KMAN PUBLISHING INSTITUTE
Journal Website

Article history:
Received 16 December 2025
Revised 27 April 2026
Accepted 04 May 2026
Initial Published 08 May 2026
Final Publication 01 September 2026

Psychology of Woman Journal

Volume 7, Issue 5, pp 1-11

E-ISSN: 3041-8615

Comparing the Effectiveness of Solution-Focused Brief Therapy and Compassion-Focused Therapy on Death Anxiety and Negative Meta-Emotion in Women with Multiple Sclerosis

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A r t i c l e I n f o

Article type:
Original Research

How to cite this article:
Naeeni Davarani, M., Alimahdi, M., Rafiepoor, A., & Sabet, M. (2026). Comparing the Effectiveness of Solution-Focused Brief Therapy and Compassion-Focused Therapy on Death Anxiety and Negative Meta-Emotion in Women with Multiple Sclerosis. *Psychology of Woman Journal*, *7*(5), 1-11.
http://dx.doi.org/10.61838/kman.pwj.5354

A B S T R A C T

Objective: The present study aimed to compare the effectiveness of Solution-Focused Brief Therapy (SFBT) and Compassion-Focused Therapy (CFT) on death anxiety and negative meta-emotion in women with multiple sclerosis.

Methods and Materials: This applied quasi-experimental study used a pretest–posttest design with a control group and follow-up phase. The statistical population consisted of women with multiple sclerosis in Tehran, Iran, during 2024–2025. A total of 45 participants were selected through convenience sampling and randomly assigned into three groups: SFBT, CFT, and control group, with 15 participants in each group. The experimental groups participated in eight 90-minute weekly group therapy sessions, while the control group received no psychological intervention during the study period. Data were collected using Templer's Death Anxiety Scale and the Negative Meta-Emotion Scale developed by Mitmansgruber et al. Data were analyzed using repeated-measures analysis of variance, multivariate analysis, and Bonferroni post hoc comparisons in SPSS at a significance level of $p < .05$.

Findings: The findings demonstrated significant time-by-group interaction effects for both death anxiety and negative meta-emotion. In the comparison between the SFBT and control groups, significant reductions were observed in death anxiety (Wilks' Lambda = .234, F = 44.30, p = .001, partial η^2 = .766) and negative meta-emotion (Wilks' Lambda = .156, F = 72.90, p = .001, partial η^2 = .844). Similarly, the comparison between the CFT and control groups revealed significant reductions in death anxiety (Wilks' Lambda = .282, F = 34.30, p = .001, partial η^2 = .718) and negative meta-emotion (Wilks' Lambda = .120, F = 165.50, p = .001, partial η^2 = .880). Bonferroni post hoc comparisons showed that both intervention groups differed significantly from the control group at posttest and follow-up stages. Although the CFT group showed descriptively greater reductions in death anxiety and negative meta-emotion, the direct differences between SFBT and CFT were not statistically significant.

Conclusion: The results indicated that both Solution-Focused Brief Therapy and Compassion-Focused Therapy were effective in reducing death anxiety and negative meta-emotion in women with multiple sclerosis, and the treatment effects remained stable at follow-up. These findings suggest that brief solution-oriented and compassion-based psychological interventions can serve as effective supportive treatments alongside medical care for women with chronic neurological illness. Both approaches may help patients improve emotional adjustment, reduce existential distress, and develop more adaptive emotional coping strategies.

