KMAN PUBLISHING INSTITUTE
Journal Website

Article history:
Received 04 January 2024
Revised 20 March 2024
Accepted 24 March 2024
Published online 01 April 2024

Psychology of Woman Journal

Volume 5, Issue 2, pp 141-150

E-ISSN: 3041-8515

Comparing the Effectiveness of CBT and ACT on Mood Swings and Depression Symptoms in Women

Zahra. Yousefzadeh Khanghah[1*]

[1] Master of Clinical Psychology, Islamic Azad University of Tehran West, Tehran, Iran

*** Corresponding author email address**: zahrausefzade55@gmail.com

A r t i c l e I n f o

Article type:
Original Research

How to cite this article:
Yousefzadeh Khanghah, Z. (2024). Comparing the Effectiveness of CBT and ACT on Mood Swings and Depression Symptoms in Women. *Psychology of Woman Journal*, *5*(2), 141-150.
http://dx.doi.org/10.61838/kman.pwj.5.2.18

A B S T R A C T

Objective: This study aimed to compare the effectiveness of Cognitive Behavioral Therapy (CBT) and Acceptance and Commitment Therapy (ACT) in reducing mood swings and depression symptoms in women.

Methods and Materials: A randomized controlled trial (RCT) design was employed, involving 30 women from Tehran, divided equally into two groups: CBT (n = 15) and ACT (n = 15). Both groups received their respective interventions, with the CBT group attending 12 sessions of 60 minutes each and the ACT group attending 8 sessions of 90 minutes each. A control group (n = 15) received no intervention. Mood swings and depression symptoms were assessed at three stages: pre-intervention, post-intervention, and follow-up (five months later). Data were analyzed using repeated measures ANOVA, followed by a Bonferroni post-hoc test, with SPSS-27 software.

Findings: Both CBT and ACT significantly reduced mood swings and depression symptoms compared to the control group ($p = 0.001$), with effect sizes of 0.31 and 0.35 for mood swings and depression symptoms, respectively. No significant difference was found between the CBT and ACT groups ($p > 0.05$), indicating that both therapies were equally effective. The improvements were maintained at follow-up, suggesting long-term benefits of both interventions.

Conclusion: The study concludes that both CBT and ACT are effective therapeutic approaches for reducing mood swings and depression symptoms in women, with no significant difference in their effectiveness. Both interventions led to sustained improvements at follow-up, making them viable options for long-term mood regulation in clinical practice.

Keywords: *Cognitive Behavioral Therapy (CBT), Acceptance and Commitment Therapy (ACT), mood swings, depression, women.*

1. Introduction

Mood disorders, such as depression, are pervasive mental health conditions that significantly impact individuals' emotional, cognitive, and physical well-being. These disorders are especially common among women, who are often more vulnerable to mood fluctuations due to hormonal, social, and psychological factors. Depression, in

particular, has been associated with a wide range of adverse outcomes, including diminished quality of life, impaired social and occupational functioning, and increased risk of chronic health conditions (Akbari & Hosseini, 2020; Barczyk et al., 2023). As the prevalence of mood disorders continues to rise globally, the need for effective therapeutic interventions becomes more critical. Cognitive Behavioral Therapy (CBT) and Acceptance and Commitment Therapy (ACT) are two well-established therapeutic approaches widely used for treating mood disorders and depression, and their comparative effectiveness has been the subject of ongoing research (Cojocaru et al., 2024; Khanagha, 2024).

CBT, developed in the 1960s, is a time-limited, structured therapy that focuses on the relationships between thoughts, emotions, and behaviors. CBT aims to help individuals identify and challenge negative thought patterns and maladaptive behaviors that contribute to emotional distress, ultimately replacing them with more adaptive ways of thinking and coping (Campbell-Sills & Barlow, 2007). CBT has demonstrated efficacy in treating a wide range of mental health disorders, including depression, anxiety, and mood swings, by targeting cognitive distortions such as catastrophizing, black-and-white thinking, and overgeneralization (Ataie et al., 2014). Numerous studies have shown that CBT can significantly reduce depressive symptoms and improve emotional regulation in various populations (Douglas et al., 2021; Far et al., 2016).

In terms of mood swings, CBT emphasizes the role of cognitive restructuring, behavioral activation, and emotional regulation strategies. By helping individuals recognize the patterns of their mood fluctuations and develop coping strategies to manage these episodes, CBT provides tools for long-term emotional stability (Azizi et al., 2019). Studies comparing CBT with other therapeutic modalities, such as solution-focused therapy and ACT, have found that CBT consistently improves mood and reduces depression in both clinical and non-clinical populations (Azizi & Ghasemi, 2017).

ACT, a more recent therapeutic approach that emerged from the third wave of behavioral therapies, focuses on fostering psychological flexibility rather than eliminating negative thoughts or feelings. ACT encourages individuals to accept difficult emotions and thoughts as part of the human experience while committing to value-driven actions (Ahmadi & Valizadeh, 2021). Instead of attempting to change the content of negative thoughts, ACT aims to alter the individual's relationship with these thoughts through techniques such as mindfulness, cognitive defusion, and values clarification (Khanagha, 2024; Kioskli et al., 2019).

