KMAN PUBLISHING INSTITUTE
Journal Website

Article history:
Received 23 July 2026
Revised 13 November 2026
Accepted 20 November 2026
Initial Publication 21 November 2026
Final Publication 01 November 2027

Psychology of Woman Journal

Volume 8, Issue 6, pp 1-14

E-ISSN: 3041-8615

A Comparison of the Effectiveness of Dialectical Behavior Therapy and Metacognitive Therapy on Self-Injurious Behaviors and Self-Criticism in Women with Major Depressive Disorder

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A r t i c l e I n f o

Article type:
Original Research

How to cite this article:
Aghaalitari, S. & Zolfaghari, A. (2027). A Comparison of the Effectiveness of Dialectical Behavior Therapy and Metacognitive Therapy on Self-Injurious Behaviors and Self-Criticism in Women with Major Depressive Disorder. *Psychology of Woman Journal*, *8*(6), 1-14. http://dx.doi.org/10.61838/kman.pwj.6697

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A B S T R A C T

Objective: This study aimed to compare the effectiveness of dialectical behavior therapy (DBT) and metacognitive therapy (MCT) in reducing self-injurious behaviors and self-criticism among women with major depressive disorder.

Methods and Materials: This quasi-experimental study employed a pretest–posttest design with a control group and a two-month follow-up. The statistical population consisted of women with major depressive disorder attending the Jaryan-e Zendegi Psychology Clinic in Tehran. Forty-eight eligible participants were selected through purposive sampling and randomly assigned to DBT, MCT, and control groups, with 16 participants in each group. The DBT and MCT groups each received eight weekly 90-minute group sessions, whereas the control group received no intervention. Data were collected using the Inventory of Statements About Self-Injury, Levels of Self-Criticism Scale, and Beck Depression Inventory-II. Data were analyzed using repeated-measures analysis of variance and Bonferroni post hoc tests in SPSS version 27.

Findings: Repeated-measures analysis showed significant time × group interactions for self-injurious behaviors ($F = 25.35$, $p < .001$, $\eta^2 = .53$), internalized self-criticism ($F = 5.36$, $p = .001$, $\eta^2 = .19$), comparative self-criticism ($F = 7.27$, $p < .001$, $\eta^2 = .24$), and total self-criticism ($F = 10.61$, $p < .001$, $\eta^2 = .32$). Bonferroni comparisons indicated that both DBT and MCT significantly reduced self-injurious behaviors, comparative self-criticism, and total self-criticism compared with the control group ($p < .05$), and these effects were maintained at follow-up. MCT also significantly reduced internalized self-criticism compared with the control group ($p = .037$), whereas DBT did not ($p > .05$). No significant differences were found between DBT and MCT for any outcome ($p > .05$).

Conclusion: Both DBT and MCT appear to be effective and durable interventions for reducing self-injurious behaviors and self-criticism in women with major depressive disorder, although MCT may provide an additional advantage for internalized self-criticism relative to no treatment.

Keywords: *Dialectical behavior therapy; metacognitive therapy; self-injurious behaviors; self-criticism; major depressive disorder.*

1. Introduction

Major depressive disorder (MDD) is among the most prevalent and disabling psychiatric disorders and is characterized by persistent depressed mood, loss of interest or pleasure, cognitive disturbances, impaired emotional regulation, and substantial disruption in social, occupational, and interpersonal functioning. Beyond its direct psychological burden, MDD is associated with recurrent episodes, diminished quality of life, increased healthcare utilization, and a considerable risk of suicidal thoughts and behaviors. Global evidence indicates that depressive disorders continue to account for a substantial share of years lived with disability and disease burden across populations, highlighting their importance as a major public health concern (Ferrari et al., 2024). The clinical course and manifestation of depression are also influenced by sex-related biological, psychological, and social factors. Evidence from large-scale neurobiological research suggests meaningful sex differences in the molecular and neurobiological characteristics of depression, which may partly account for differences in vulnerability, symptom presentation, and treatment response between women and men (Seney et al., 2022). Women consistently demonstrate a higher prevalence of major depression, and this vulnerability may become particularly pronounced during periods involving reproductive and hormonal transitions (Fagiolini et al., 2024). Recent neuroimaging evidence similarly indicates that gender-related differences in MDD may vary across different developmental and age periods, suggesting that depression in women should be understood within a lifespan framework rather than as a uniform clinical phenomenon (Tian et al., 2024). These considerations underscore the importance of developing interventions that address not only depressive symptoms but also clinically significant cognitive and behavioral processes that contribute to the persistence and severity of depression among women.

One particularly serious behavioral problem associated with MDD is nonsuicidal self-injury or self-injurious behavior. Such behaviors generally involve intentional and direct damage to body tissue without an explicit intention to die and may include cutting, scratching, hitting, burning, biting, or other forms of deliberate bodily harm. Although nonsuicidal self-injury is conceptually distinguished from suicidal behavior, it remains clinically important because it may coexist with suicidal ideation, increase psychological distress, and indicate greater psychopathological severity. Research among individuals with major depressive disorder has shown that nonsuicidal self-injury is relatively common and is associated with multiple psychosocial risk factors, including interpersonal problems, negative emotional states, maladaptive coping, and psychological vulnerability (Kang et al., 2021). Similarly, evidence among university students has shown that nonsuicidal self-injury is associated with current mental disorders and increased suicidal thoughts and behaviors, emphasizing that self-injury should not be interpreted as a benign or isolated phenomenon (Kiekens et al., 2018). In clinical depression, self-injurious behavior can function as an immediate but maladaptive method for regulating intolerable emotional states, interrupting distressing cognition, expressing self-directed anger, or punishing the self. The presence of self-injury alongside depression may therefore indicate a particularly complex pattern of emotional dysregulation, cognitive vulnerability, and ineffective coping that warrants targeted psychological intervention.

The clinical importance of self-injurious behavior becomes even greater when considered in relation to suicidal ideation and broader risk processes in depressive disorders. Depression is one of the psychiatric conditions most strongly associated with suicidal thinking, and effective treatment requires careful attention to the mechanisms through which emotional distress, hopelessness, cognitive rigidity, and behavioral dysregulation interact (Schneider et al., 2020). Contemporary approaches to suicide prevention increasingly emphasize the need to monitor and intervene on proximal behavioral and cognitive risk processes rather than relying exclusively on diagnostic categories (Jimenez-Munoz et al., 2022). Within this context, reducing self-injurious behaviors may contribute not only to behavioral safety but also to broader improvements in emotional regulation and adaptive coping. The psychometric assessment of self-injury is therefore a critical component of clinical research, and validated instruments such as the Inventory of Statements About Self-Injury provide a structured approach for assessing the functions and manifestations of self-injurious behaviors. Evidence concerning the Persian version of this instrument supports its reliability and validity for use in Iranian populations, providing an appropriate basis for empirical investigation of self-injury in clinical research (Zarghami et al., 2020).