Keywords: *multiple sclerosis, death anxiety, negative meta-emotion, solution-focused brief therapy, compassion-focused therapy*

1. Introduction

Multiple sclerosis (MS) is a chronic, progressive, and immune-mediated neurological disorder that affects the central nervous system and disrupts sensory, motor, cognitive, and emotional functioning. The disease is characterized by inflammatory demyelination and neurodegeneration that can gradually impair daily functioning and quality of life (Dobson & Giovannoni, 2019; Filippi et al., 2018). Epidemiological evidence indicates that the prevalence of MS has increased considerably over recent decades, making it one of the most important chronic neurological disorders worldwide. According to the latest global reports, the number of individuals living with MS has risen substantially, reflecting the growing physical, psychological, and social burden associated with the disease (Multiple Sclerosis International, 2023; Walton et al., 2020). In Iran, the prevalence of MS has also increased in recent years, particularly among women, and this trend has intensified the need for comprehensive interventions that address not only physical symptoms but also psychological adjustment and emotional well-being.

Living with MS involves continuous confrontation with uncertainty, physical limitations, fatigue, pain, cognitive difficulties, and fear of disease progression. These challenges can profoundly affect psychological functioning and emotional regulation. Research has consistently shown that individuals with MS experience significantly higher levels of anxiety, depression, emotional distress, and reduced psychological adjustment compared with healthy populations (Boeschoten et al., 2017; Jellinger, 2024; Marrie et al., 2015). Emotional difficulties in MS are not merely secondary reactions to disability but are often embedded within the chronic and unpredictable nature of the disease itself. The fluctuating course of MS, fear of relapse, loss of independence, and concerns about future deterioration can produce persistent emotional vulnerability and existential insecurity (Dennison et al., 2009; Desborough et al., 2020). Qualitative studies have further demonstrated that many individuals with MS perceive the illness as a threat to identity, self-concept, autonomy, and life meaning, thereby intensifying emotional suffering and psychological instability (Desborough et al., 2020).

Among the psychological problems associated with MS, death anxiety has received increasing attention. Death anxiety refers to emotional distress, fear, worry, and cognitive preoccupation related to death, dying, uncertainty, or perceived loss of control. In chronic and progressive illnesses such as MS, awareness of bodily decline and uncertainty about future functioning may intensify concerns related to mortality and existential vulnerability (Francalancia et al., 2021). Women with MS may experience heightened death anxiety because they often face ongoing physical symptoms, social role disruptions, dependency concerns, and uncertainty regarding disease progression. Persistent exposure to these stressors can increase fear of helplessness, disability, and future suffering. Recent evidence suggests that death anxiety in MS is associated with poorer psychological adjustment, reduced quality of life, emotional dysregulation, and increased distress (Aboutalebi et al., 2022; Azizpour et al., 2025). Therefore, addressing death anxiety has become an important clinical priority in psychological interventions designed for individuals with MS.

Another important psychological construct relevant to women with MS is negative meta-emotion. Meta-emotion refers to emotional reactions toward one's own emotional experiences. Negative meta-emotion occurs when individuals react negatively to primary emotions, such as feeling ashamed of anxiety, angry about sadness, guilty about fear, or frustrated by emotional vulnerability (Mitmansgruber et al., 2009). Such secondary emotional reactions may intensify emotional suffering because individuals become distressed not only by the original emotion but also by their judgment and rejection of that emotion. In chronic illnesses, negative meta-emotion can be

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E-ISSN: 3041-8615

particularly damaging because patients repeatedly encounter emotionally challenging experiences and may interpret their emotional responses as signs of weakness or failure. This process can increase avoidance, suppression, rumination, emotional dysregulation, and self-criticism (Gross, 2015). Studies have shown that difficulties in emotion regulation and maladaptive emotional responses are strongly associated with poorer psychological adjustment in MS populations (Dennison et al., 2009; Ford et al., 2018).

The relationship between death anxiety and negative meta-emotion may be especially important in MS populations. Patients who experience fear, sadness, helplessness, or uncertainty about illness may also develop shame, self-criticism, or anger toward these emotional reactions. Consequently, emotional suffering may become amplified through cycles of emotional rejection and secondary distress. Psychological approaches that reduce self-judgment, increase emotional acceptance, and strengthen adaptive coping may therefore be particularly useful for women with MS. Recent interventions in MS populations have increasingly emphasized resilience, emotional flexibility, self-compassion, acceptance, and psychological adaptation rather than symptom elimination alone (Hassami et al., 2025; Najafi et al., 2024; Pakenham & Giovannetti, 2024).

