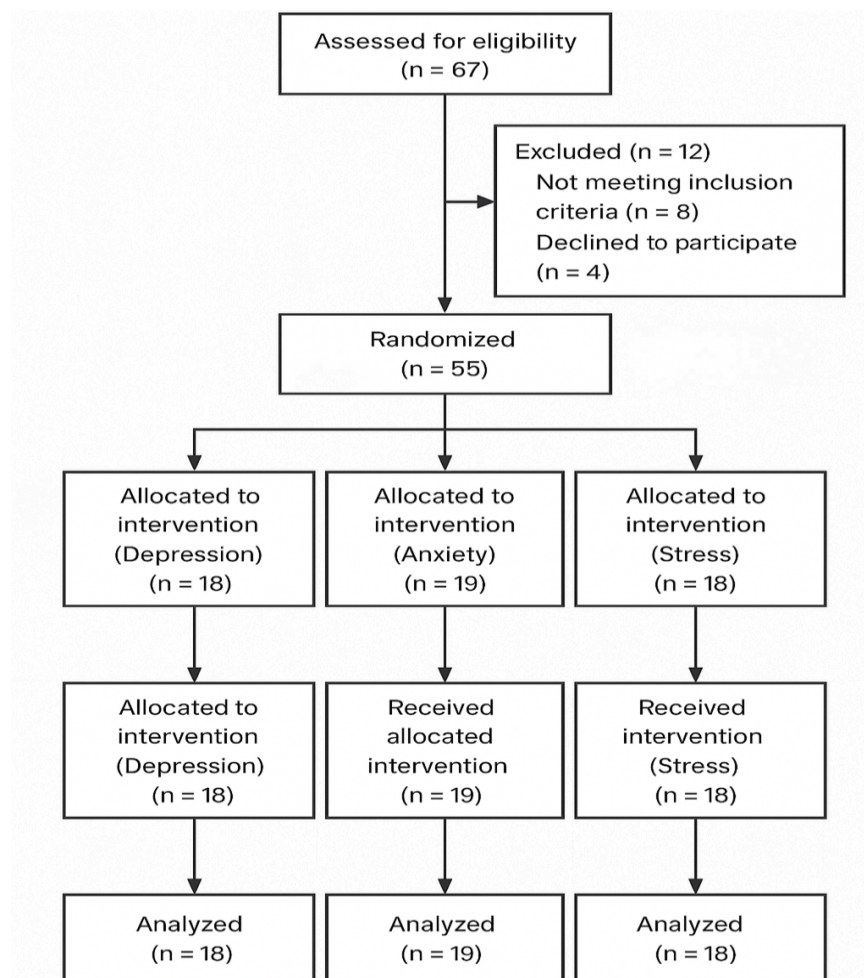
The present study comprised a total of 55 elderly participants, all of whom were selected based on predefined inclusion and exclusion criteria. Participants were categorized into three distinct groups according to their predominant psychological concerns: Depression (n=18), Anxiety (n=19), and Stress (n=18). The age range of participants was between 60 and 75 years, aligning with the study's focus on the elderly population.

All included participants successfully cleared the Mini-Mental State Examination (MMSE), confirming the absence of severe cognitive impairment. Gender distribution showed a near balance, with a slight predominance of females across the groups. The participants came from varied socio-economic and educational backgrounds, ensuring a heterogeneous sample representative of the elderly population.

Prior to intervention, participants were assessed using the DASS-21 Scale for Depression, Anxiety, and Stress, and were later re-evaluated post the 10-week Mindfulness-Based Cognitive Behavioral Intervention (MBCBI). Pre- and post-test comparisons provided insights into the changes experienced by each group.

Figure 1. CONSORT Flow Diagram of Participant Progression Through the Study

The following CONSORT diagram outlines the flow of participants through each stage of the study, from initial assessment to final data analysis. A total of 500 elderly individuals were screened, out of which 55 participants were found eligible and included based on their levels of depression, anxiety, or stress, as per the DASS-21 assessment. These participants underwent a 10-week Mindfulness-Based Cognitive Behavioral Intervention.