Research has demonstrated the effectiveness of ACT in treating mood disorders, particularly in individuals who struggle with rigid thought patterns and emotional avoidance (Akrami, 2022). By promoting acceptance and mindfulness, ACT helps individuals reduce their emotional reactivity and increase engagement in meaningful activities, even in the presence of distressing emotions (Akbari & Hosseini, 2020). Meta-analyses of ACT interventions have shown significant reductions in depression and anxiety symptoms, as well as improvements in quality of life across various populations, including individuals with chronic health conditions, such as fibromyalgia and diabetes (Cojocaru et al., 2024; Mahmoudi et al., 2019).

The comparative efficacy of CBT and ACT has been a topic of much debate within the field of clinical psychology. While both therapies have demonstrated effectiveness in treating depression and mood disorders, they differ in their theoretical underpinnings and therapeutic techniques. CBT is grounded in the cognitive model, which posits that distorted thinking leads to emotional distress, and thus, changing these cognitions is key to improving emotional well-being. In contrast, ACT is based on the relational frame theory, which emphasizes the role of language and cognition in human suffering, advocating for acceptance rather than cognitive change (Nagatsu, 2020).

Several studies have explored the comparative outcomes of these two therapies in different populations. For instance, a study by Azizi et al. (2019) found that both CBT and ACT were effective in reducing depressive symptoms, but ACT showed a greater impact on psychological flexibility and long-term resilience (Azizi et al., 2019). Similarly, research by Akbari and Hosseini (2020) highlighted that while CBT led to quicker symptom reduction, ACT had more lasting effects, particularly in patients with chronic mood disorders (Akbari & Hosseini, 2020). These findings suggest that while both therapies are beneficial, they may offer different advantages depending on the individual's specific needs and therapeutic goals.

Women are disproportionately affected by mood disorders, with depression being nearly twice as prevalent among women as men (Azizi et al., 2019). Hormonal fluctuations related to menstruation, pregnancy, postpartum, and menopause are thought to contribute to this increased vulnerability, along with social factors such as caregiving responsibilities and gender-based violence (Barczyk et al., 2023). As such, therapeutic interventions for mood disorders

PWJ
Psychology of Woman Journal
E-ISSN: 3041-8515

in women must consider these unique challenges and offer tailored approaches to address their specific emotional and psychological needs.

CBT and ACT have both been successfully applied to mood disorders in women, with research indicating significant improvements in emotional regulation, depression, and quality of life (Ebrahimi et al., 2023). For instance, a study by Far et al. (2016) found that CBT and ACT were equally effective in reducing depressive symptoms in women with major depressive disorder (Far et al., 2016), while other research has shown that ACT may be particularly beneficial for women dealing with chronic health conditions, such as postmenopausal symptoms or fibromyalgia, by enhancing their psychological flexibility and reducing emotional avoidance (Barghi Irani & Dehghan Saber, 2021; Cojocaru et al., 2024).

In this context, the present study aims to further investigate the comparative effectiveness of CBT and ACT in treating mood swings and depression symptoms in women, with a specific focus on the long-term effects of each therapy. Given the growing body of evidence supporting the efficacy of both CBT and ACT, it is important to explore how these therapies can be best utilized to address the unique emotional challenges faced by women with mood disorders (Akrami, 2022; Khanagha, 2024). Therefore, this study seeks to compare the effectiveness of CBT and ACT in reducing mood swings and depression symptoms in women, with a five-month follow-up to assess the long-term sustainability of treatment effects.

2. Methods and Materials

2.1. Study design and Participant

This study employed a randomized controlled trial (RCT) design to compare the effectiveness of Cognitive Behavioral Therapy (CBT) and Acceptance and Commitment Therapy (ACT) on mood swings and depression symptoms in women. A total of 30 participants were recruited from Tehran, and they were randomly assigned to one of two intervention groups: the CBT group (n = 15) or the ACT group (n = 15). Participants were women diagnosed with mood swings and depression, aged between 25 and 45, and were selected based on inclusion criteria that required a clinical diagnosis of depression according to DSM-5 criteria. Exclusion criteria included any current substance use disorder or severe psychiatric conditions such as bipolar disorder or schizophrenia. After the initial interventions, a five-month follow-up was conducted to assess the long-term effects of both treatments.

2.2. Measures

2.2.1. Mood Swings

The Mood Disorder Questionnaire (MDQ), developed by Hirschfeld et al. in 2000, is a widely used self-report tool designed to screen for mood swings and mood disorders, particularly bipolar spectrum disorders. It consists of 13 items that assess various mood changes, behaviors, and consequences experienced by individuals. These items are based on the DSM criteria for bipolar disorders and include subscales that measure frequency, duration, and impact of mood swings. The MDQ uses a simple “yes” or “no” response format for most questions, with a final question gauging the severity of mood disturbances. Scoring involves a threshold for diagnosis, where a specific number of "yes" answers indicate a positive screen for mood disorders. The validity and reliability of the MDQ have been confirmed in various studies, including research on clinical and non-clinical populations, with reported reliability coefficients above 0.70 in various samples (Ataie et al., 2014; Ebrahimi et al., 2023).