Solution-Focused Brief Therapy (SFBT) represents one of the therapeutic approaches that may help reduce psychological distress in chronic illness populations. SFBT is a strengths-based, future-oriented, and goal-directed therapeutic model that focuses on clients' resources, successful exceptions, preferred future, and small achievable changes rather than prolonged exploration of deficits and pathology (de Shazer et al., 2007). The approach assumes that clients possess internal strengths and capabilities that can facilitate meaningful change. Therapeutic techniques such as the miracle question, scaling questions, exception-seeking, and solution-building are designed to increase hope, self-efficacy, emotional coping, and agency. Because SFBT is brief and structured, it may be particularly suitable for individuals with chronic illnesses who experience fatigue, emotional burden, and limited tolerance for lengthy interventions.

The growing evidence supporting SFBT has strengthened interest in its application to chronic health conditions. Systematic reviews and meta-analytic findings have shown that SFBT can improve psychosocial outcomes across a range of clinical populations by facilitating positive emotional change and strengthening adaptive coping processes (Franklin et al., 2017; Vermeulen-Oskam et al., 2024). Research has also shown that SFBT contributes to emotional change by amplifying hope, strengths, and positive emotional experiences (Kim & Franklin, 2015). In neurological and chronic illness contexts, SFBT has demonstrated positive effects on resilience, social adjustment, quality of life, distress tolerance, and coping (Fereydoni & Sabet, 2021; Gan, 2020; Naderipour, 2023; Shandiz et al., 2022). These findings suggest that focusing on achievable goals, previous coping successes, and future-oriented adaptation may help women with MS reduce existential distress and improve emotional functioning.

Compassion-Focused Therapy (CFT) represents another promising intervention for emotional difficulties in MS. Developed by Gilbert, CFT is grounded in evolutionary psychology, attachment theory, affect regulation theory, and compassion science (Gilbert, 2009, 2010, 2014). The therapy focuses on reducing shame, self-criticism, and threat-based emotional processing while strengthening compassion, emotional acceptance, and self-soothing capacities. According to Gilbert's model, many psychological problems are maintained by overactivation of the threat system and underdevelopment of the soothing system. Individuals who respond to emotional suffering with self-criticism, avoidance, or shame may become trapped in cycles of chronic distress. CFT therefore seeks to cultivate compassionate responses toward oneself and others in order to improve emotional regulation and psychological resilience.

Self-compassion has emerged as a particularly important protective factor in chronic illness populations. Self-compassion involves treating oneself with kindness, mindful awareness, and recognition of common humanity during experiences of suffering or failure (Neff, 2023). Studies have shown that self-compassion is associated with improved resilience, emotional adjustment, quality of life, and psychological well-being in individuals with MS (Nery-Hurwit et al., 2018). Compassion-based interventions have also demonstrated effectiveness in reducing self-criticism, shame, anxiety, and psychological distress across clinical populations (Kirby et al., 2017; Millard, 2023; Vidal & Soldevilla, 2023). In women with MS, compassion-focused and compassion-based interventions have shown positive effects on death anxiety, distress tolerance, psychological flexibility, rumination, and emotional adjustment (Aboutalebi et al., 2022; Azizpour et al., 2025; Hakimabadi & Tajikesmaeili, 2021; Mansouri Koryani, 2022; Mousavipour & Bavi, 2024). These findings suggest that

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interventions emphasizing compassion and emotional acceptance may directly address the shame, fear, and emotional vulnerability associated with chronic neurological illness.