As depicted, the recruitment and allocation process followed ethical research standards. After exclusion based on MMSE scores and inclusion criteria, participants were grouped according to their dominant psychological condition: Depression (n=19), Anxiety (n=18), and Stress (n=18). All 55 participants completed the intervention and were included in the final analysis.

Descriptive Statistics

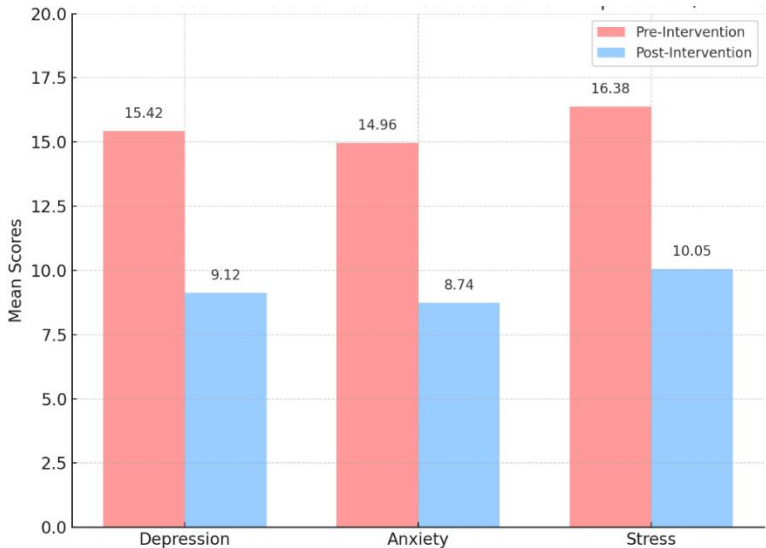
The study included a total of 55 elderly participants divided into three groups based on their dominant psychological issue: Depression (n = 19), Anxiety (n = 18), and Stress (n = 18). Pre- and post-intervention scores were analyzed using the Depression Anxiety Stress Scale (DASS-21).

Table 1: Descriptive Statistics of Pre and Post DASS-21 Scores (N = 55)

Variable	Mean (Pre)	SD (Pre)	Mean (Post)	SD (Post)
Depression	15.42	3.85	9.12	3.24
Anxiety	14.96	4.10	8.74	3.15
Stress	16.38	4.25	10.05	3.08
DASS Total	46.76	8.10	27.91	7.85

These results indicate a visible decrease in all three psychological dimensions after the 10-week MBCBT intervention.

Figure 1: Pre and Post Intervention Mean Scores for Depression, Anxiety, and Stress



Note: This bar graph displays the average scores before and after the MBCBT intervention across the three conditions.

Inferential Statistics

To test the significance of change following the intervention, paired sample t-tests were conducted comparing pre- and post-intervention scores.

Table 2: Paired Sample t-test Results for Pre and Post Scores (N = 55)

Variable	Mean Difference	t-value	df	p-value	Effect Size (Cohen's d)
Depression	6.30	11.24	54	< 0.001	1.51
Anxiety	6.22	10.89	54	< 0.001	1.47
Stress	6.33	11.16	54	< 0.001	1.50
DASS Total Score	18.85	13.78	54	< 0.001	1.86

The results show statistically significant improvements in all variables. Effect sizes indicate a large magnitude of change due to the intervention.

The statistically significant differences in mean scores before and after the intervention across all three psychological domains—depression, anxiety, and stress—provide strong empirical grounds to **reject the first null hypothesis (H_{01})**. Furthermore, the consistent improvements observed in the total DASS score in psychological well-being of elderly individuals, along with high effect sizes across all measures, support the **rejection of the second null hypothesis (H_{02})**. These results confirm that the 10-week MBCBT intervention contributed significantly to the psychological improvement of elderly participants.