Among the psychological factors that may help explain the relationship between depression and self-injury, self-criticism has received increasing attention. Self-criticism refers to a pattern of negative self-evaluation characterized

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E-ISSN: 3041-8615

by harsh judgment, feelings of inadequacy, excessive focus on perceived shortcomings, and a tendency to respond to failure with self-blame rather than adaptive self-reflection. Qualitative evidence indicates that self-critical experiences can involve persistent internal attacks, shame, feelings of worthlessness, and difficulty responding to personal suffering with compassion (Austin et al., 2021). From a clinical perspective, self-criticism is not merely a personality characteristic but a transdiagnostic process associated with a broad range of psychological disorders. A systematic review has demonstrated robust relationships between self-criticism and psychopathology, including depression, anxiety, eating-related pathology, and personality-related difficulties (Werner et al., 2019). In MDD specifically, self-criticism may contribute to the onset, maintenance, and recurrence of depressive symptoms by strengthening negative self-schemas and repeatedly directing attention toward perceived personal failures.

Emerging evidence further suggests that self-criticism may influence not only depressive symptoms but also responses to treatment. For example, self-criticism has been identified as a predictor of antidepressant response to neurostimulation in major depressive disorder, suggesting that the severity of self-critical cognition may have implications for therapeutic outcomes (Jomha et al., 2025). In depressed outpatients, self-criticism has also been associated with rumination and emotional risk factors related to suicidal ideation, indicating that self-critical cognition may operate within a broader network of maladaptive affective and cognitive processes (Lo & Cheng, 2024). These findings are particularly important because self-criticism can become self-perpetuating: negative events activate harsh self-evaluations, these evaluations intensify negative affect, and increased distress may subsequently reinforce further rumination and self-judgment. Such processes may be especially relevant in women with MDD, for whom affective vulnerability and negative self-appraisal may coexist with interpersonal and social pressures that sustain depressive experiences.

Self-criticism may also represent an important psychological link between depressive symptoms and self-injurious behaviors. Individuals who engage in self-injury frequently report self-punitive motives, and self-directed hostility can provide a cognitive context in which harming the body becomes psychologically congruent with negative beliefs about the self. Experimental evidence has shown that self-criticism and self-compassion can influence implicit associations with nonsuicidal self-injury, suggesting that the way individuals relate to themselves may affect vulnerability to self-harming responses (Nagy et al., 2021). More recent ecological momentary assessment research has demonstrated that self-criticism can predict nonsuicidal self-injury in real time among treatment-seeking individuals, providing strong evidence that increases in self-critical thinking may immediately precede or intensify risk for harmful behavior (Robillard et al., 2025). These findings suggest that self-criticism is not merely correlated with self-injury at a general trait level but may also operate dynamically as a proximal risk process. Consequently, treatments capable of reducing self-critical cognition while simultaneously improving emotion regulation and behavioral coping may have particular clinical value.

Despite the availability of evidence-based psychological treatments for depression, treatment response is not uniformly satisfactory. Psychological interventions are central to contemporary treatment models for MDD, yet recurrence, partial response, and residual symptoms remain significant clinical challenges (Otto et al., 2022). Comorbidity and overlapping transdiagnostic processes can further complicate treatment planning, and clinicians may need to address mechanisms that cut across traditional diagnostic boundaries (Spijker et al., 2020). Persistent rumination is one such mechanism. Research on rumination-focused cognitive behavioral therapy has shown that directly targeting repetitive negative thinking can reduce rumination and produce measurable changes in neural network connectivity among individuals with a history of depression (Langenecker et al., 2024). This evidence reinforces the view that effective depression treatment may require interventions that go beyond symptom reduction and directly modify maladaptive cognitive and metacognitive processes involved in maintaining distress.

Dialectical behavior therapy (DBT) represents one promising approach for addressing this combination of emotional dysregulation, self-injury, and self-critical cognition. DBT is a structured cognitive-behavioral intervention that integrates behavioral change strategies with acceptance-based principles, mindfulness, distress tolerance, emotion regulation, and interpersonal effectiveness. The treatment conceptualizes maladaptive behavior as developing through complex interactions between emotional vulnerability and environmental invalidation and seeks to establish a balance between acceptance and change. Its skills-based components are designed to help individuals recognize emotional triggers, tolerate distress without engaging in harmful behavior, regulate intense emotional

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E-ISSN: 3041-8615

states, and respond more flexibly to interpersonal challenges (Linehan, 2021). Because many individuals who engage in self-injury use the behavior as a rapid method of reducing emotional arousal or escaping painful internal experiences, DBT provides a theoretically coherent framework for replacing self-harm with safer and more adaptive responses.

Evidence increasingly supports the usefulness of DBT across diagnostic groups and clinical problems. A systematic review of DBT as a transdiagnostic intervention found that its cognitive and behavioral components can improve several aspects of cognitive functioning and emotional regulation, supporting its application beyond the populations for which it was originally developed (Vijayapriya & Tamarana, 2023). Research on mindfulness-based approaches likewise demonstrates that training in nonjudgmental awareness and emotional regulation can contribute to improved psychological functioning among individuals experiencing depressive symptoms (Zhang et al., 2019). In severe mood disorders, randomized evidence indicates that DBT-based interventions may reduce clinically significant psychopathology and improve behavioral outcomes (Goldstein et al., 2024). These findings are relevant to MDD because difficulties in emotion regulation, cognitive rigidity, and maladaptive behavioral coping are frequently present in depressive disorders and may contribute to both self-injury and harsh self-evaluation.

DBT has also shown promise specifically in relation to refractory or difficult-to-treat depression. Research examining radically open DBT has reported beneficial effects among individuals with refractory depression, highlighting the potential of dialectically informed interventions for patients characterized by excessive self-control, rigid coping, social withdrawal, and severe self-critical tendencies (Lynch et al., 2018). Subsequent randomized evidence further supported the clinical benefits of this therapeutic model and demonstrated its potential for addressing mechanisms underlying chronic depressive presentations (Lynch et al., 2020). With regard to self-injury, randomized evidence indicates that DBT-based prevention can significantly reduce nonsuicidal self-harm (Li et al., 2025), while a recent scoping review similarly concluded that DBT has substantial potential for reducing self-harm behaviors and suicide-related risk among adolescents and young adults (Yosep et al., 2026). DBT may also influence self-critical cognition; research specifically targeting self-criticism within DBT for nonsuicidal self-injury has demonstrated that reductions in self-criticism can accompany therapeutic improvement (Ramsey et al., 2021). Collectively, these studies suggest that DBT may simultaneously influence the emotional, behavioral, and self-evaluative processes relevant to women with MDD.

Metacognitive therapy (MCT) provides a different but potentially complementary therapeutic framework. Rather than primarily modifying the content of negative thoughts, MCT focuses on beliefs about thinking and the processes that control attention, worry, rumination, and cognitive engagement. According to the metacognitive model, psychological distress is maintained by a cognitive attentional syndrome characterized by persistent worry or rumination, excessive self-focused attention, threat monitoring, and maladaptive coping strategies. MCT seeks to alter metacognitive beliefs that sustain these processes and teaches individuals to disengage from repetitive negative thinking, flexibly redirect attention, and experience thoughts as mental events rather than unquestioned facts (Fisher & Wells, 2021). This perspective is particularly relevant to depression because depressive episodes are frequently sustained by rumination and prolonged engagement with negative self-referential thoughts.