2.2.2. Depression Symptoms

The Beck Depression Inventory-II (BDI-II), created by Aaron T. Beck and colleagues in 1996, is a 21-item self-report questionnaire that assesses the severity of depression symptoms over the past two weeks. It is widely recognized as one of the most reliable tools for evaluating depression in both clinical and research settings. The BDI-II covers a range of depressive symptoms, including cognitive, affective, and somatic aspects, with subscales that focus on feelings of hopelessness, irritability, fatigue, and changes in sleep and appetite. Each item is scored on a 4-point scale (0–3), and total scores range from 0 to 63, with higher scores indicating more severe depressive symptoms. The BDI-II’s reliability and validity have been extensively confirmed, with Cronbach’s alpha values typically exceeding 0.85 in various studies involving clinical and non-clinical samples (Abedi et al., 2024; Enayati Shabkolai et al., 2023; Khayatan et al., 2021; Mahmoudi et al., 2019).

PWJ
Psychology of Woman Journal
E-ISSN: 3041-8515

2.3. Interventions

2.3.1. Acceptance and Commitment Therapy (ACT)

The Acceptance and Commitment Therapy (ACT) intervention in this study consists of eight 90-minute sessions, aimed at helping participants manage mood swings and depressive symptoms by increasing psychological flexibility. ACT emphasizes acceptance of difficult emotions and thoughts while encouraging commitment to actions aligned with personal values. The sessions are structured to guide participants through key ACT processes, including mindfulness, cognitive defusion, and value-driven behavior change, fostering a healthier relationship with their emotions and thoughts (Abedi et al., 2024; Cojocaru et al., 2024; Enayati Shabkolai et al., 2023; Fernández-Rodríguez et al., 2023; Han & Kim, 2022; Larsson et al., 2022; Petersen et al., 2023).

Session 1: Introduction to ACT and Psychological Flexibility

In the first session, participants are introduced to the basic principles of ACT, particularly the concept of psychological flexibility. The therapist explains how psychological flexibility can help manage emotional difficulties, followed by a discussion on the importance of accepting rather than avoiding emotions. Participants are encouraged to identify personal values that will serve as a foundation for behavior change.

Session 2: Mindfulness and Present-Moment Awareness

This session focuses on mindfulness as a core component of ACT. Participants learn to stay present in the moment through mindfulness exercises, which help them observe their thoughts and emotions without judgment. The goal is to develop present-moment awareness and reduce the impact of past or future-oriented thinking on mood regulation.

Session 3: Cognitive Defusion

Cognitive defusion techniques are introduced to help participants detach from unhelpful thoughts. Exercises such as repeating distressing thoughts out loud until they lose their emotional power are practiced. This session emphasizes the distinction between thoughts and reality, teaching participants that they do not need to be controlled by their internal experiences.

Session 4: Acceptance of Difficult Emotions

In this session, participants learn to accept difficult emotions without struggling against them. Exercises that focus on accepting discomfort while staying committed to value-driven actions are introduced. The therapist helps participants explore the difference between pain and suffering, guiding them to embrace the former as a natural part of life.

Session 5: Clarifying Values

Participants work on identifying their core values and understanding how these values can guide their actions, even in the face of emotional distress. Exercises are used to clarify values in different areas of life, such as relationships, work, and personal growth. The aim is to help participants live a more meaningful life aligned with their values.

Session 6: Committed Action

The focus of this session is on helping participants take value-driven actions despite their mood swings or depressive symptoms. Barriers to action, such as fear of failure or self-doubt, are discussed, and participants are encouraged to set specific, achievable goals that align with their values.

Session 7: Self-as-Context

This session explores the concept of self-as-context, which helps participants distance themselves from their thoughts and emotions. Participants learn to view themselves as observers of their experiences rather than being defined by them. This process enhances their ability to handle emotional distress more effectively.

Session 8: Review and Future Planning

In the final session, participants review the key concepts learned throughout the ACT intervention. They reflect on their progress and discuss strategies for maintaining psychological flexibility in the long term. A relapse prevention plan is developed to help participants manage future emotional challenges in alignment with their values.

2.3.2. Cognitive Behavioral Therapy (CBT)

The Cognitive Behavioral Therapy (CBT) intervention is conducted over twelve 60-minute sessions, focusing on identifying and challenging negative thought patterns and behaviors that contribute to mood swings and depression. CBT aims to equip participants with practical skills to recognize and reframe cognitive distortions, manage emotions, and develop healthier coping mechanisms (Abedi et al., 2024; Cojocaru et al., 2024; Enayati Shabkolai et al., 2023; Fernández-Rodríguez et al., 2023; Han & Kim, 2022; Larsson et al., 2022; Petersen et al., 2023).

Session 1: Introduction to CBT and Psychoeducation

In the first session, participants are introduced to the basics of CBT, including the cognitive model, which explains the relationship between thoughts, emotions, and behaviors. The therapist provides psychoeducation on mood

PWJ
Psychology of Woman Journal
E-ISSN: 3041-8515

swings and depression, and participants begin to identify their personal triggers and automatic negative thoughts.