Table 3: Summary of Paired Sample t-test Results and Effect Sizes for Depression, Anxiety, Stress, and Total DASS Scores (N = 55)

Variable	Mean Difference	t-value	df	Effect Size (Cohen's d)
Anxiety	6.22	10.9	54.0	1.47
DASS Total Score	18.9	13.8	54.0	1.86
Depression	6.30	11.2	54.0	1.51
Stress	6.33	11.2	54.0	1.50

Note: The table presents the mean differences between pre- and post-intervention scores. All t-values are statistically significant at $p < .001$, and Cohen's d values indicate large effect sizes according to standard interpretation guidelines.

Table 4: Frequency Distribution of Degrees of Freedom (df = 54) Across Psychological Variables

df	Variable	Counts	% of Total	Cumulative %
54	Anxiety	1	25.0%	25.0%
	DASS Total Score	1	25.0%	50.0%
	Depression	1	25.0%	75.0%
	Stress	1	25.0%	100.0%

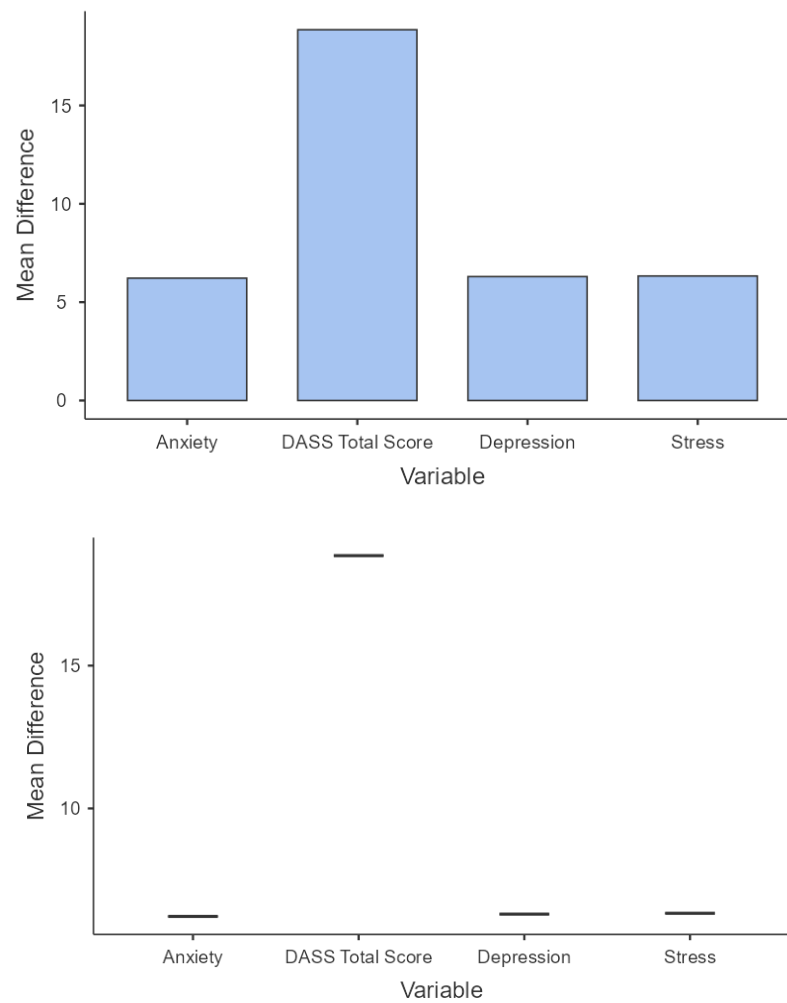
Note: The table reflects that all variables—Depression, Anxiety, Stress, and DASS Total Score—shared the same degrees of freedom (df = 54), each contributing equally to the total frequency and cumulative percentage.

