

Comparison of the Effectiveness of a Divorce Stigma Reduction Training and Mindfulness-Based Cognitive Therapy on Sense of Coherence in Divorced Women

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Received: February 25, 2026; Revised: May 18, 2026; Accepted: June 04, 2026

Abstract

Background: Marital dissolution acts as a severe psychosocial stressor that frequently compromises women's psychological well-being, a vulnerability that is often exacerbated by societal stigma. The present study sought to evaluate and compare the efficacy of Divorce Stigma Reduction (DSR) training versus Mindfulness-Based Cognitive Therapy (MBCT) in fostering the Sense of Coherence (SOC) among divorced women.

Method: The research employed a quasi-experimental design featuring pretest, posttest, and a two-month follow-up phase, alongside a waitlist control group. The target population consisted of divorced women seeking services at the Rose Counseling Center in Shiraz, Iran, during 2024. Through convenience sampling, 45 eligible individuals were recruited and randomly allocated into three equal groups (n=15 per group). Participants in the first experimental condition attended eight 90-minute sessions of DSR training, while those in the second condition underwent eight 90-minute sessions of MBCT. The control group received no active intervention during the study period. Assessment of the primary outcome was conducted using the 29-item Sense of Coherence Scale (SOC-29). Statistical analyses, comprising repeated measures analysis of variance (ANOVA) and Bonferroni post-hoc comparisons, were executed using SPSS version 26.

Results: The repeated measures ANOVA revealed significant group-by-time interaction effects for both overall SOC and its underlying components ($P < 0.001$). Compared to the waitlist controls, participants receiving DSR training and MBCT demonstrated significant improvements in SOC scores across the posttest and follow-up evaluations ($P < 0.001$). At post-intervention, the mean total SOC scores were 72.33 ± 6.04 for the DSR condition, 65.27 ± 6.68 for the MBCT condition, and 47.47 ± 5.86 for the control group. Notably, DSR training yielded significantly greater gains in total SOC at posttest relative to MBCT (mean difference = 7.06, 95%CI [3.12, 11.00], $P < 0.001$). Furthermore, these therapeutic gains were adequately sustained at the two-month follow-up assessment.

Conclusions: While both therapeutic interventions proved successful in bolstering SOC among divorced women, DSR training exhibited significantly greater clinical efficacy than MBCT within this specific population.

Keywords: Divorce, Social Stigma, Mindfulness, Sense of Coherence, Women

How to Cite: Heidary K, Tabrizi M, Dayariyan MM. Comparison of the Effectiveness of a Divorce Stigma Reduction Training and Mindfulness-Based Cognitive Therapy on Sense of Coherence in Divorced Women. Women. Health. Bull. 2026;13(3):167-176. doi: 10.30476/whb.2026.110940.1400.

1. Introduction

Divorce is widely recognized as one of the most taxing life events, functioning as a profound psychosocial stressor that destabilizes the emotional and social foundations of an individual's life (1). For women, the dissolution of marriage often precipitates a multifaceted crisis encompassing financial instability, the loss of social support, and significant psychological distress (2). Beyond these personal losses, divorced women frequently encounter "divorce stigma," a form of social devaluation and prejudice that labels them as failures or social deviants (3). Within the Iranian cultural context, this stigma is operationally defined through

negative societal labeling (e.g., being viewed as a "failed wife" or a "family disgrace"), social avoidance by relatives and community members, reduced marriage prospects for extended family, and internalized feelings of shame and guilt that circumscribe social and economic opportunities. This pervasive stigma is frequently internalized as profound shame and isolation, further complicating the adjustment process and exacerbating the risk of developing clinical depression and anxiety. Consequently, divorced women often experience diminished self-worth and a disrupted worldview, necessitating targeted psychological interventions to restore mental equilibrium and facilitate healthy post-divorce adaptation (4).