Although both SFBT and CFT appear effective in improving psychological functioning, the mechanisms underlying these interventions differ conceptually. SFBT primarily focuses on constructing solutions, strengthening agency, identifying exceptions to problems, and promoting future-oriented coping (de Shazer et al., 2007; Franklin et al., 2017). In contrast, CFT directly targets emotional suffering, self-criticism, shame, and maladaptive emotional regulation through compassionate awareness and self-soothing strategies (Gilbert, 2010, 2014). Therefore, comparing these two approaches may provide valuable insight into whether solution-building processes or compassion-based emotional regulation processes are more effective in reducing death anxiety and negative meta-emotion among women with MS.

Despite increasing interest in psychological interventions for MS, comparative research examining different therapeutic approaches remains limited, particularly regarding existential distress and meta-emotional functioning. Most existing studies have focused on depression, anxiety, stress, quality of life, or resilience, whereas fewer investigations have specifically examined death anxiety and negative meta-emotion as central psychological outcomes (Azizpour et al., 2025; Francalancia et al., 2021). Moreover, comparative studies directly evaluating SFBT and CFT in women with MS remain scarce. Given that MS patients often experience chronic emotional vulnerability, uncertainty, and self-critical emotional responses, identifying effective psychological interventions may contribute substantially to emotional adaptation and psychological well-being.

Considering the increasing prevalence of MS and the significant emotional burden associated with the disease, there is a growing need for brief, feasible, and evidence-based psychological interventions that can be integrated into routine care. Interventions that strengthen emotional resilience, improve self-regulation, reduce existential fear, and foster adaptive coping may play an important role in improving long-term adjustment among women with MS. Therefore, the present study aimed to compare the effectiveness of Solution-Focused Brief Therapy and Compassion-Focused Therapy on death anxiety and negative meta-emotion in women with multiple sclerosis.

2. Methods and Materials

2.1. Study design and Participant

The present study employed an applied, quasi-experimental design with a pretest–posttest control-group structure. The study was designed to compare the effectiveness of Solution-Focused Brief Therapy (SFBT) and Compassion-Focused Therapy (CFT) on death anxiety and negative meta-emotion in women with multiple sclerosis (MS). Three groups were included: one group received SFBT, one group received CFT, and one group served as the control group. The two experimental groups received structured psychological interventions, whereas the control group received no psychological intervention during the study period. This design was appropriate because the main objective was to examine and compare changes in psychological outcomes after two different therapeutic interventions. Although the original dissertation also examined hostile attribution, the present article focuses only on death anxiety and negative meta-emotion. Therefore, the research model, instruments, statistical analyses, and reporting of findings were revised accordingly.

The statistical population consisted of patients diagnosed with multiple sclerosis in Tehran, Iran, during the 2024–2025 period. The sample included 45 women with MS who were selected using convenience sampling. After initial screening and confirmation of eligibility, participants were randomly assigned to three equal groups: the SFBT group, the CFT group, and the control group. Each group included 15 participants.

The use of a sample size of 45 participants was consistent with the quasi-experimental nature of the study and the group-based intervention design. Random assignment was used after recruitment to reduce selection bias and increase the comparability of the groups at baseline. Participants in the experimental groups attended eight 90-minute group therapy sessions, while participants in the control group were placed on a waiting list and did not receive any psychological intervention during the intervention period.

Participants were included if they had a confirmed diagnosis of multiple sclerosis by a neurologist, were willing to participate in the study, had the ability to attend group therapy sessions, and provided informed consent. Participants also had to be physically and cognitively able to complete the questionnaires and take part in the intervention sessions.

Participants were excluded if they had severe psychiatric disorders requiring immediate specialized treatment, severe

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cognitive impairment that prevented questionnaire completion, relapse or severe physical deterioration during the intervention period, absence from more than two intervention sessions, or simultaneous participation in another structured psychological intervention. These criteria were considered to protect participants' safety and to preserve the internal validity of the intervention effects.