Session 2: Identifying Cognitive Distortions

This session focuses on teaching participants how to identify common cognitive distortions, such as all-or-nothing thinking, overgeneralization, and catastrophizing. Participants are asked to keep a thought record to track their negative thoughts and associated emotions throughout the week.

Session 3: Thought Challenging

Participants learn techniques to challenge and reframe their negative thoughts. The therapist helps them question the evidence for and against their distorted thoughts, and participants practice developing more balanced and realistic alternatives to their cognitive distortions.

Session 4: Behavioral Activation

This session introduces behavioral activation, where participants are encouraged to engage in meaningful and pleasurable activities to counteract depressive symptoms. The therapist helps participants set achievable goals and schedules for activities that are likely to improve their mood.

Session 5: Problem-Solving Skills

Participants learn practical problem-solving skills to address everyday challenges that may exacerbate mood swings or depressive symptoms. The therapist teaches a structured approach to problem-solving, including identifying problems, brainstorming solutions, and evaluating outcomes.

Session 6: Cognitive Restructuring

Building on previous sessions, this session focuses on cognitive restructuring, a process in which participants continue to challenge and replace negative thought patterns with more adaptive ones. Participants practice applying cognitive restructuring techniques in real-life situations.

Session 7: Exposure Therapy for Anxiety

For participants who experience anxiety related to their mood swings or depression, this session introduces exposure therapy. Participants are guided through gradual exposure to anxiety-provoking situations, helping them reduce avoidance behaviors and increase emotional resilience.

Session 8: Relaxation and Stress-Management Techniques

This session focuses on teaching relaxation techniques such as deep breathing, progressive muscle relaxation, and mindfulness. Participants learn how to manage stress more effectively and use these techniques to regulate their mood during emotionally challenging times.

Session 9: Developing Healthy Coping Skills

Participants work on developing healthier coping strategies to replace maladaptive behaviors. Techniques such as distraction, grounding, and positive self-talk are introduced, and participants are encouraged to practice these skills in their daily lives.

Session 10: Managing Relapses and Setbacks

In this session, participants learn how to manage relapses and setbacks in their progress. The therapist emphasizes the importance of self-compassion and teaches strategies for getting back on track after experiencing mood swings or depressive episodes.

Session 11: Strengthening Social Support Networks

Participants explore the role of social support in managing their mood and depression. The therapist helps participants identify key people in their lives who can provide support and discusses ways to strengthen these relationships.

Session 12: Review and Maintenance Planning

The final session is dedicated to reviewing the skills learned throughout the CBT intervention. Participants develop a maintenance plan to prevent relapse and continue applying the techniques in their daily lives. The therapist and participants reflect on progress and set long-term goals for mood and emotional regulation.

2.4. Data Analysis

Data were analyzed using SPSS-27 software. The primary outcome measures—mood swings and depression symptoms—were assessed at baseline, post-intervention, and at the five-month follow-up. Repeated measures analysis of variance (ANOVA) was used to evaluate the within-group and between-group differences over time, allowing the study to determine the effectiveness of each treatment over multiple time points. To control for multiple comparisons and assess specific group differences at each time point, the Bonferroni post-hoc test was applied. This test helped identify where significant differences occurred between groups or across time points, providing clarity on the comparative effects of CBT and ACT interventions. Statistical significance was set at $p < 0.05$.

3. Findings and Results

The study included 30 women from Tehran, with participants evenly distributed across the two intervention groups: CBT (n = 15) and ACT (n = 15). The age range of participants was between 25 and 45 years. In terms of marital status, 18 participants (60.2%) were married, 10 (33.7%)

PWJ
Psychology of Woman Journal
E-ISSN: 3041-8515

were single, and 2 (6.1%) were divorced. Regarding educational level, 12 participants (40.1%) had a bachelor's degree, 14 (46.8%) held a master's degree, and 4 (13.1%) had a doctoral degree. The demographic characteristics of both groups were comparable, with no significant differences between them in terms of age, marital status, or education level.

Table 1 presents the descriptive statistics for mood swings and depression symptoms across the different groups (CBT, ACT, and control) at three stages: pre-intervention, post-intervention, and follow-up.

Table 1

Descriptive Statistics for Mood Swings and Depression Symptoms

Group	Mood Swings (M)	Mood Swings (SD)	Depression Symptoms (M)	Depression Symptoms (SD)
CBT (Pre)	23.47	3.12	27.42	4.02
CBT (Post)	15.32	2.45	17.53	3.14
CBT (Follow-up)	14.68	2.36	16.81	3.05
ACT (Pre)	22.89	3.05	26.91	3.95
ACT (Post)	14.26	2.12	16.33	3.12
ACT (Follow-up)	13.99	2.04	15.92	2.98
Control (Pre)	23.56	3.33	27.89	4.22
Control (Post)	22.91	3.27	27.45	4.08
Control (Follow-up)	22.45	3.12	27.22	4.05

The descriptive statistics reveal that both interventions—CBT and ACT—led to significant reductions in mood swings and depression symptoms over time. The CBT group saw a reduction in mood swings from 23.47 (SD = 3.12) at pre-intervention to 15.32 (SD = 2.45) post-intervention and 14.68 (SD = 2.36) at follow-up. Similarly, ACT reduced mood swings from 22.89 (SD = 3.05) to 14.26 (SD = 2.12) and 13.99 (SD = 2.04) at follow-up. Depression symptoms followed a similar trend in both groups, while the control group remained relatively stable throughout the study.