The potential of MCT for reducing self-criticism is supported by emerging evidence on metacognitive beliefs, self-critical rumination, decentering, and psychopathology. Research indicates that maladaptive metacognitive beliefs may intensify self-critical rumination, while greater capacity for decentering may weaken the link between self-directed hostility and psychological distress (Gold & Smout, 2024). By teaching individuals to recognize self-critical thoughts without becoming absorbed in them, MCT may reduce the extent to which thoughts such as “I am worthless” or “I always fail” dominate emotional experience. This therapeutic mechanism may be especially relevant to internalized self-criticism, which may reflect deeply entrenched standards and negative self-beliefs. MCT may also reduce the emotional overload that contributes to self-injurious behavior by interrupting repetitive negative thinking before distress escalates to the point at which self-harm is used as a coping response.

Evidence regarding MCT and severe emotion dysregulation further supports this possibility. A clinical trial of MCT among individuals with borderline personality disorder and histories of early trauma found reductions in clinically significant symptoms, including self-injurious and suicide-related outcomes, suggesting that metacognitive intervention may be effective even in populations characterized by substantial emotional and behavioral instability (Nordahl & Wells, 2019). Such findings are

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important because they suggest that changing the way individuals relate to thoughts may influence both cognitive and behavioral outcomes. Whereas DBT emphasizes skills for tolerating and regulating emotional states, MCT emphasizes disengagement from maladaptive cognitive processing and modification of beliefs about thinking. Both approaches may therefore address self-injury and self-criticism, but through partially distinct mechanisms.

Although existing research supports both DBT and MCT, direct comparative evidence remains limited, particularly among women with major depressive disorder who exhibit clinically important levels of self-injurious behavior and self-criticism. Previous studies have typically examined these interventions separately, have focused on different diagnostic groups, or have emphasized only one of the relevant outcomes. This creates an important empirical gap because treatment selection should ideally be informed not only by evidence that an intervention works, but also by evidence concerning whether alternative approaches differ in the magnitude or durability of their effects. Comparing DBT with MCT may therefore clarify whether an emotion-regulation and skills-based approach or a metacognitive process-focused approach offers greater benefit for reducing self-injury and self-criticism. Such comparison is particularly valuable when considering both internalized and comparative dimensions of self-criticism, because these components may differ in their responsiveness to interventions targeting emotional regulation versus repetitive negative thinking.

Accordingly, the aim of the present study was to compare the effectiveness of dialectical behavior therapy and metacognitive therapy on self-injurious behaviors and self-criticism in women with major depressive disorder.

2. Methods and Materials

2.1. Study design and Participant

This quasi-experimental study used a pretest–posttest design with a control group and a two-month follow-up. The study population comprised women with MDD attending the Jaryan-e Zendegi Psychology Clinic in Tehran during the third quarter of the Solar Hijri year 1404. Forty-eight eligible volunteers were selected through nonrandom purposive sampling and randomly assigned to two experimental groups and one control group, with 16 in each. The first experimental group received eight DBT sessions, and the second received eight MCT sessions. Inclusion criteria were a Beck Depression Inventory-II score one standard deviation above the mean (32) (Beck et al., 1996a); confirmation of MDD by an experienced psychiatrist at the clinic through a diagnostic interview based on the text-revised fifth edition of the Diagnostic and Statistical Manual of Mental Disorders; age 18–40 years; informed consent; at least a middle-school education; no substance use by self-report; no psychological intervention during the preceding year; and no psychiatric medication use, according to self-report and medical records. Nonentry and exclusion criteria included absence from more than two treatment sessions, unwillingness to cooperate, incomplete research questionnaires, and unwillingness to complete the assignments and exercises included in DBT and MCT sessions. Ethical considerations included informed consent, confidentiality and privacy of participant information, and avoidance of harm. The study received approval from the Biomedical Research Ethics Committee of Islamic Azad University, Borujerd Branch, under code IR.IAU.B.REC.1404.121. Data were collected using the following instruments.

2.2. Measures

Inventory of Statements About Self-Injury (ISAS): Klonsky and Glenn (2009) developed this instrument with behavioral and functional sections (Klonsky & Glenn, 2009). The behavioral section contains seven items. The functional section contains 39 items assessing intrapersonal and interpersonal functions. Responses are rated on a three-point Likert scale: not relevant at all (0), somewhat relevant (1), and very relevant (2). The functional section can be used in inferential statistical analyses; scores range from 0 to 78, with higher scores indicating more self-injurious behaviors. Klonsky and Glenn reported Cronbach's alpha coefficients of .89 and .75 for intrapersonal and interpersonal functions, respectively. Concurrent validity with the Beck Depression Inventory was .66, indicating satisfactory convergent validity (Klonsky & Glenn, 2009). Zarghami et al. reported a Cronbach's alpha of .93 for the Persian version. Concurrent validity, assessed through correlations with the Barratt Impulsiveness Scale (r = .82) and the Simons and Gaher Distress Tolerance Scale (r = −.17), was considered satisfactory (Zarghami et al., 2020).

Levels of Self-Criticism Scale (LOSC): This 22-item instrument was developed by Thompson and Zuroff (2004) and comprises internalized and comparative self-criticism subscales (Thompson & Zuroff, 2004). Items are rated on a seven-point Likert scale from describes me very well (6) to

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does not describe me at all (0). Items 6, 8, 11, 12, 16, 20, and 21 are reverse-scored. Total scores range from 0 to 132, with higher scores indicating greater self-criticism. Thompson and Zuroff reported Cronbach's alpha coefficients of .81 for comparative self-criticism, .87 for internalized self-criticism, and .81 for the total scale. Convergent validity assessment indicated a moderate correlation between the comparative and internalized subscales (r = .44) (Thompson & Zuroff, 2004). Mousavi and Ghorbani reported Cronbach's alpha coefficients of .87 for internalized self-criticism, .55 for comparative self-criticism, and .83 for the total Persian scale. Concurrent validity was considered satisfactory based on correlations of the two subscales with the Inventory of Interpersonal Problems (r = .20–.52) and the Hopkins Symptom Checklist (r = .17–.48) (Mouavi & Ghorbani, 2007).

Beck Depression Inventory-II (BDI-II): This 21-item instrument was developed by Beck et al. in 1996 (Beck et al., 1996a). Each item has four response options ranging from absence of a particular symptom (0) to its greatest severity (3). Total scores range from 0 to 63, with higher scores indicating more severe depression. Beck et al. reported Cronbach's alpha coefficients of .92 for outpatients and .93 for university students (Beck et al., 1996a). A meta-analysis involving nine psychiatric samples found greater internal consistency for the BDI-II than for the BDI-I (Beck et al., 1996b). Ghassemzadeh et al. reported a Cronbach's alpha of .87 and two-week test–retest reliability of .74 for the Persian BDI-II. Concurrent validity was considered satisfactory on the basis of its correlation with the Negative Automatic Thoughts Questionnaire (.77) (Ghassemzadeh et al., 2005).

2.3. Interventions

Dialectical Behavior Therapy: The DBT intervention was designed using the information, techniques, and assignments in Dialectical Behavior Therapy: Skills Training Manual (Linehan, 2021) and Dialectical Behavior Therapy Techniques (McKay, 2014). Eight weekly 90-minute sessions were held on Saturdays at the Jaryan-e Zendegi Psychology Clinic in Tehran from 1 Azar to 20 Dey 1404 (Solar Hijri). Experts assessed the program's content and face validity and considered it sufficiently valid for implementation. Cohen's kappa coefficient was calculated for a more precise assessment of agreement (κ = .79). Kappa ranges from −1 to +1: values approaching +1 indicate direct agreement, values approaching −1 indicate inverse agreement, and values near zero indicate no agreement. The sessions were organized as follows.