A central psychological construct impacted by these challenges is the sense of coherence (SOC). Rooted in the salutogenic model, SOC reflects an individual's global orientation toward perceiving life as comprehensible, manageable, and meaningful (5). For divorced women, a robust SOC serves as a vital internal resource, enabling them to view post-divorce experiences as understandable and fostering a belief in their capacity to utilize available resources to overcome adversity (6). However, the chronic stress of marital dissolution and its accompanying social stigma frequently erode this coherence, causing the future to appear unpredictable and rendering daily demands overwhelming (7). Research indicated that individuals with a diminished SOC are more susceptible to the deleterious effects of social pressure and are less likely to employ adaptive coping strategies, thereby highlighting the critical need to bolster this construct to promote long-term psychological resilience (8).

To address these distinct vulnerabilities, the Divorce Stigma Reduction (DSR) training package has emerged as a specialized intervention targeting the socio-cultural dimensions of divorce. This educational framework aims to deconstruct internalized stigma by fostering cognitive reappraisal and social skill development, empowering women to redefine their identities beyond their marital status (9). Previous literature demonstrated that structured stigma-reduction programs can significantly mitigate feelings of social alienation and enhance self-efficacy among marginalized populations (10). By specifically targeting the stigma variable, DSR training encourages participants to externalize negative societal perceptions and reclaim a sense of personal agency. Previous research suggested that equipping women with the cognitive tools to navigate perceived discrimination bolsters their psychological stability, providing a clearer trajectory for reconstructing their life narratives following separation (11).

Parallel to stigma-focused modalities, Mindfulness-Based Cognitive Therapy (MBCT) offers a broad yet profound cognitive intervention. MBCT integrates elements of traditional cognitive behavioral therapy with mindfulness practices to assist individuals in disengaging from ruminative thought patterns and cultivating a non-judgmental awareness of present-moment experiences

(12). Among divorced populations, MBCT has demonstrated efficacy in attenuating the “emotional flooding” often associated with traumatic marital memories and future-oriented uncertainty (13). By fostering a “being mode” of mind, women learn to observe distressing cognitions regarding their divorce without becoming entangled in them, facilitating a more coherent and stable psychological state (14). Previous empirical investigations consistently showed that MBCT enhances emotion regulation and fortifies the internal components of coherence, specifically by increasing perceived manageability of life stressors through heightened self-awareness (15, 16).

Despite the well-documented benefits of both therapeutic approaches, a significant gap remains in the literature regarding which intervention—one specifically targeting the socio-cultural context (DSR) or one addressing underlying cognitive-emotional processes (MBCT)—yields greater efficacy in enhancing the holistic SOC among divorced women. Most existing studies have examined these interventions in isolation or focused on general psychiatric outcomes, such as depression, often neglecting the integrated construct of SOC within the context of divorce-related stigma (13, 16). Given the escalating rates of divorce and the profound socio-cultural pressures exerted on women across various societies, identifying the most potent interventional strategy is of paramount clinical importance. Such evidence will equip mental health professionals with the precise, empirically supported protocols necessary to assist this vulnerable population. Therefore, the present study aimed to evaluate and compare the effectiveness of DSR training and MBCT on the sense of coherence in divorced women.

2. Methods

2.1. Design

This research utilized a quasi-experimental, pretest-posttest control group design incorporating a two-month follow-up assessment.

2.2. Selection and Description of Participants

The target population comprised divorced women presenting for psychological support at the Rose Counseling Center in Shiraz, Iran, throughout 2024. A convenience sample of 45 eligible

individuals was recruited. Simple randomization, facilitated by a standard random number table, was subsequently employed to allocate these individuals into three identically sized groups ($n=15$ per group). Specifically, each participant was assigned a sequential, two-digit identifier ranging from 01 to 45. Following the arbitrary selection of a starting coordinate (determined by drawing a random row and column) within the table, numbers were systematically drawn in a fixed direction. The initial 15 unique identifiers falling within the 01 to 45 parameter designated assignment to the MBCT group, the subsequent 15 to the DSR group, and the final 15 to the control group. Any redundant identifiers or those exceeding the defined range were bypassed in favor of the next qualifying number.