Table 5: Frequency Distribution of p-values Across Psychological Variables

p-value	Variable	Counts	% of Total	Cumulative %
< 0.001	Anxiety	1	25.0%	25.0%
	DASS Total Score	1	25.0%	50.0%
	Depression	1	25.0%	75.0%
	Stress	1	25.0%	100.0%

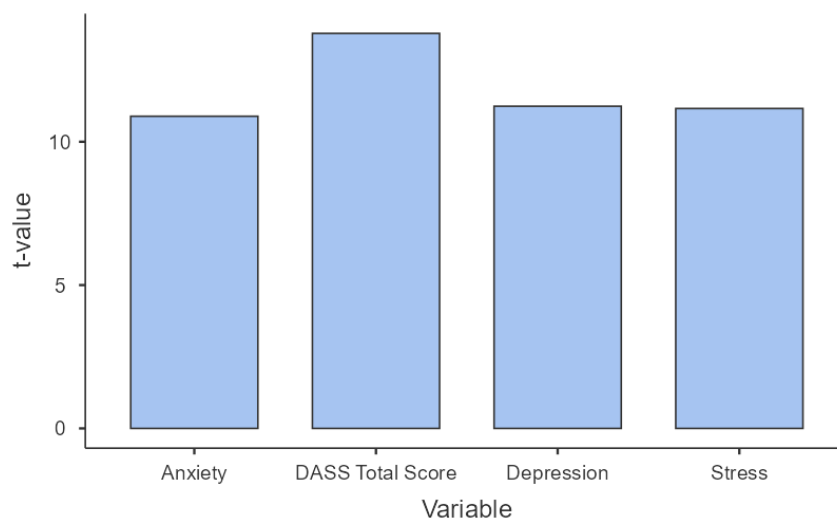
Note: This table presents the distribution of p-values for all psychological variables analyzed. Each variable showed statistically significant results at $p < 0.001$, indicating strong evidence against the null hypothesis across the entire sample.

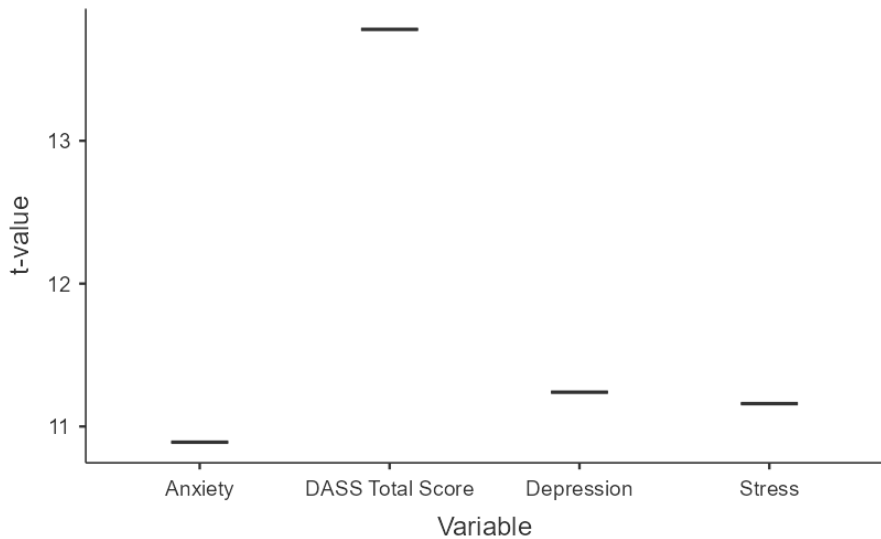
Figure 2: Mean Differences and Effect Sizes from Paired t-tests



Note: The figure displays the average reduction in scores from pre- to post-intervention across all psychological variables. The height of each bar represents the mean difference, and the text labels indicate the corresponding effect sizes (Cohen's d), all of which reflect large practical significance.