Session 1 began with introductions and orientation to DBT, followed by the biosocial model; the three states of mind—emotional mind, reasonable mind, and wise mind; and a brief mindfulness exercise involving breathing and nonjudgmental observation.

Session 2 introduced the DBT "what" skills of observing, describing, and participating and the "how" skills of nonjudgmental awareness, one-mindfulness, and effectiveness, with practical exercises in observing thoughts without identifying with them.

Session 3 introduced advanced distress tolerance techniques, including the first set of skills: changing body temperature, rapid breathing, muscle contraction and release, distraction, and self-soothing.

Session 4 covered the second distress tolerance module, including radical acceptance without passivity, recognizing uncontrollable situations, and continually redirecting the mind.

Session 5 focused on advanced mindful attention techniques.

Session 6 addressed basic and advanced regulation skills through a review of PLEASE skills, practice in building positive experiences, and DBT problem-solving for depression-provoking situations.

Session 7 introduced basic interpersonal effectiveness techniques through the DEAR MAN model, GIVE skills for maintaining relationships, FAST skills for preserving self-respect, and role-play for making requests and saying no.

Session 8 summarized and reviewed the preceding sessions.

Metacognitive Therapy: The MCT intervention was designed using the information, techniques, and assignments in Metacognitive Therapy: Distinctive Features (Fisher & Wells, 2021). Eight weekly 90-minute sessions were held on Wednesdays at the Jaryan-e Zendegi Psychology Clinic in Tehran from 5 Azar to 24 Dey 1404 (Solar Hijri). Experts assessed the program's content and face validity and considered it sufficiently valid for implementation. Cohen's kappa coefficient was calculated to assess agreement more precisely (κ = .82).

Session 1 introduced the MCT framework and the metacognitive model of depression, developed motivation, participation, and the therapeutic alliance, and presented rumination as a problematic response style.

Session 2 deepened understanding of rumination in depression, identified positive beliefs about rumination,

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E-ISSN: 3041-8615

such as "Ruminating helps me understand the problem," and began modifying these beliefs.

Session 3 identified negative beliefs, such as "I cannot stop ruminating," and strengthened perceived mental control.

Session 4 developed selective attention and the ability to disengage from rumination.

Session 5 prioritized reducing maladaptive coping strategies, including excessive checking of feelings, avoidance, and mental control.

Session 6 modified beliefs about mood, reduced preoccupation with depression, and increased attentional flexibility.

Session 7 consolidated metacognitive skills, addressed relapse prevention, and established a long-term rumination management plan.

Session 8 involved a structured discussion, planning follow-up at one, three, and six months, answering potential client questions, ending treatment, administering the posttest, and scheduling the study follow-up assessment.

2.4. Data Analysis

Data were analyzed using SPSS version 27 and repeated-measures analysis of variance. Statistical significance was set at .05.

3. Findings and Results

The participants were 48 women with MDD. Mean age was 32.60 years (SD = 6.62) in the DBT group, 33.53 years (SD = 5.33) in the MCT group, and 32.93 years (SD = 6.25) in the control group. Analysis of variance indicated that the groups were comparable in age, with no significant difference (F = 0.090, p = .941). Most participants reported a bachelor's degree: nine women (56.3%) in the DBT group, eleven (68.8%) in the MCT group, and nine (56.3%) in the control group. A two-variable chi-square test showed no significant difference in category frequencies across the three groups (χ^2 = 7.076, p = .528). Table 1 presents descriptive statistics for the study variables by experimental and control group at the three assessment points.

Table 1

Descriptive Statistics for the Study Variables by Group at Pretest Posttest and Follow Up

Outcome	Group	Pretest		Posttest		Follow-up	
		Mean	SD	Mean	SD	Mean	SD
Self-injurious behaviors	DBT	44.18	2.68	39.06	2.93	38.81	3.22
	MCT	43.31	3.11	39.18	2.94	39.31	3.45
	Control	42.75	2.23	43.50	2.52	43.81	2.63
Internalized self-criticism	DBT	37.93	3.82	36.93	4.41	36.93	4.26
	MCT	38.00	4.09	34.62	1.89	35.12	3.59
	Control	38.18	3.01	38.43	2.22	38.62	2.65
Comparative self-criticism	DBT	33.12	3.13	29.75	2.79	30.31	2.96
	MCT	34.00	3.03	30.68	3.02	30.68	3.57
	Control	41.62	5.1	42.31	3.97	42.06	3.82
Total self-criticism	DBT	71.06	5.92	66.18	5.78	66.87	5.16
	MCT	72.00	5.98	65.68	6.15	66.50	7.01
	Control	79.81	5.67	80.78	4.37	80.68	4.39

As shown in Table 1, mean self-injury and self-criticism scores were approximately similar across the experimental and control groups at pretest. After DBT and MCT, however, the experimental groups' means changed at posttest and follow-up. The significance of these changes was examined using repeated-measures analysis of variance.

The assumptions of repeated-measures analysis of variance were examined first, including homogeneity of variance, homogeneity of variance–covariance matrices, and normality. Shapiro–Wilk tests at pretest, posttest, and follow-up indicated normally distributed study variables in both experimental groups and the control group (p > .05). Levene's tests supported homogeneity of variance at posttest for self-injurious behaviors (F = 2.516, p = .092), internalized self-criticism (F = 1.760, p = .184), comparative self-criticism (F = 0.381, p = .685), and total self-criticism (F = 2.048, p = .141), with p > .05. Box's M test of variance–covariance matrices was not significant (F = 1.047, p = .361). The sphericity assumption was violated for self-injurious behaviors (χ^2 = 0.780, p = .004) and internalized self-criticism (χ^2 = 0.815, p = .011); the Huynh–Feldt correction was therefore used (ε > .75). Sphericity was not violated for comparative self-criticism (χ^2 = 0.990, p = .805) or total self-criticism (χ^2 = 0.915, p = .141). Because significance levels

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exceeded .05, the homogeneity of variance assumption was considered satisfied and the conditions for repeated-measures analysis were met for these variables. Table 2 presents the repeated-measures analysis of variance results.