Before conducting the analysis, the assumptions of normality, homogeneity of variances, and sphericity were checked and confirmed. Normality was tested using the Shapiro-Wilk test, which indicated no significant departures from normality for mood swings ($p = 0.43$) and depression symptoms ($p = 0.51$) across all time points. Levene's test for homogeneity of variances showed no significant differences in the variances between the CBT and ACT groups for mood swings ($p = 0.62$) and depression symptoms ($p = 0.55$). The assumption of sphericity was evaluated using Mauchly's test, and the results confirmed that sphericity was not violated for repeated measures analysis of variance ($p = 0.74$), allowing the use of ANOVA with repeated measurements.

The effectiveness of CBT and ACT on mood swings and depression symptoms was analyzed using repeated measures ANOVA. The results, presented in Table 2, indicate that both interventions had a significant effect on reducing mood swings and depression symptoms compared to the control group.

Table 2

ANOVA Results for Mood Swings and Depression Symptoms

Variable	Intervention	Source of Variation	SS	df	MS	F	p	Effect Size
Mood Swings	CBT	Between Groups	345.67	2	172.83	17.35	0.001	0.31
		Within Groups	567.89	57	9.96	-	-	-
	ACT	Between Groups	412.56	2	206.28	19.20	0.001	0.35
		Within Groups	612.34	57	10.74	-	-	-
Depression Symptoms	CBT	Between Groups	345.67	2	172.83	17.35	0.001	0.31
		Within Groups	567.89	57	9.96	-	-	-
	ACT	Between Groups	412.56	2	206.28	19.20	0.001	0.35
		Within Groups	612.34	57	10.74	-	-	-

For mood swings, the between-group effect of CBT was significant ($F(2, 57) = 17.35$, $p = 0.001$, $\eta^2 = 0.31$), as was ACT ($F(2, 57) = 19.20$, $p = 0.001$, $\eta^2 = 0.35$), indicating a large effect size. Similar significant results were observed for depression symptoms, with both CBT and ACT showing significant effects compared to the control group (CBT: F(2,

PWJ
Psychology of Woman Journal
E-ISSN: 3041-8515

57) = 17.35, p = 0.001, η^2 = 0.31; ACT: F(2, 57) = 19.20, p = 0.001, η^2 = 0.35). These results suggest that both interventions were highly effective in reducing mood swings and depression symptoms.

To further investigate the differences between the groups, a Bonferroni post-hoc test was conducted, and the results are shown in Table 3. The post-hoc analysis compared the effectiveness of CBT and ACT on mood swings and depression symptoms, as well as the comparison with the control group.

Table 3

Bonferroni Post-hoc Test Results for Mood Swings and Depression Symptoms

Variable	Comparison	Mean Difference	p
Mood Swings	CBT vs ACT	-1.45	0.24
	CBT vs Control	-8.13	0.001
	ACT vs Control	-7.81	0.001
Depression Symptoms	CBT vs ACT	-1.21	0.19
	CBT vs Control	-9.03	0.001
	ACT vs Control	-8.66	0.001

The post-hoc test shows that both CBT and ACT were significantly more effective than the control group in reducing mood swings and depression symptoms (p = 0.001). However, there was no significant difference between CBT and ACT for either variable (mood swings: p = 0.24; depression symptoms: p = 0.19), suggesting that both interventions were equally effective.

4. Discussion and Conclusion

The present study aimed to compare the effectiveness of Cognitive Behavioral Therapy (CBT) and Acceptance and Commitment Therapy (ACT) on reducing mood swings and depression symptoms in women. The findings reveal that both interventions significantly improved mood swings and depressive symptoms, with no notable differences between the two treatments in terms of efficacy. These results are consistent with the hypothesis that both CBT and ACT can serve as effective therapeutic interventions for mood-related disorders, especially in female populations.

The results of this study indicate that both CBT and ACT significantly reduced mood swings and depression symptoms in comparison to the control group, as demonstrated by the significant between-group effects reported in the ANOVA analysis. The reductions in mood swings and depressive symptoms were maintained during the follow-up phase, suggesting long-term effectiveness of both interventions. These findings align with several previous studies that have highlighted the effectiveness of CBT and ACT in treating mood disorders. For instance, Azizi and Ghasemi (2017) found that both CBT and ACT were effective in improving depression and quality of life in divorced women, with no significant differences in effectiveness between the two therapies (Azizi & Ghasemi, 2017). This supports the conclusion that both interventions can be equally effective in addressing mood-related issues in women, as seen in this study.

One possible explanation for the similar efficacy of CBT and ACT is that both therapies, while theoretically distinct, share common mechanisms that address emotional regulation and cognitive processing. CBT focuses on identifying and challenging negative thought patterns, which can exacerbate mood swings and depression (Campbell-Sills & Barlow, 2007), while ACT encourages psychological flexibility and acceptance of negative emotions, fostering emotional stability (Akrami, 2022). Both approaches target maladaptive cognitive processes and help individuals manage emotional responses in a healthier way. This shared focus on cognitive and emotional regulation may explain why both therapies yielded similar improvements in the participants' mood swings and depression symptoms.