To qualify for inclusion, participants had to possess a definitive divorce decree finalized within the preceding five years, hold a minimum of a high school diploma, and present no concurrent engagement in psychotherapy or history of severe psychiatric illness. Participants were excluded if they missed more than two scheduled intervention sessions or initiated pharmacotherapy for acute psychological distress during the trial. The research protocol adhered rigorously to ethical standards. Written informed consent was obtained from all participants following comprehensive briefings regarding data confidentiality and their voluntary right to withdraw from the study at any juncture without penalty. To maintain ethical equity, control participants were waitlisted and provided with an abridged psychoeducational session upon the trial's conclusion.

2.3. Sample Size Determination

A power analysis was performed before the study using G*Power 3.1 software. Based on effect size estimates from previous research (17), the analysis showed that at least 42 participants were needed to achieve a statistical power of 0.80 at an alpha level of 0.05. To allow for possible dropouts, the final sample size was increased to 45 participants.

2.4. Data Collection and Measurements

Sense of Coherence Scale (SOC-29): The 29-item Sense of Coherence Scale (SOC-29) was utilized to measure participants' SOC (18). This instrument evaluates an individual's global orientation toward perceiving life experiences as comprehensible,

manageable, and meaningful. Responses are recorded on a 7-point semantic differential scale, yielding cumulative scores between 29 and 203, where elevated values reflect a more robust SOC. While theoretically underpinned by the triad of comprehensibility, manageability, and meaningfulness, the instrument is conventionally scored as a unidimensional construct. The scale's initial validation confirmed both construct and content validity, demonstrating strong reliability across various samples with Cronbach's alpha coefficients typically falling between 0.86 and 0.92 (18). When adapted for Iranian demographics, the Persian translation of the SOC-29 exhibited robust psychometric properties, including satisfactory content validity (CVI=0.89, CVR=0.78) (19) and adequate internal consistency (Cronbach's alpha=0.82). For the current investigation, the calculated Cronbach's alpha was 0.82.

2.5. Procedure

Upon the conclusion of the recruitment and eligibility screening phases, baseline (pretest) assessments were administered across all cohorts. Individuals allocated to the two experimental conditions subsequently engaged in eight weekly, 90-minute therapeutic sessions, strictly adhering to their designated clinical protocols (DSR training and MBCT). Concurrently, participants assigned to the control condition were placed on a waitlist and received no active psychological intervention during this timeframe. Immediately following the culmination of the eight-week treatment phase, posttest evaluations were collected from the complete sample of 45 participants. To determine the longitudinal durability of the therapeutic outcomes, an additional follow-up assessment was conducted two months post-intervention. The comprehensive trajectory of the study sample—encompassing initial recruitment, eligibility verification, randomization, and overall trial retention—is detailed in Figure 1.

2.6. Intervention Protocols

The interventions were facilitated by two expert clinical psychologists, each with over eight years of experience delivering cognitive-behavioral and mindfulness-based therapies. Both clinicians received specialized training in the DSR and MBCT protocols and conducted the sessions under the weekly supervision of a senior clinical psychologist.