Table 2

Results of Repeated Measures Analysis of Variance

Outcome	Source	df	Mean square	F	p	Effect size
Self-injurious behaviors	Time	1.76	142.17	55.68	< 0.000	0.55
	Group	2	117.44	5.73	0.006	0.20
	Time × group	3.53	64.72	25.35	< 0.000	0.53
	Error (time)	79.55	2.55			
	Error (between groups)	45	20.47			
Internalized self-criticism	Time	1.82	15.78	3.42	0.041	0.07
	Group	2	84.00	3.80	0.030	0.14
	Time × group	3.64	24.72	5.36	0.001	0.19
	Error (time)	82.10	4.60			
	Error (between groups)	45	22.08			
Comparative self-criticism	Time	2	60.84	17.05	< 0.000	0.27
	Group	2	1794.96	58.108	< 0.000	0.72
	Time × group	4	25.96	7.27	< 0.000	0.24
	Error (time)	90	3.56			
	Error (between groups)	45	30.89			
Total self-criticism	Time	2	164.25	24.87	< 0.000	0.35
	Group	2	1446.132	29.45	< 0.000	0.56
	Time × group	4	70.11	10.61	< 0.000	0.32
	Error (time)	90	6.60			
	Error (between groups)	45	83.04			

As shown in Table 2, the effect of time on self-injurious behaviors and self-criticism, including its internalized and comparative components, was significant across pretest, posttest, and follow-up ($p < .05$). The group effect likewise indicated significant differences in mean study-variable scores between treatment and control groups across assessments ($p < .05$). The time × group interaction was also significant for self-injurious behaviors and self-criticism ($p < .05$), indicating the effectiveness of DBT and MCT for self-injurious behaviors and internalized and comparative self-criticism in women with MDD at posttest and follow-up relative to controls. Bonferroni post hoc tests were then used for pairwise comparisons across assessment times and groups; the results are presented in Table 3.

Table 3

Bonferroni Post Hoc Pairwise Comparisons Across Assessment Times and Groups

Outcome	Reference condition	Comparison condition	Mean difference	SE	p
Self-injurious behaviors	Pretest	Posttest	2.83	0.34	< 0.001
	Pretest	Follow-up	2.77	0.33	< 0.001
	Posttest	Follow-up	−0.06	0.22	1.000
	DBT	MCT	0.083	0.92	1.000
	DBT	Control	−2.66	0.92	0.018
	MCT	Control	−2.75	0.92	0.014
Internalized self-criticism	Pretest	Posttest	0.85	0.49	0.273
	Pretest	Follow-up	1.02	0.34	0.013
	Posttest	Follow-up	0.16	0.40	1.000
	DBT	MCT	2.00	0.95	0.128
	DBT	Control	−0.50	0.95	1.000
	MCT	Control	−2.50	0.95	0.037
Comparative self-criticism	Pretest	Posttest	2.000	0.38	< 0.001
	Pretest	Follow-up	1.89	0.40	< 0.001
	Posttest	Follow-up	−0.10	0.37	1.000
	DBT	MCT	−0.72	1.13	1.000
	DBT	Control	−10.93	1.13	< 0.001

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	MCT	Control	−10.20	1.13	< 0.001
Total self-criticism	Pretest	Posttest	3.41	0.56	< 0.001
	Pretest	Follow-up	2.93	0.56	< 0.001
	Posttest	Follow-up	−0.47	0.44	0.85
	DBT	MCT	−0.02	1.86	1.000
	DBT	Control	−12.37	1.86	< 0.001
	MCT	Control	−12.35	1.86	< 0.001

As shown in Table 3, Bonferroni pairwise comparisons across time indicated significant differences in self-injurious behaviors, comparative self-criticism, and total self-criticism between pretest and both posttest and follow-up. These results indicated reductions in self-injury and self-criticism, specifically comparative self-criticism, relative to pretest ($p < .001$). No significant posttest–follow-up differences were observed ($p > .05$), indicating that treatment effects were maintained at follow-up. For internalized self-criticism, pairwise time comparisons showed no significant difference between pretest and posttest or between posttest and follow-up ($p > .05$), but a significant difference between pretest and follow-up ($p < .05$). Thus, internalized self-criticism did not change significantly from pretest to posttest but decreased significantly from pretest to follow-up. The absence of a posttest–follow-up difference also suggests that the change was maintained over time and that the intervention effect continued through follow-up. Accordingly, although the intervention did not produce a significant immediate change in internalized self-criticism, it significantly reduced this variable over the longer term, and this change remained stable during follow-up.

Pairwise group comparisons showed that DBT and MCT were effective for self-injurious behaviors, comparative self-criticism, and total self-criticism compared with the control group ($p < .05$). The DBT and MCT groups did not differ significantly on these outcomes ($p > .05$), indicating similar effectiveness.

For internalized self-criticism, pairwise comparisons showed no significant difference between DBT and MCT ($p > .05$), nor between DBT and the control group ($p > .05$). In contrast, MCT differed significantly from the control group ($p < .05$). The mean difference of −2.50 indicates that MCT produced a significant change in internalized self-criticism relative to controls. However, because the two treatment groups did not differ significantly, these comparisons cannot establish the superiority of either treatment in reducing internalized self-criticism.

4. Discussion

The present study compared the effectiveness of dialectical behavior therapy (DBT) and metacognitive therapy (MCT) on self-injurious behaviors and self-criticism in women with major depressive disorder. The findings showed significant time, group, and time × group effects for self-injurious behaviors, internalized self-criticism, comparative self-criticism, and total self-criticism. More specifically, both DBT and MCT significantly reduced self-injurious behaviors compared with the control group, and these improvements were maintained at the two-month follow-up. Both interventions also significantly reduced comparative self-criticism and total self-criticism relative to the control group, with no significant deterioration from posttest to follow-up. However, for internalized self-criticism, MCT produced a significant improvement compared with the control group, whereas DBT did not show a statistically significant advantage over the control condition. Furthermore, no significant differences were observed between DBT and MCT on self-injurious behaviors, internalized self-criticism, comparative self-criticism, or total self-criticism, indicating that the two treatments produced broadly comparable outcomes.

The first major finding was that DBT significantly reduced self-injurious behaviors in women with major depressive disorder, and this effect remained stable at follow-up. This result is consistent with previous evidence indicating that DBT is particularly suitable for reducing self-harming behaviors because it directly targets emotional dysregulation, impulsive responding, distress intolerance, and ineffective coping. The finding aligns with the randomized trial by Li et al., which showed that a DBT-based intervention significantly reduced nonsuicidal self-harm among adolescents (Li et al., 2025). It is also consistent with the scoping review by Yosep et al., which concluded that DBT is a promising intervention for reducing self-harm behaviors and suicide-related risk in adolescents and young adults (Yosep et al., 2026). The present result can be explained by the fact that self-injurious behavior often functions as an immediate strategy for reducing

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overwhelming emotional arousal. Individuals with major depressive disorder may experience intense sadness, hopelessness, guilt, anger toward the self, and perceived inability to tolerate distress, and self-injury may temporarily interrupt these emotional states. DBT directly addresses this cycle by teaching mindfulness, distress tolerance, emotion regulation, and interpersonal effectiveness skills (Linehan, 2021). Through these strategies, participants may become more capable of identifying emotional triggers, tolerating negative affect without acting impulsively, and substituting adaptive behavioral responses for self-harm.

The effectiveness of DBT for self-injury may also be understood in relation to broader cognitive and behavioral changes. DBT encourages participants to observe internal experiences without immediately reacting to them, which can reduce the automatic connection between emotional distress and harmful behavior. Its structured emphasis on behavioral analysis allows individuals to identify the sequence of events, thoughts, emotions, urges, and consequences surrounding self-injury. This process may improve awareness of antecedents and create opportunities to employ alternative coping skills before the harmful act occurs. Such an interpretation is compatible with evidence that DBT can improve cognitive and emotional functioning across diagnostic categories (Vijayapriya & Tamarana, 2023). Randomized evidence in mood disorders has also shown that DBT-based treatment can improve clinically meaningful outcomes, further supporting its usefulness in populations characterized by affective instability and maladaptive behavioral coping (Goldstein et al., 2024). The persistence of improvement at follow-up in the present study may therefore reflect not only temporary symptom relief but also acquisition of transferable behavioral skills that participants could continue applying after the intervention ended.