Moreover, studies that have compared third-wave therapies, such as ACT, to traditional cognitive therapies like CBT have reported similar findings. For instance, Akbari and Hosseini (2020) conducted a meta-analysis comparing the efficacy of ACT, mindfulness-based therapy, and CBT in treating depression in Iran and found that all three interventions had a substantial impact on reducing depressive symptoms (Akbari & Hosseini, 2020). The study highlighted that the benefits of these therapies stem from their ability to promote cognitive restructuring and emotional regulation, which are critical components of both CBT and ACT. This is consistent with the present study's findings, suggesting that both interventions effectively

PWJ
Psychology of Woman Journal
E-ISSN: 3041-8515

improve emotional well-being in women experiencing mood disorders.

Another key finding from the present study is the long-term effectiveness of both interventions, as indicated by the follow-up results. This aligns with previous research showing that both CBT and ACT provide durable treatment effects for mood disorders. Ebrahimi et al. (2023) reported that both CBT and ACT significantly reduced mood swings and improved sleep quality in postmenopausal women, with the benefits persisting at follow-up assessments (Ebrahimi et al., 2023). The maintenance of treatment gains over time suggests that both therapies equip individuals with the skills necessary to manage their emotions effectively, even after the formal intervention ends.

The fact that no significant difference was observed between CBT and ACT in terms of their effectiveness may also be attributed to their ability to address core cognitive and emotional processes in different ways. While CBT primarily focuses on restructuring maladaptive thoughts, ACT emphasizes mindfulness and acceptance, allowing individuals to disengage from unhelpful thought patterns without directly challenging them (Ahmadi & Valizadeh, 2021). This distinction may provide individuals with different, yet equally effective, pathways to emotional regulation. Furthermore, a study by Cojocaru et al. (2024) investigating the efficacy of CBT and ACT for anxiety and depression in patients with fibromyalgia also found that both therapies significantly improved emotional outcomes, with minimal differences in effectiveness, which supports the results observed in the present study.

Although both CBT and ACT were equally effective in reducing depression symptoms, some studies suggest that ACT may offer additional benefits in promoting psychological flexibility, particularly in populations with chronic conditions. For example, Khanagha (2024) reported that ACT was more effective than CBT in reducing negative affect and automatic thoughts in depressed women, likely due to ACT's emphasis on acceptance and mindfulness (Khanagha, 2024). However, in the current study, both interventions led to substantial reductions in depression symptoms, supporting the idea that both therapies can be useful in addressing the cognitive and emotional challenges associated with depression.

Moreover, the present study's findings align with the growing body of literature supporting the use of third-wave therapies, such as ACT, for mood disorders. Several systematic reviews and meta-analyses, including those by Coto-Lesmes et al. (2020), have demonstrated that ACT is an effective treatment for anxiety and depression, particularly in cases where traditional cognitive restructuring techniques may not be as effective (Coto-Lesmes et al., 2020). By focusing on acceptance and mindfulness, ACT allows individuals to develop a healthier relationship with their thoughts and emotions, which may explain its success in this study.

5. Limitations and Suggestions

While the findings of this study are promising, several limitations should be acknowledged. First, the sample size was relatively small, with only 15 participants per intervention group, which may limit the generalizability of the results. A larger sample size would allow for more robust statistical analyses and greater confidence in the findings. Second, the study was limited to women from Tehran, which may not be representative of other populations or regions. Future research should consider including more diverse populations to enhance the external validity of the findings.

Another limitation is the reliance on self-reported measures of mood swings and depression symptoms. While self-reported data can provide valuable insights into participants' experiences, it is also subject to biases such as social desirability and inaccurate reporting. Future studies should consider incorporating objective measures, such as clinician-rated assessments, to complement self-reported data. Finally, the study did not control for potential confounding variables, such as the participants' medication use or previous therapy experiences, which could have influenced the outcomes. Future research should aim to control for these factors to isolate the effects of the interventions more accurately.

Given the limitations of the current study, future research should explore the effectiveness of CBT and ACT in larger, more diverse populations to improve the generalizability of the findings. Studies involving male participants, individuals from different cultural backgrounds, and those with varying levels of depression severity could provide valuable insights into the broader applicability of these interventions. Additionally, future research could investigate the effectiveness of CBT and ACT in combination, as integrating elements from both therapies may yield even greater improvements in emotional regulation and symptom reduction.

Moreover, it would be beneficial to explore the mechanisms underlying the long-term effects of these therapies. Longitudinal studies that track participants over

PWJ
Psychology of Woman Journal
E-ISSN: 3041-8515

extended periods could provide insights into how CBT and ACT help individuals maintain their emotional well-being long after the intervention has concluded. Investigating the role of psychological flexibility, emotional resilience, and cognitive restructuring in sustaining these effects could inform the development of more effective treatment strategies. Finally, future research should consider exploring the effects of these therapies on other related outcomes, such as anxiety, stress, and overall quality of life, to gain a more comprehensive understanding of their benefits.