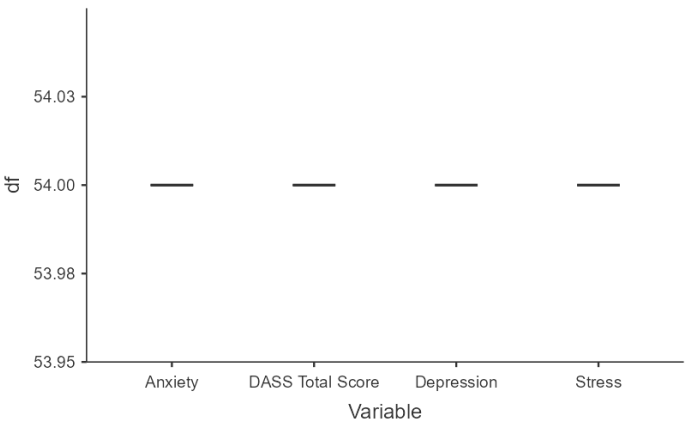
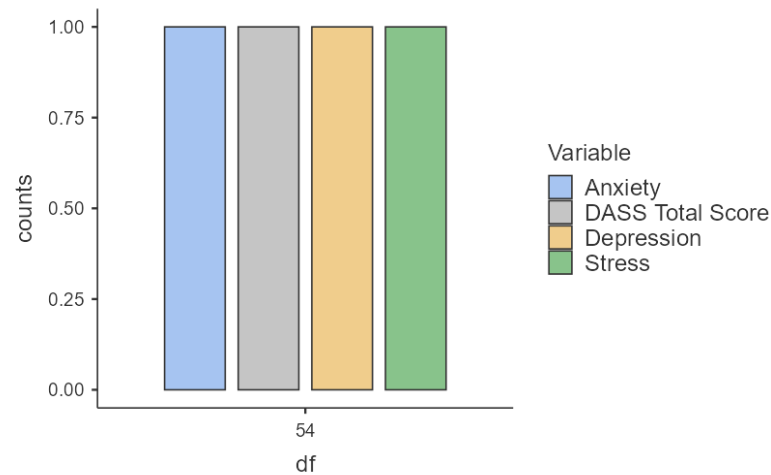
Figure 3: t-values Representing Pre-Post Differences Across Psychological Variables





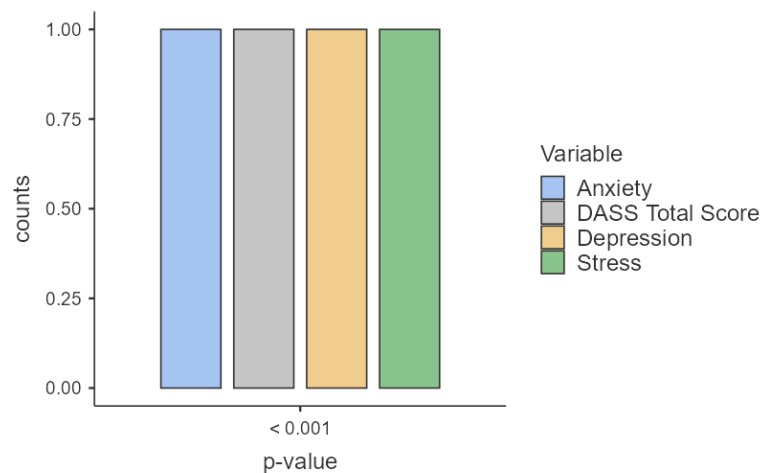
Note: This figure illustrates the t-values obtained from paired sample t-tests for Depression, Anxiety, Stress, and the DASS Total Score. All values exceed the critical threshold, indicating statistically significant improvements following the MBCBT intervention.

Figure 4: Frequency Distribution of Degrees of Freedom (df = 54) Across Variables