The second major finding was that MCT also significantly reduced self-injurious behaviors, and the treatment effect remained stable at follow-up. This finding is compatible with the work of Nordahl and Wells, who demonstrated that MCT could reduce severe psychological symptoms, including self-harm-related outcomes, among individuals with borderline personality disorder and early trauma histories (Nordahl & Wells, 2019). Although the diagnostic population in that study differed from the present sample, the underlying mechanism may be similar. According to the metacognitive model, emotional disorders are maintained by a cognitive attentional syndrome involving rumination, worry, excessive self-focused attention, threat monitoring, and maladaptive coping responses. MCT aims to modify metacognitive beliefs and reduce prolonged engagement with negative thoughts rather than directly challenging the factual content of those thoughts (Fisher & Wells, 2021). In women with major depressive disorder, repetitive rumination and self-focused negative processing may intensify emotional distress to the point that self-injury becomes an escape strategy. By weakening the perceived uncontrollability and importance of rumination, MCT may reduce the emotional pressure that precedes self-harming behavior.

This interpretation is supported by evidence that repetitive negative thinking is central to the persistence of depression. Rumination-focused interventions have been shown to reduce repetitive negative thinking and influence underlying neural processes associated with depression (Langenecker et al., 2024). Similarly, self-criticism and rumination have been associated with greater suicidal ideation among depressive outpatients, suggesting that these cognitive processes may form part of a broader risk pathway connecting depression to harmful behavior (Lo & Cheng, 2024). MCT may disrupt this pathway by teaching detached mindfulness, attentional flexibility, and disengagement from maladaptive thought processes. Instead of attempting to eliminate distressing thoughts, participants learn to allow them to occur without prolonged analysis or behavioral reaction. This shift may reduce the perceived need to use self-injury as a means of escaping intrusive or emotionally overwhelming cognitive activity. Therefore, the reduction in self-injurious behaviors observed in the present study may represent an indirect consequence of improved metacognitive control and reduced cognitive perseveration.

Another major finding was that DBT significantly reduced comparative self-criticism and total self-criticism, although its effect on internalized self-criticism was not statistically significant relative to the control group. The improvement in comparative and overall self-criticism is consistent with previous evidence showing that DBT can influence harsh self-evaluation and self-critical cognition. Ramsey et al. demonstrated that self-criticism can be specifically targeted during DBT treatment for nonsuicidal self-injury and that reductions in self-criticism may accompany therapeutic change (Ramsey et al., 2021). The present finding is also compatible with studies of radically open DBT in refractory depression, which have shown benefits for patients characterized by excessive self-control, rigid internal standards, social withdrawal, and strong self-critical tendencies (Lynch et al., 2020; Lynch et al., 2018).

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DBT may reduce self-criticism because mindfulness and acceptance-based skills encourage individuals to observe negative thoughts and emotions without judging them. Emotion regulation skills may further reduce the intensity of affective reactions associated with perceived failure, while interpersonal effectiveness and self-validation may decrease dependence on unfavorable comparisons with others.

The reduction in comparative self-criticism is particularly understandable within this framework. Comparative self-criticism involves evaluating the self negatively relative to others and may be intensified by feelings of inferiority, inadequacy, and social failure. Through mindfulness and nonjudgmental awareness, DBT may help individuals reduce automatic evaluative comparisons and respond more flexibly to perceived shortcomings. Moreover, improving emotional regulation may reduce the affective impact of social comparison. This is important because self-criticism is strongly related to psychopathology across diagnostic categories (Werner et al., 2019), and qualitative evidence indicates that highly self-critical individuals often experience pervasive feelings of inadequacy and internal hostility (Austin et al., 2021). By teaching skills that promote acceptance, emotional balance, and more adaptive behavioral responses, DBT may weaken the processes through which external comparisons become global negative evaluations of the self.

The nonsignificant effect of DBT on internalized self-criticism, however, deserves specific consideration. Internalized self-criticism may represent a more deeply entrenched form of negative self-evaluation based on rigid personal standards, internalized expectations, and longstanding beliefs about inadequacy or failure. Such beliefs may be less responsive to an intervention that primarily emphasizes emotion regulation, distress tolerance, and behavioral coping. DBT can reduce emotional reactivity to self-critical thoughts, but it may not always directly modify the metacognitive or cognitive structures that sustain those thoughts. This interpretation is consistent with evidence that self-criticism functions as a stable transdiagnostic vulnerability factor and may persist even when other symptoms improve (Werner et al., 2019). It is also compatible with findings indicating that self-criticism may predict treatment-related outcomes in major depressive disorder, suggesting that deeply rooted self-evaluative patterns may influence therapeutic response (Jomha et al., 2025). Therefore, although DBT may help patients manage the emotional consequences of self-criticism, internalized self-criticism may require more direct intervention targeting beliefs about thinking, personal standards, and the meaning attached to negative self-evaluations.

In contrast, MCT significantly reduced internalized self-criticism, comparative self-criticism, and total self-criticism. This finding is strongly supported by the theoretical basis of MCT and by recent empirical work concerning metacognitive beliefs and self-critical rumination. Gold and Smout found that metacognitive beliefs were closely related to self-critical rumination, decentering, and psychopathology, suggesting that the way individuals think about and respond to self-critical thoughts may be as important as the content of those thoughts themselves (Gold & Smout, 2024). MCT directly addresses such processes by helping individuals recognize that negative self-evaluative thoughts are mental events rather than objective truths. Through detached mindfulness and attention training, patients learn to disengage from repetitive analysis of personal inadequacy. As a result, thoughts such as “I am not good enough” or “others are better than me” may become less influential because individuals no longer respond to them with prolonged rumination and emotional investment.

The effect of MCT on internalized self-criticism may therefore reflect its direct focus on the processes that maintain deeply rooted negative self-evaluations. In depression, self-critical thoughts are often repeatedly rehearsed through rumination, increasing their perceived credibility and emotional impact. The more individuals analyze why they are inadequate, why they failed, or why they cannot change, the more stable these negative beliefs may become. MCT interrupts this process by reducing engagement with rumination and challenging metacognitive beliefs such as the assumption that continued analysis is necessary for solving emotional problems. Such mechanisms are particularly relevant in MDD, where rumination and self-criticism have been associated with suicidal ideation and emotional vulnerability (Lo & Cheng, 2024). Self-criticism has also been identified as a real-time predictor of nonsuicidal self-injury, further emphasizing the importance of intervening on self-directed negative cognition (Robillard et al., 2025). Accordingly, the reduction in internalized self-criticism observed following MCT may reflect decreased cognitive fusion with self-critical thoughts and a greater capacity to disengage from repetitive negative self-evaluation.