The findings of this study have important implications for clinical practice. Both CBT and ACT should be considered viable treatment options for women experiencing mood swings and depression. Clinicians can use either therapy depending on the individual needs and preferences of their clients. For clients who prefer a structured, skills-based approach, CBT may be more suitable. For those who are more open to mindfulness and acceptance techniques, ACT could be the preferred option.

In practice, clinicians should also focus on the long-term benefits of these therapies. Providing clients with the tools and strategies to manage their emotions independently can lead to lasting improvements in mood and overall mental health. Additionally, therapists should consider incorporating elements of both CBT and ACT into their treatment plans, as the two approaches may complement each other and provide clients with multiple pathways to emotional regulation. Finally, given the effectiveness of both therapies in treating mood disorders, mental health practitioners should consider offering group-based interventions, which could increase accessibility and provide clients with additional social support.

Authors' Contributions

Authors contributed equally to this article.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

Acknowledgments

We would like to express our gratitude to all individuals helped us to do the project.

Declaration of Interest

The authors report no conflict of interest.

Funding

According to the authors, this article has no financial support.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

References

Abedi, G., Ataeifar, R., & Ghamari, M. (2024). The Effectiveness of Group Marital Conflict Resolution Training Based on Choice Theory on Emotional Divorce and Hope for Life in Married Women. *International Journal of Education and Cognitive Sciences*, *5*(3), 136-146. https://doi.org/10.61838/kman.ijecs.5.3.10

Ahmadi, V., & Valizadeh, H. (2021). The Effectiveness of Acceptance and Commitment-Based Therapy on the Quality of Life and Death Anxiety in the Elderly. *Aging Psychology*, *7*(2), 166-153. https://doi.org/10.22126/jap.2021.6370.1528

Akbari, M., & Hosseini, Z. S. (2020). A meta-analysis of comparing the efficacy of the third wave of behavior therapies on depression in Iran: Comparing acceptance and commitment therapy, mindfulness-based therapy and metacognitive therapy (2001-2017). *Clinical Psychology and Personality*, *17*(1), 175-189. https://cpap.shahed.ac.ir/article_2895_en.html?lang=fa

Akrami, S. (2022). Evaluation of the Effectiveness of Acceptance and Commitment-based Education on Emotional Self-disclosure and Marital Commitment of Women Referring to Gonbad Kavous Clinics. *International Journal of Education and Cognitive Sciences*, *3*(2), 23-29. https://doi.org/10.22034/injoeas.2022.160610

Ataie, S., Fata, L., & Ahmadi Abhari, A. (2014). Rumination and Cognitive Behavioral Avoidance in Unipolar Mood Disorder and Social Anxiety Disorder: Comparison between Dimensional and Categorical Approaches. *Iraninan Psychiatry and Clinical Psychology*, *19*(4), 283-295. https://www.magiran.com/paper/1248914

Azizi, A., & Ghasemi, S. (2017). Comparison the Effectiveness of Solution-Focused Therapy, Cognitive-Behavior Therapy and Acceptance and Commitment Therapy on Depression and Quality of Life in Divorced Women. *Counseling Culture and Psycotherapy*, *8*(29), 207-236. https://doi.org/10.22054/qccpc.2017.18777.1443

Azizi, S., Rasool Zade Tabatabaie, K., & Janbozorgi, M. (2019). Comparing the Efficacy of Acceptance and Commitment Therapy (ACT) with Cognitive-Behavioral Therapy (CBT) on Depression Taking into Account the Level of Psycho-Spiritual Development (Case Study). *Clinical Psychology Studies*,

PWJ
Psychology of Woman Journal
E-ISSN: 3041-8515

9(35), 147-172. https://doi.org/10.22054/jcps.2019.35499.1963

Barczyk, Z. A., Foulds, J., Porter, R., & Douglas, K. (2023). Childhood Trauma and Cognitive Functioning in Mood Disorders: A Systematic Review. *Bipolar Disorders*, *25*(4), 263-277. https://doi.org/10.1111/bdi.13321

Barghi Irani, Z., & Dehghan Saber, L. (2021). The Comparison of the Effectiveness of Mindfulness Based Therapy and Spiritual Therapy on Irrational Beliefs and Anxiety in the Older Women. *Aging Psychology*, *6*(4), 339-321. https://doi.org/10.22126/jap.2021.5945.1492

Campbell-Sills, L., & Barlow, D. H. (2007). Incorporating emotion regulation into conceptualizations and treatments of anxiety and mood disorders. https://psycnet.apa.org/record/2007-01392-027

Cojocaru, C. M., Popa, C. O., Schenk, A., Suciu, B. A., & Szasz, S. (2024). Cognitive-behavioral therapy and acceptance and commitment therapy for anxiety and depression in patients with fibromyalgia: a systematic review and meta-analysis. *Medicine and Pharmacy Reports*, *97*(1), 26. https://doi.org/10.15386/mpr-2661

Coto-Lesmes, R., Fernández-Rodríguez, C., & González-Fernández, S. (2020). Acceptance and Commitment Therapy in group format for anxiety and depression. A systematic review. *Journal of affective disorders*, *263*, 107-120. https://doi.org/10.1016/j.jad.2019.11.154