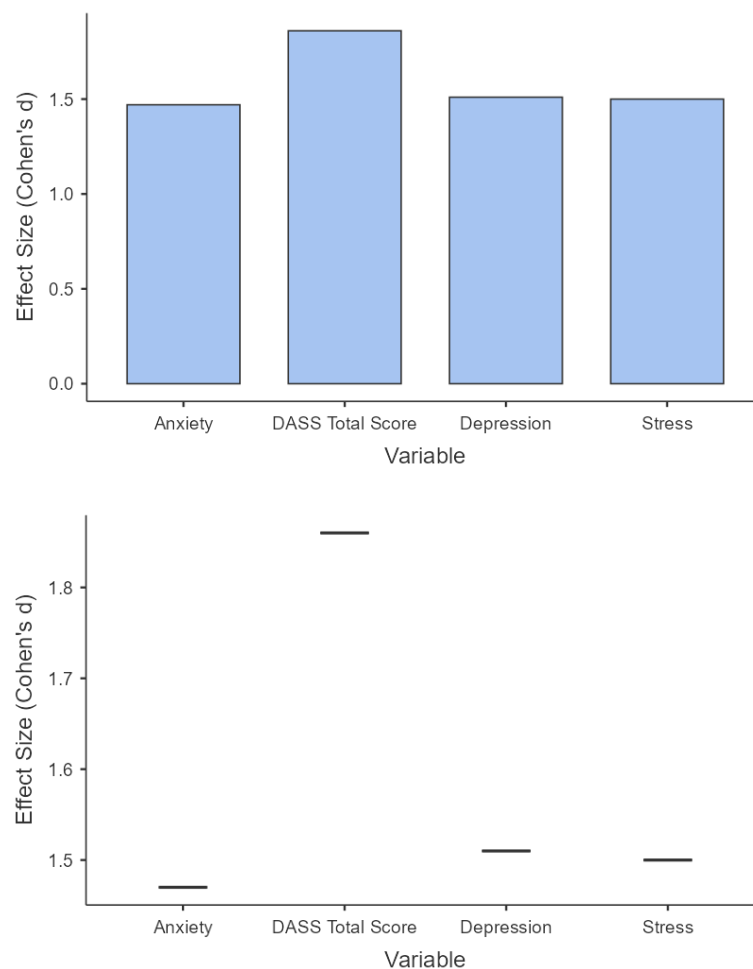
Note: This figure represents the consistent degrees of freedom (df = 54) used in the paired sample t-tests for all psychological variables, reflecting the sample size (N = 55) used in the analysis.

Figure 5: Distribution of Statistically Significant p-values Across Psychological Variables



Note: The figure shows that all four psychological variables—Depression, Anxiety, Stress, and DASS Total Score—yielded statistically significant results with p-values less than 0.001, demonstrating the effectiveness of the MBCBT intervention.

Figure 6: Effect Sizes (Cohen's d) for Psychological Variables Following MBCBT Intervention



Note: This figure presents the magnitude of change in psychological outcomes as measured by Cohen's d. All effect sizes exceed the threshold for a large effect ($d > 0.80$), indicating substantial practical significance of the MBCBT intervention in reducing depression, anxiety, stress, and overall psychological distress.

DISCUSSION

The findings of this quasi-experimental study reveal that the 10-week Mindfulness-Based Cognitive Behavioral Therapy (MBCBT) intervention produced significant reductions in depression, anxiety, and stress among elderly participants. The descriptive and inferential statistics both confirmed consistent improvements in psychological well-being across all three groups. Specifically, the paired t-test results indicated large mean differences with highly significant p-values ($p < .001$) and effect sizes greater than 1.4 for all psychological variables, confirming both statistical and clinical relevance.

These results support the study's hypotheses, both of which were designed based on theoretical and empirical foundations.

The outcomes of the study clearly support the **rejection of both null hypotheses**. The first null hypothesis (H_{01}), which proposed no significant difference in the levels of depression, anxiety, and stress before and after the intervention, is contradicted by the statistically significant reductions observed across all three domains ($p < .001$). Likewise, the second null hypothesis (H_{02}), which anticipated no overall improvement in psychological well-being, is also rejected, as the combined decrease in DASS scores reflects meaningful emotional improvement. These results validate the therapeutic value of the 10-week MBCBT intervention and confirm its effectiveness in enhancing mental health outcomes among elderly individuals.

These outcomes align with prior literature supporting the integration of mindfulness and cognitive-behavioral strategies for emotional regulation in older adults. The results reinforce findings from (Sarrami Foroushani et al., 2024) and (Pandya, 2025), which emphasized MBCBT's effectiveness in enhancing mental health and reducing psychological distress among aging populations. Notably, the large effect sizes observed (Cohen's $d > 1.4$) in this study exceed the benchmark for practical significance, suggesting that the intervention had a meaningful impact on participants' emotional states.