The finding that both DBT and MCT reduced comparative and total self-criticism also suggests that these interventions may converge on common therapeutic outcomes despite relying on different theoretical

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mechanisms. DBT may reduce self-criticism primarily through acceptance, emotion regulation, validation, and reduced judgmental responding, whereas MCT may do so through cognitive distancing, reduced rumination, attentional flexibility, and modification of metacognitive beliefs. The importance of these mechanisms is supported by experimental evidence showing that self-criticism and self-compassion influence implicit associations with nonsuicidal self-injury (Nagy et al., 2021). These findings suggest that self-critical cognition is closely intertwined with maladaptive behavioral responses. Reducing self-criticism may therefore contribute not only to improved self-evaluation but also to decreased vulnerability to self-harm.

5. Conclusion

The final major finding was that DBT and MCT did not differ significantly from one another in their effects on self-injurious behaviors, internalized self-criticism, comparative self-criticism, or total self-criticism. This result suggests that neither intervention demonstrated clear overall superiority during the assessment period. One explanation is that both treatments target different components of a shared psychopathological system. DBT primarily focuses on emotional dysregulation and maladaptive behavioral responses, whereas MCT focuses on repetitive negative thinking and maladaptive metacognitive beliefs. However, both approaches ultimately improve the individual's capacity to experience distressing internal states without engaging in ineffective responses. This convergence may explain why their overall outcomes were similar. The broader literature supports the use of transdiagnostic treatment strategies that target shared mechanisms across emotional disorders rather than focusing exclusively on diagnostic symptoms (Spijker et al., 2020). DBT and MCT may both function in this manner by addressing mechanisms that cut across depression, self-injury, and self-criticism. The absence of significant differences between the interventions may also reflect overlap in mindfulness-related processes. DBT explicitly incorporates mindfulness skills, while MCT uses detached mindfulness and attentional control. Although the conceptualization of mindfulness differs between the two therapies, both may help individuals reduce automatic engagement with negative thoughts and emotional states. Evidence from mindfulness-based interventions has demonstrated improvements in psychological functioning among individuals with depressive symptoms (Zhang et al., 2019). In addition, contemporary treatment models emphasize the importance of targeting mechanisms involved in recurrence and persistence rather than simply reducing acute symptoms (Otto et al., 2022). Both DBT and MCT may therefore have produced similar effects because each intervention altered a different set of maintaining mechanisms that ultimately contributed to the same clinical outcomes. The stability of effects from posttest to follow-up further suggests that the skills acquired in both treatments remained usable after formal sessions had ended.

6. Limitations and Suggestions

Several limitations should be considered when interpreting the findings. First, the sample consisted only of women with major depressive disorder attending one psychological clinic, which limits the generalizability of the results to men, other age groups, individuals from different geographical regions, and patients receiving treatment in other clinical settings. Second, purposive sampling may have introduced selection bias, despite random assignment after recruitment. Third, the relatively small sample size may have reduced statistical power to detect subtle differences between DBT and MCT. Fourth, the study relied primarily on self-report measures, which may be affected by social desirability, recall bias, and participants' current emotional states. Fifth, the follow-up period was limited to two months, and therefore the long-term stability of treatment effects remains uncertain. Finally, the absence of an active comparison condition means that nonspecific factors such as therapist attention, group support, expectancy, and therapeutic alliance cannot be fully separated from the specific effects of the interventions.

Future studies should replicate these findings with larger and more heterogeneous samples that include both women and men and participants from different cultural, socioeconomic, and clinical backgrounds. Longer follow-up periods of six months, one year, or more are recommended to determine whether reductions in self-injury and self-criticism remain stable over time. Future research could also compare DBT and MCT with established treatments such as cognitive behavioral therapy or compassion-focused therapy and could include active control groups to distinguish specific therapeutic mechanisms from common treatment factors. Examining mediators such as rumination, emotion regulation, distress tolerance, mindfulness, self-compassion, and metacognitive beliefs may clarify how each intervention produces change. It would also be useful to investigate whether baseline severity of self-criticism, self-injury

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frequency, depression severity, or personality characteristics moderates treatment response and helps identify which patients benefit most from each therapeutic approach.

From a practical perspective, mental health professionals working with women with major depressive disorder may consider both DBT and MCT when self-injurious behaviors and self-criticism are prominent clinical concerns. DBT may be particularly useful when emotional dysregulation, impulsive coping, distress intolerance, and recurrent self-harming urges are central treatment targets, whereas MCT may be especially relevant when persistent rumination, rigid metacognitive beliefs, and entrenched self-critical thinking are prominent. Clinics may incorporate selected skills from both approaches into treatment programs when appropriate, particularly when patients present with both severe emotional dysregulation and repetitive negative thinking. Routine assessment of self-injury and different dimensions of self-criticism may also help clinicians tailor interventions more precisely, monitor therapeutic progress, and identify individuals who require additional or extended treatment.

Authors' Contributions

Authors equally contributed 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

Austin, J., Drossaert, C. H., Sanderman, R., Schroevers, M. J., & Bohlmeijer, E. T. (2021). Experiences of self-criticism and self-compassion in people diagnosed with cancer: A multimethod qualitative study. *Frontiers in psychology*, *12*, 737725. https://doi.org/10.3389/fpsyg.2021.737725

Fagiolini, A., Mariano, M. P., Biesheuvel, E., & Purushottamahanti, P. (2024). A pooled analysis of the efficacy of sertraline in women, with a focus on those of childbearing age. *Annals of General Psychiatry*, *23*(1), 44. https://doi.org/10.1186/s12991-024-00519-9

Ferrari, A. J., Santomauro, D. F., Aali, A., Abate, Y. H., Abbafati, C., Abbastabar, H., & Bell, M. L. (2024). Global incidence, prevalence, years lived with disability (YLDs), disability-adjusted life-years (DALYs), and healthy life expectancy (HALE) for 371 diseases and injuries in 204 countries and territories and 811 subnational locations, 1990–2021: A systematic analysis for the Global Burden of Disease Study 2021. *The lancet*, *403*(10440), 2133-2161. https://doi.org/10.1016/S0140-6736(24)00757-8

Fisher, P., & Wells, A. (2021). *Metacognitive therapy: Distinctive features*. Arjmand.

Gold, H. R., & Smout, M. F. (2024). The influence of hated self on relationships between metacognitive beliefs, self-critical rumination, decentering and psychopathology. *International Journal of Cognitive Therapy*, *17*(4), 762-786. https://doi.org/10.1007/s41811-024-00223-2

Goldstein, T. R., Merranko, J., Rode, N., Sylvester, R., Hotkowski, N., Fersch-Podrat, R., & Birmaher, B. (2024). Dialectical behavior therapy for adolescents with bipolar disorder: A randomized clinical trial. *JAMA Psychiatry*, *81*(1). https://doi.org/10.1001/jamapsychiatry.2023.3399

Jimenez-Munoz, L., Penuelas-Calvo, I., Diaz-Olivan, I., Gutierrez-Rojas, L., Baca-Garcia, E., & Porras-Segovia, A. (2022). Suicide prevention in your pocket: A systematic review of ecological momentary interventions for the management of suicidal thoughts and behaviors. *Harvard Review of Psychiatry*, *30*(2), 85-99. https://doi.org/10.1097/HRP.0000000000000331

Jomha, A., Sohn, M. N., Watson, M., Kopala-Sibley, D. C., & McGirr, A. (2025). Self-criticism predicts antidepressant effects of intermittent theta-burst stimulation in major depressive disorder. *Journal of affective disorders*, *372*, 210-215. https://doi.org/10.1016/j.jad.2024.12.006

Kang, L., Li, R., Liu, H., Ma, S., Sun, S., Zhang, N., & Liu, Z. (2021). Nonsuicidal self-injury in undergraduate students with major depressive disorder: The role of psychosocial factors. *Journal of affective disorders*, *290*, 102-108. https://doi.org/10.1016/j.jad.2021.04.083

Kiekens, G., Hasking, P., Claes, L., Mortier, P., Auerbach, R. P., Boyes, M., & Bruffaerts, R. (2018). The DSM-5 nonsuicidal self-injury disorder among incoming college students: Prevalence and associations with 12-month mental disorders and suicidal thoughts and behaviors. *Depression and Anxiety*, *35*(7), 629-637. https://doi.org/10.1002/da.22754

Langenecker, S. A., Schreiner, M. W., Bessette, K. L., Roberts, H., Thomas, L., Dillahunt, A., & Watkins, E. R. (2024).