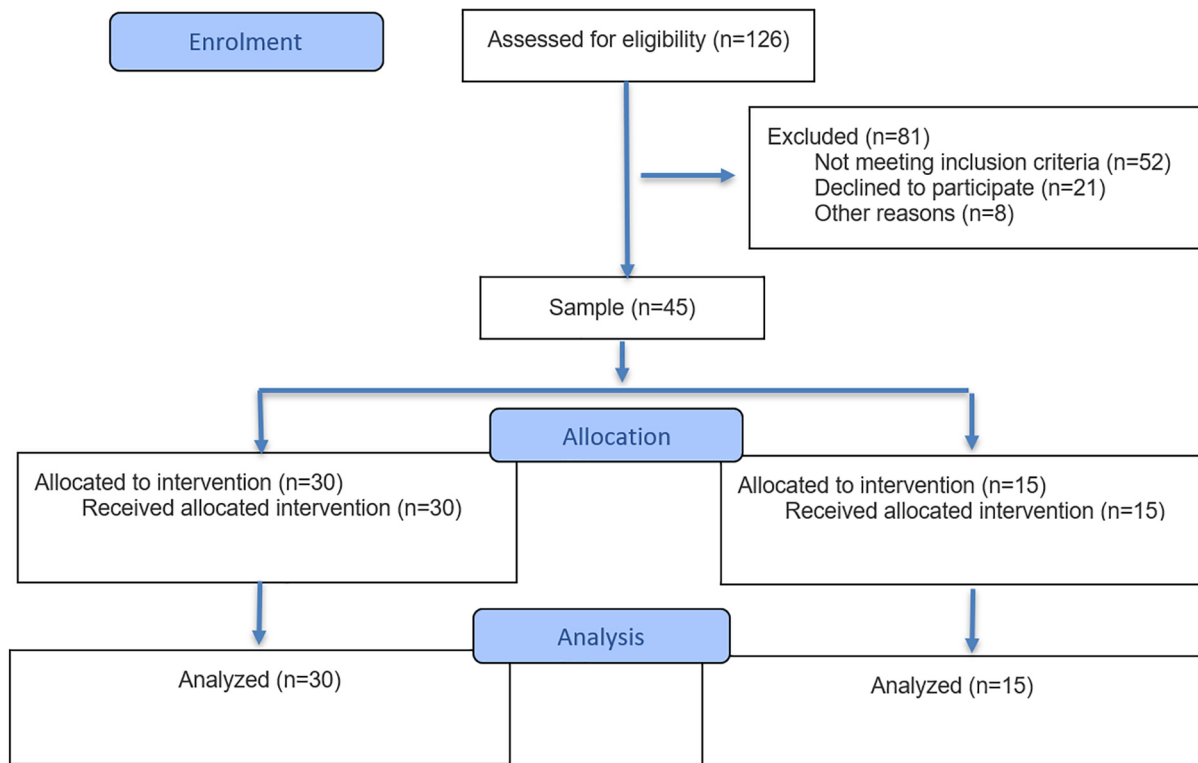


Figure 1: The figure shows the CONSORT flow diagram of the study.

Table 1: Summary of the Divorce Stigma Reduction (DSR) training package

Session	Title	Objectives	Content
1	Orientation and Introduction to Stigma	Establishing group cohesion and psychological safety	Introducing members; building trust; defining stigma and assessing the impact of divorce on identity; identifying emotional needs; administering the pretest
2	Understanding of Social Stigma	Challenging negative beliefs and navigating social labeling	Analyzing cognitive distortions; rewriting personal narratives with a focus on post-divorce growth; identifying maladaptive schemas
3	Emotional Acceptance and Self-Compassion	Enhancing emotional acceptance and reducing emotional avoidance	Teaching the acceptance of negative emotions; reducing self-blame; fostering self-compassion; developing emotional awareness
4	Resilience Against Social Pressure	Improving emotion regulation and managing social judgments	Practicing problem-solving skills; confronting negative social judgments; increasing awareness of metacognitive beliefs
5	Cognitive Restructuring	Reducing self-destructive thoughts and increasing cognitive flexibility	Identifying and modifying dysfunctional thoughts; reducing rumination; enhancing overall cognitive flexibility
6	Social Relationship Reconstruction	Improving social interactions and establishing healthy boundaries	Evaluating healthy versus unhealthy relationships; training in effective communication skills; boosting self-esteem and a sense of worthiness
7	Goal Setting and Meaning-Making	Reconstructing life post-divorce and finding personal purpose	Identifying core values; setting short-term and long-term goals; deriving personal meaning from the divorce experience
8	Economic Empowerment and Autonomy	Enhancing financial independence and planning for the future	Exploring career opportunities; outlining financial planning strategies; fostering economic independence; administering the posttest

Treatment fidelity was maintained through the use of standardized session checklists and independent evaluations of audio recordings from a random sample of 30% of the sessions. Comprehensive outlines of the DSR and MBCT protocols are provided in Tables 1 and 2, respectively. Grounded in cognitive-behavioral models of internalized stigma reduction, the DSR training was culturally adapted for Iranian divorced women. The protocol specifically targets cognitive distortions associated with divorce stigma, fosters self-compassion, enhances interpersonal skills, and promotes both economic empowerment and meaning-making.