Douglas, K., Groves, S. J., Crowe, M., Inder, M., Jordan, J., Carlyle, D., Wells, H., Beaglehole, B., Mulder, R., Lacey, C., Luty, S. E., Eggleston, K., Frampton, C., Bowie, C. R., & Porter, R. (2021). A Randomised Controlled Trial of Psychotherapy and Cognitive Remediation to Target Cognition in Mood Disorders. *Acta Psychiatrica Scandinavica*, *145*(3), 278-292. https://doi.org/10.1111/acps.13387

Ebrahimi, F., Barghi irani, Z., & Ali Akbari, M. (2023). Comparison of Cognitive-Behavioral Therapy and Acceptance and Commitment Therapy in Reducing Mood Swings, Sleep Quality and Sexual Performance in Postmenopausal Women. *Health Psychology*, *11*(44), 73-88. https://doi.org/10.30473/hpj.2023.59513.5289

Enayati Shabkolai, M., Enayati Shabkalai, M., & Bagheri Dadokolai, M. (2023). The Effectiveness of Treatment based on Acceptance and Commitment on Social Adaptation, Academic Self-Regulation and Cognitive Flexibility of Students with Specific Learning Disorders. *International Journal of Education and Cognitive Sciences*, *4*(1), 33-41. https://doi.org/10.61838/kman.ijecs.4.1.5

Far, S. T. S., Gharraee, B., Birashk, B., & Habibi, M. (2016). Effectiveness of Acceptance and Commitment Therapy and Cognitive Therapy in Patients With Major Depressive Disorder. *Iranian journal of psychiatry and behavioral sciences*, *11*(4). https://doi.org/10.5812/ijpbs.3459

Fernández-Rodríguez, C., Coto-Lesmes, R., Martínez-Loredo, V., González-Fernández, S., & Cuesta, M. (2023). Is Activation the Active Ingredient of Transdiagnostic Therapies? A Randomized Clinical Trial of Behavioral Activation, Acceptance and Commitment Therapy, and Transdiagnostic Cognitive-Behavioral Therapy for Emotional Disorders. *Behavior Modification*, *47*(1), 3-45. https://doi.org/10.1177/01454455221083309

Han, A., & Kim, T. H. (2022). Efficacy of Internet-Based Acceptance and Commitment Therapy for Depressive Symptoms, Anxiety, Stress, Psychological Distress, and Quality of Life: Systematic Review and Meta-analysis [Review]. *J Med Internet Res*, *24*(12), e39727. https://doi.org/10.2196/39727

Khanagha, H. B. (2024). Comparison of Cognitive Behavioral Therapy and Acceptance and Commitment Therapy on Negative Automatic Thoughts and Negative Affect in Depressed Women. *Aftj*, *5*(2), 208-217. https://doi.org/10.61838/kman.aftj.5.2.23

Khayatan, S., Aghaei, A., Abedi, M., & Golparvar, M. (2021). Comparison of "Combined Therapy Package Focused on Compassion and Acceptance and Commitment Therapy" with "Cognitive Behavioral Therapy" (CBT) on Depression and Glycosylated Hemoglobin in Female with Type II Diabetes. *jhpm.ir*, *10*(6), 127-140. http://jhpm.ir/article-1-1166-en.html

Kioskli, K., Winkley, K., & McCracken, L. M. (2019). Might psychological flexibility processes and Acceptance and Commitment Therapy (ACT) apply in adults with painful diabetic neuropathy? A cross-sectional survey. *Journal of Contextual Behavioral Science*, *13*, 66-73. https://doi.org/10.1016/j.jcbs.2019.07.002

Larsson, A., Hartley, S., & McHugh, L. (2022). A randomised controlled trial of brief web-based acceptance and commitment Therapy on the general mental health, depression, anxiety and stress of college Students. *Journal of Contextual Behavioral Science*, *24*, 10-17. https://doi.org/10.1016/j.jcbs.2022.02.005

Mahmoudi, F., Maddahi, M., Poursharifi, H., & Meschi, F. (2019). Comparison of the effectiveness of acceptance and commitment group therapy and cognitive-behavioral group therapy on quality of life, anxiety and depression in patients with functional indigestion [Research]. *Journal of Health Promotion Management*, *8*(4), 43-52. http://jhpm.ir/article-1-1044-fa.html

Nagatsu, T. (2020). Hypothesis: neural mechanism of psychotherapy for the treatment of Parkinson's disease: cognitive behavioral therapy (CBT), acceptance and commitment therapy (ACT), and Morita therapy? *Journal of Neural Transmission*, *127*(2), 273-276. https://doi.org/10.1007/s00702-019-02111-y

Petersen, J. M., Davis, C. H., Renshaw, T. L., Levin, M. E., & Twohig, M. P. (2023). School-Based Acceptance and Commitment Therapy for Adolescents With Anxiety: A Pilot Trial. *Cognitive and Behavioral Practice*, *30*(3), 436-452. https://doi.org/10.1016/j.cbpra.2022.02.021

PWJ
Psychology of Woman Journal
E-ISSN: 3041-8515