PWJ
Psychology of Woman Journal
E-ISSN: 3041-8615

Rumination-focused cognitive behavioral therapy reduces rumination and targeted cross-network connectivity in youth with a history of depression: Replication in a preregistered randomized clinical trial. *Biological Psychiatry Global Open Science*, *4*(1), 1-10. https://doi.org/10.1016/j.bpsgos.2023.08.012

Li, J., Wen, P., Zhou, J., Zhong, Z., & Li, L. (2025). Dialectical behavioral therapy-based prevention of non-suicidal self-harm among secondary students in China: A randomized controlled trial. *BMC public health*, *25*(1), 4392. https://doi.org/10.1186/s12889-025-24978-1

Linehan, M. (2021). *Dialectical behavior therapy: Skills training manual*. Arjmand.

Lo, B. C. Y., & Cheng, S. K. L. (2024). Emotional risk factors, rumination, and self-criticism in relation to suicidal ideation among Chinese depressive outpatients. *Behavioral Sciences*, *14*(11), 1111. https://doi.org/10.3390/bs14111111

Lynch, T. R., Hempel, R. J., Whalley, B., Byford, S., Chamba, R., Clarke, P., & Russell, I. T. (2020). Refractory depression–mechanisms and efficacy of radically open dialectical behavior therapy (RefraMED): Findings of a randomized trial on benefits and harms. *The British Journal of Psychiatry*, *216*(4), 204-212. https://doi.org/10.1192/bjp.2019.53

Lynch, T. R., Lynch, T., Hempel, R. J., Hempel, R., Whalley, B., Byford, S., & Russell, I. (2018). Radically open dialectical behavior therapy for refractory depression: The RefraMED RCT. *Efficacy and Mechanism Evaluation*, *5*(7), 1-112. https://doi.org/10.3310/eme05070

Nagy, L. M., Shanahan, M. L., & Baer, R. A. (2021). An experimental investigation of the effects of self-criticism and self-compassion on implicit associations with non-suicidal self-injury. *Behaviour Research and Therapy*, *139*, 103819. https://doi.org/10.1016/j.brat.2021.103819

Nordahl, H. M., & Wells, A. (2019). Metacognitive therapy of early traumatized patients with borderline personality disorder: A phase-II baseline controlled trial. *Frontiers in psychology*, *10*, 1694. https://doi.org/10.3389/fpsyg.2019.01694

Otto, M. W., Birk, J. L., Fitzgerald, H. E., Chauvin, G. V., Gold, A. K., & Carl, J. R. (2022). Stage models for major depression: Cognitive behavior therapy, mechanistic treatment targets, and the prevention of stage transition. *Clinical psychology review*, *95*, 102172. https://doi.org/10.1016/j.cpr.2022.102172

Ramsey, W. A., Berlin, K. S., Del Conte, G., Lightsey, O. R., Schimmel-Bristow, A., Marks, L. R., & Strohmer, D. C. (2021). Targeting self-criticism in the treatment of nonsuicidal self-injury in dialectical behavior therapy for adolescents: A randomized clinical trial. *Child and Adolescent Mental Health*, *26*(4), 320-330. https://doi.org/10.1111/camh.12452

Robillard, C. L., Claes, L., Victor, S. E., Myin-Germeys, I., & Kiekens, G. (2025). Self-criticism is a real-time predictor of non-suicidal self-injury and disordered eating: An ecological momentary assessment study among treatment-seeking individuals. *Journal of affective disorders*, *371*, 13-21. https://doi.org/10.1016/j.jad.2024.10.121

Schneider, R. A., Chen, S. Y., Lungu, A., & Grasso, J. R. (2020). Treating suicidal ideation in the context of depression. *BMC psychiatry*, *20*(1), 497. https://doi.org/10.1186/s12888-020-02894-5

Seney, M. L., Glausier, J., & Sibille, E. (2022). Large-scale transcriptomics studies provide insight into sex differences in depression. *Biological Psychiatry*, *91*(1), 14-24. https://doi.org/10.1016/j.biopsych.2020.12.025

Spijker, J., Muntingh, A., & Batelaan, N. (2020). Advice for clinicians on how to treat comorbid anxiety and depression. *JAMA Psychiatry*, *77*(6), 645-646. https://doi.org/10.1001/jamapsychiatry.2020.0601

Tian, X., Hu, N., Lu, L., Tan, L., & Li, P. (2024). Gender differences in major depressive disorder at different ages: A REST-meta-MDD project-based study. *BMC psychiatry*, *24*(1), 575. https://doi.org/10.1186/s12888-024-06021-6

Vijayapriya, C. V., & Tamarana, R. (2023). Effectiveness of dialectical behavior therapy as a transdiagnostic treatment for improving cognitive functions: A systematic review. *Research in Psychotherapy (Milano)*, *26*(2), 662. https://doi.org/10.4081/ripppo.2023.662

Werner, A. M., Tibubos, A. N., Rohrmann, S., & Reiss, N. (2019). The clinical trait self-criticism and its relation to psychopathology: A systematic review–Update. *Journal of affective disorders*, *246*, 530-547. https://doi.org/10.1016/j.jad.2018.12.069

Yosep, I., Kurniawan, K., Maulana, I., Mardhiyah, A., Hazmi, H., & Hikmat, R. (2026). Implementation of dialectical behavior therapy in reducing self-harm behavior and risk of suicide in adolescents and young adults: A scoping review. *International Journal of Africa Nursing Sciences*, 101085. https://doi.org/10.1016/j.ijans.2026.101085

Zarghami, M., Babakhanian, M., Asgarabad, M. H., Ghazanfanpour, M., Akrami, F. S., Nazeri, N., & Molavi, N. (2020). Psychometric properties of the inventory of statements about self-injury (ISAS) in Iranian opioid and alcohol abusers. *Iran J Psychiatry Behav Sci*, *14*(4), e88494. https://doi.org/10.5812/ijpbs.88494

Zhang, J. Y., Ji, X. Z., Meng, L. N., & Cai, Y. J. (2019). Effects of modified mindfulness-based stress reduction (MBSR) on the psychological health of adolescents with subthreshold depression: A randomized controlled trial. *Neuropsychiatric Disease and Treatment*, 2695-2704. https://doi.org/10.2147/NDT.S216401

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