2.7. Data Analysis

Statistical evaluations were conducted utilizing SPSS version 26. The dataset was initially summarized through descriptive statistics, specifically by calculating the means and standard deviations. To assess the inferential efficacy of the interventions across the designated time points, a repeated measures ANOVA was performed. Subsequently, Bonferroni post-hoc tests were implemented to isolate and evaluate specific between-group differences.

Table 2: Summary of the Mindfulness-based Cognitive Therapy (MBCT) protocol

Session	Title	Objectives	Content
1	Introduction and Automatic Pilot	Establishing group norms; introducing the “automatic pilot” concept	Providing a program overview and establishing rules; introducing MBCT concepts; conducting the “raisin exercise” to experience mindful eating
2	Barriers to Mindfulness	Identifying and overcoming obstacles to mindfulness practice	Reviewing homework; identifying barriers to practice; practicing breathing meditation; distinguishing between thoughts and feelings; conducting sitting meditation
3	Mindfulness of the Breath	Enhancing present-moment awareness of the body and thoughts	Practicing breathing techniques (inhalation/exhalation); engaging in mindful breathing; observing the breath without judgment; performing relaxation exercises
4	Present-Moment Awareness (Detached Mindfulness)	Strengthening focus and awareness of thoughts and sensations	Practicing sitting meditation with awareness of sounds and thoughts; exploring reactions to pleasant and unpleasant events
5	Allowing and Letting Be	Increasing acceptance of thoughts and emotions; reducing resistance	Engaging in mindful yoga; observing thoughts as mental events; practicing sitting meditation; fostering a non-striving attitude
6	Thoughts vs. Facts	Recognizing cognitive distortions and the limitations of thoughts	Providing sleep hygiene education; practicing – minutes of mindful breathing; identifying the “thinking” mind versus the “sensing” mind
7	Self-Care and Acceptance	Promoting radical self-care and non-judgmental acceptance	Practicing sitting meditation; cultivating open awareness; engaging in non-selective acceptance practice; developing a “self-care plan”
8	Acceptance and Change	Consolidating skills and maintaining practice post-intervention	Reviewing skills; practicing a -minute breathing space; conducting group discussions on managing future setbacks; gathering final feedback; administering the posttest

MBCT: Mindfulness-based Cognitive Therapy

3. Results

The participants were divorced women with mean ages of 36.20 years (SD=5.21) in the DSR group, 37.53 years (SD=4.97) in the MBCT group, and 35.92 years (SD=4.58) in the control group. The average time since divorce was 3.87 years (SD=1.50) in the DSR group, 4.07 years (SD=1.38) in the MBCT group, and 3.80 years (SD=1.61) in the control group. Regarding number of children, four participants in each group had no children. In both the DSR and control groups, seven women had one child and four had two children. In the MBCT group, five women had one child and six had two children. Educational levels were similar across the three groups. Ten participants in the DSR group, ten in the MBCT group, and nine in the control group had a university degree or higher; the remaining participants had a high school diploma. Preliminary analyses indicated no statistically significant baseline differences

among the groups concerning age ($P=0.642$), time elapsed since divorce ($P=0.782$), number of children ($P=0.812$), or educational attainment ($P=0.917$). A comprehensive summary of these baseline demographic and clinical characteristics is provided in Table 3.

Descriptive statistics (Table 4) indicated that pretest scores for total SOC and its constituent components were comparable across the three groups. Mean scores ranged from approximately 12 to 19 for the subscales and 47 to 51 for total SOC, reflecting moderate baseline levels of coherence consistent with post-divorce populations experiencing stress. At posttest, both intervention groups demonstrated substantial improvements; however, the DSR group exhibited the most pronounced gains (total SOC increased from 50.87 ± 5.28 to 72.33 ± 6.04), followed by the MBCT group (from 48.40 ± 5.33 to 65.27 ± 6.68). Conversely, the control group's scores remained stable (from 47.20 ± 6.79 to 47.47 ± 5.86).