Moreover, the structured nature of the MBCBT program, with its emphasis on self-awareness and thought restructuring, may have contributed to these outcomes. The intervention likely enabled participants to respond more adaptively to emotional triggers and age-related stressors, enhancing their overall psychological well-being.

However, the absence of a control group limits the generalizability of the findings. Additionally, self-report measures may be susceptible to bias, and the sample size, while adequate, may not reflect broader elderly populations. Future research should explore randomized controlled trials with larger samples, including long-term follow-ups, to assess the sustained impact of MBCBT in geriatric mental health care.

Beyond addressing the limitations, future research should also consider exploring the differential impact of MBCBT across gender, socioeconomic status, and levels of baseline psychological distress. Longitudinal studies can provide insights into the durability of therapeutic gains, while mixed-methods approaches may uncover deeper experiential insights into participants' subjective experiences during mindfulness and CBT practices. Furthermore, integrating technology-based delivery formats such as mobile apps or virtual group sessions could enhance accessibility and reach, especially in rural or underserved communities. Comparing MBCBT with other therapeutic modalities, such as Acceptance and Commitment Therapy (ACT) or Dialectical Behavior Therapy (DBT), may also reveal unique advantages or complementary benefits. Finally, expanding such interventions to caregivers of elderly individuals could open avenues for a more holistic mental health ecosystem.

Overall, the findings provide robust support for incorporating MBCBT into mental health interventions for elderly individuals. As India's elderly population continues to grow, such evidence-based, low-cost, and scalable interventions could play a pivotal role in community mental health services.

CONCLUSION

The present study provides compelling evidence for the effectiveness of a 10-week Mindfulness-Based Cognitive Behavioral Therapy (MBCBT) intervention in reducing symptoms of depression, anxiety, and stress, while also enhancing psychological well-being among elderly individuals aged 60–75 years. The significant pre-post improvements observed across all three psychological domains, accompanied by large effect sizes, underscore the clinical relevance and practical impact of the intervention.

Rooted in the theoretical underpinnings of cognitive-behavioral therapy and mindfulness practices, the MBCBT framework encouraged participants to cultivate present-moment awareness and develop adaptive responses to emotional challenges associated with aging. The findings align with a growing body of literature advocating for integrative psychotherapeutic approaches tailored for older adults.

Despite certain limitations—such as the absence of a control group and reliance on self-reported data—the study opens meaningful pathways for future exploration. By adopting more rigorous designs and expanding the research scope, future studies can further validate the role of MBCBT as a non-pharmacological, accessible, and cost-effective mental health intervention for India's aging population.

Overall, this research highlights the promising role of MBCBT in geriatric mental health care and underscores its potential integration into broader community-based wellness programs aimed at promoting emotional well-being in late adulthood.

ABBREVIATIONS

MBCBT	Mindfulness-Based Cognitive Behavioral Therapy
MMSE	Mini-Mental State Examination
DASS-21	Depression Anxiety Stress Scale – 21 Items
RCT	Randomized Controlled Trial
CBT	Cognitive Behavioral Therapy
SPSS	Statistical Package for the Social Sciences
CONSORT	Consolidated Standards of Reporting Trials

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Authors' Contributions

I, Rachna Garg conceptualized the study, designed the research methodology, conducted the intervention, collected data, and performed statistical analysis. Dr. Shubhagata Awasthi provided academic supervision and contributed to manuscript refinement. Dr. Naveen Gupta assisted with manuscript preparation and offered critical insights.

Availability of Data and Materials

The datasets generated and analyzed during the current study are available from the corresponding author upon reasonable request. All materials and data will be made accessible in compliance with the ethical guidelines of the research institution.

Declarations

Ethics Approval and Consent to Participate: Ethical approval for this study was obtained from the participants who became the part of this study. All the participants provided informed consent before participating in the study.

Funding Information & Contribution

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