Table 3: Demographic characteristics of the participants across the three groups

Variable	DSR Training (n=15)	MBCT (n=15)	Control (n=15)	P value
Age (years), Mean $\pm$ SD	36.20 $\pm$ 5.21	37.53 $\pm$ 4.97	35.92 $\pm$ 4.58	0.642
Time since divorce (years), Mean $\pm$ SD	3.87 $\pm$ 1.50	4.07 $\pm$ 1.38	3.80 $\pm$ 1.61	0.782
Number of children, n (%)				
- None	4 (26.7)	4 (26.7)	4 (26.7)	0.812
- One	7 (46.7)	5 (33.3)	7 (46.7)	
- Two	4 (26.7)	6 (40.0)	4 (26.7)	
Educational level, n (%)				
- High school diploma	5 (33.3)	5 (33.3)	6 (40.0)	0.917
- University or higher	10 (66.7)	10 (66.7)	9 (60.0)	

DSR: Divorce Stigma Reduction; MBCT: Mindfulness-Based Cognitive Therapy; SD: Standard Deviation

Table 4: Means and standard deviations of Sense of Coherence (SOC) scores by group and time point

Variable	Group	Pretest Mean±SD	Posttest Mean±SD	Follow-up Mean±SD	P (within- group)	Partial η^2 (within-group)
Comprehensibility	DSR Training	13.60±2.23	20.87±3.92	20.13±4.04	0.001	0.62
	MBCT	12.67±2.06	17.93±3.65	16.27±3.52	0.001	0.58
	Control	12.40±2.75	13.20±3.24	12.67±3.26	0.472	0.04
	P (between-group)	0.312	0.001	0.001	-	-
	Partial η^2 (between-group)	0.03	0.58	0.52	-	-
Manageability	DSR Training	17.93±2.49	26.67±4.68	25.93±4.48	0.001	0.64
	MBCT	17.20±2.51	24.33±4.40	22.87±4.10	0.001	0.59
	Control	16.53±3.07	17.60±3.04	17.13±2.82	0.582	0.03
	P (between-group)	0.285	0.001	0.001	-	-
	Partial η^2 (between-group)	0.04	0.61	0.55	-	-
Meaningfulness	DSR Training	19.33±2.66	24.80±4.00	25.93±4.48	0.001	0.51
	MBCT	18.73±3.03	23.00±3.94	22.40±3.50	0.001	0.48
	Control	18.27±3.73	16.67±3.18	18.13±2.98	0.910	0.01
	P (between-group)	0.467	0.001	0.001	-	-
	Partial η^2 (between-group)	0.02	0.47	0.44	-	-
SOC (total)	DSR training	50.87±5.28	72.33±6.04	72.00±7.58	0.001	0.71
	MBCT	48.40±5.33	65.27±6.68	61.53±7.10	0.001	0.65
	Control	47.20±6.79	47.47±5.86	47.93±6.03	0.757	0.02
	P (between-group)	0.198	0.001	0.001	-	-
	Partial η^2 (between-group)	0.05	0.68	0.62	-	-

DSR: Divorce Stigma Reduction; MBCT: Mindfulness-Based Cognitive Therapy; SD: Standard Deviation; SOC: Sense of Coherence

Before running the repeated measures ANOVA, we checked that the data met the necessary statistical assumptions. The Shapiro-Wilk test verified the normal distribution of the data, while Levene's test established the homogeneity of variances across the groups at all assessment points. Additionally, Mauchly's test indicated that the assumption of sphericity was met, confirming the appropriateness of the repeated measures ANOVA. Subsequent Bonferroni post-hoc analyses demonstrated that participants in both the DSR and MBCT interventions experienced substantial enhancements in overall SOC and its three sub-domains—comprehensibility, manageability, and meaningfulness—from the pretest to both the

posttest and the two-month follow-up ($P < 0.001$). Notably, the therapeutic gains achieved by the DSR group remained entirely stable throughout the follow-up phase. Conversely, the MBCT cohort demonstrated a minor, yet statistically significant, reduction in total SOC ($P = 0.008$), comprehensibility ($P = 0.012$), and manageability ($P = 0.041$) between the posttest and follow-up assessments. As anticipated, the control group exhibited no significant score fluctuations across any of the evaluated time points ($P > 0.05$) (Table 5).

Between-group comparisons further revealed that both treatment conditions yielded significantly elevated scores in total SOC and its constituent

Table 5: Within-group pairwise comparisons of mean differences across time points (Bonferroni post-hoc tests)

Variable	Time	DSR training			MBCT			Control		
		Mean Difference	SE	P	Mean Difference	SE	P	Mean Difference	SE	P
Comprehensibility	Posttest and Pretest	7.27	0.82	0.001	5.26	0.85	0.001	0.80	0.89	0.712
	Follow-up and Pretest	6.53	0.89	0.001	3.60	0.92	0.001	0.27	0.96	0.891
	Follow-up and Posttest	-0.74	0.82	0.824	-1.66	0.85	0.012	-0.53	0.89	0.756
Manageability	Posttest and Pretest	8.74	0.89	0.001	7.13	0.92	0.001	1.07	0.96	0.645
	Follow-up and Pretest	8.00	0.96	0.001	5.67	1.00	0.001	0.60	1.04	0.812
	Follow-up and Posttest	-0.74	0.89	0.819	-1.46	0.92	0.041	-0.47	0.96	0.789
Meaningfulness	Posttest and Pretest	5.47	0.85	0.001	4.27	0.89	0.001	-1.60	0.93	0.618
	Follow-up and Pretest	6.60	0.92	0.001	3.67	0.96	0.001	-0.14	1.00	0.945
	Follow-up and Posttest	1.13	0.85	0.612	-0.60	0.89	0.734	1.46	0.93	0.681
SOC (total)	Posttest and Pretest	21.46	1.85	0.001	16.87	1.92	0.001	0.27	2.01	0.904
	Follow-up and Pretest	21.13	2.01	0.001	13.13	2.08	0.001	0.73	2.18	0.768
	Follow-up and Posttest	-0.33	1.85	0.887	-3.74	1.92	0.008	0.46	2.01	0.823

DSR: Divorce Stigma Reduction; MBCT: Mindfulness-Based Cognitive Therapy; SD: Standard Deviation; SOC: Sense of Coherence; SE: Standard Error

subscales compared to the control group during both the posttest and follow-up evaluations ($P<0.001$). Crucially, the DSR intervention proved significantly superior to MBCT in enhancing total SOC at the posttest ($MD=7.06$, 95%CI [3.12, 11.00], $P<0.001$). This comparative advantage of DSR over MBCT was robustly sustained at the two-month follow-up assessment ($MD=10.47$, 95%CI [6.12, 14.82], $P<0.001$).

4. Discussion

The present study aimed to compare the comparative efficacy of Divorce Stigma Reduction (DSR) training and Mindfulness-Based Cognitive Therapy (MBCT) on the Sense of Coherence (SOC) among divorced women. The findings revealed that both interventions significantly enhanced participants' SOC relative to the control group. However, DSR training yielded superior improvements in total SOC and its three core dimensions—comprehensibility, manageability, and meaningfulness—when compared to MBCT. Furthermore, these therapeutic gains were largely sustained over the two-month follow-up period, most notably within the DSR group.

Although the DSR package shares foundational elements with MBCT, such as cognitive restructuring techniques, the DSR intervention demonstrated greater overall efficacy. This superiority can be understood through socio-psychological theories of internalized stigma reduction (20). By directly targeting internalized divorce stigma, DSR training assisted participants in reframing their post-divorce experiences as understandable and manageable sociocultural phenomena, rather than personal failures. Consequently, this targeted cognitive reappraisal appears to have fortified the comprehensibility and meaningfulness components of SOC more effectively than the generalized mindfulness-based approach (21).

These outcomes align with prior literature indicating that targeted stigma-reduction interventions often exert stronger effects on identity-related and social variables than broad mindfulness-based approaches within stigmatized populations (20, 22). For instance, structured stigma-reduction programs have consistently been shown to alleviate social alienation and enhance self-efficacy among marginalized groups

(23). In the specific context of divorced women, dismantling culturally embedded negative labels appears to play a paramount role in restoring a coherent and functional worldview (4, 24).

While both interventions were culturally adapted for the Iranian context, the DSR protocol placed a specialized emphasis on culturally salient stressors, including social labeling (e.g., the stigma of being a “failed wife”), family and community expectations, diminished social support, and the distinct economic challenges faced by divorced women in Iran. In contrast, MBCT primarily focused on mitigating rumination and cultivating non-judgmental awareness (25, 26). Although MBCT effectively enhanced emotional regulation and the manageability component of SOC, its generalized framework appeared less potent in comprehensively addressing the unique sociocultural burdens placed on this specific population (14, 27).

The robust maintenance of therapeutic gains at the two-month follow-up, particularly within the DSR group, warrants distinct attention. This durability suggests that equipping participants with practical psychoeducational tools to confront and externalize stigma fosters more enduring modifications in cognitive schemas than mindfulness practices alone (26, 27). Conversely, the slight attenuation of effects observed in the MBCT group between the posttest and follow-up assessments underscores the potential necessity of booster sessions or continued personal practice to sustain the benefits of mindfulness-based interventions over time (26).

4.1. Limitations

Despite these promising results, the current findings must be interpreted with caution due to the relatively small sample size and single-center design. Utilizing a convenience sample from a single counseling center in Shiraz inherently restricts the generalizability of the results to divorced women from more diverse socioeconomic, ethnic, or regional backgrounds across Iran. Additionally, the reliance on self-report measures introduces the potential for social desirability bias. Future research should prioritize larger, multi-center samples and, where feasible, incorporate objective behavioral indicators of adaptation and resilience. Furthermore, the absence of a longitudinal follow-

up beyond two months constitutes a methodological limitation; while the current timeframe provides valuable insights into short-term maintenance, the long-term sustainability of these improvements remains unclear. Finally, although treatment fidelity was systematically monitored, the potential influence of therapist effects cannot be entirely ruled out.

5. Conclusions

Both DSR training and MBCT demonstrated significant efficacy in enhancing the SOC among divorced women. Notably, the DSR intervention yielded superior therapeutic gains relative to MBCT. These findings indicated that integrating stigma-reduction components into clinical interventions may be particularly advantageous when treating divorced women navigating high levels of social devaluation. Future research utilizing larger samples and multi-site designs is warranted to substantiate these outcomes.

Acknowledgement

This article was extracted from the Ph.D. thesis of Ms. Khadijah Heydari at the Department of Counseling, Islamic Azad University, Khomeinishahr Branch, Khomeinishahr, Iran. Also, the authors would like to express their sincere appreciation to all the participants who collaborated in the present study.

Declaration of AI

The authors acknowledge the use of AI-assisted tool (Grammarly) for editing the language, improving the clarity, and refining the wording of some parts of the manuscript. All content was manually reviewed and edited by the authors to ensure its accuracy and academic integrity; the authors take full responsibility for the final content of the manuscript.

Authors' Contribution

Khadijah Heydari: Contribution to the concept of the study and data collection; drafting the work. Mehdi Tabrizi: Contribution to the design of the study; reviewing the work critically for important intellectual content. Mohammad Masoud Dayariyan: Contribution to the data analysis and interpretation; reviewing the work critically for

important intellectual content. All authors have read and approved the final manuscript and agree to be accountable for all aspects of the work, such as the questions related to the accuracy or integrity of any part of the work.

Conflict of Interest: None declared.

Funding: None.

Ethical Approval

The Ethics Committee of Islamic Azad University, Khomeinishahr Branch, Khomeinishahr, Iran approved the present study with the code of IR.IAU.KHSH.REC.1403.169. Also, written informed consent was obtained from the participants.

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