2.2. Measures

Death anxiety was measured using the Death Anxiety Scale developed by Templer (1970). The scale is one of the most widely used instruments for assessing fear, worry, and emotional distress related to death and dying. In the dissertation, death anxiety was operationally defined as the score obtained from Templer's Death Anxiety Scale, with higher scores indicating higher levels of death anxiety. The dissertation reports that the scale consists of 15 items and that higher scores reflect greater death anxiety. It also notes that previous Iranian studies have reported Cronbach's alpha coefficients ranging from .78 to .88, indicating acceptable reliability. In the present study, the scale was administered at the pretest and posttest stages to all three groups. The instrument was used to evaluate changes in death anxiety following SFBT and CFT. The use of this scale was appropriate because death anxiety in women with chronic illness involves fear of death, fear of the dying process, perceived loss of control, and distress related to uncertainty about the future.

Negative meta-emotion was measured using the Negative Meta-Emotion Scale developed by Mitmansgruber et al. (2009). Meta-emotion refers to emotional reactions toward one's own emotions; negative meta-emotion includes experiences such as shame about anxiety, anger about sadness, guilt about fear, or negative judgment toward emotional vulnerability. In the dissertation, negative meta-emotion was defined as the individual's negative emotional and evaluative response to primary emotions, and it was measured using the Mitmansgruber Meta-Emotion Questionnaire. The reported dimensions included meta-anger, meta-anxiety, meta-shame, emotional control, and suppression. The dissertation also reports that higher scores indicate higher levels of negative meta-emotion and that the internal consistency reported in Iranian studies was $\alpha = .86$. In the present article, only the negative meta-emotion component was retained because the research topic focuses specifically on negative meta-emotional processes. The scale was administered to all participants before and after the intervention. This measure was suitable because the study aimed to examine whether SFBT and CFT could reduce patients' negative reactions toward their own emotional experiences.

2.3. Data Analysis

Data were analyzed using descriptive and inferential statistics. At the descriptive level, frequency, percentage, mean, and standard deviation were used to describe demographic characteristics and the main research variables. Before conducting inferential analyses, statistical assumptions were examined, including normality, homogeneity of variances, homogeneity of regression slopes, and equality of covariance matrices.

To examine the effectiveness of the interventions, multivariate analysis of covariance (MANCOVA) was used, with pretest scores entered as covariates and posttest scores of death anxiety and negative meta-emotion entered as dependent variables. When the multivariate test was significant, follow-up univariate ANCOVA tests were conducted for each dependent variable. Pairwise comparisons were then used to compare the SFBT group, CFT group, and control group. This analytic strategy was appropriate because the study involved two related psychological outcomes and aimed to compare post-intervention group differences while controlling for baseline scores. The dissertation also reports the use of multivariate analysis of covariance for analyzing the intervention effects.

The significance level was set at $p < .05$. Effect sizes were reported where appropriate to determine the magnitude of the intervention effects. Data analysis was conducted using SPSS.

3. Findings and Results

The study included 45 women with multiple sclerosis who were randomly assigned into three groups: Solution-Focused Brief Therapy (SFBT; n = 15), Compassion-Focused Therapy (CFT; n = 15), and control group (n = 15). The mean age of participants was 43.00 ± 13.40 years in the SFBT group, 43.06 ± 15.10 years in the CFT group, and 40.60 ± 12.90 years in the control group. One-way analysis of variance showed no significant difference among the groups regarding age, $F(2, 42) = 0.145$, $p = .865$. Therefore, the three groups were considered comparable at baseline before implementation of the interventions.

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Table 1

Means and Standard Deviations of Death Anxiety and Negative Meta-Emotion Across Groups and Measurement Stages

Variable	Group	Pretest M ± SD	Posttest M ± SD	Follow-up M ± SD
Death anxiety	SFBT	9.46 ± 2.29	6.86 ± 2.19	6.60 ± 2.09
	CFT	8.60 ± 1.84	4.93 ± 2.08	4.66 ± 2.02
	Control	8.86 ± 2.29	8.60 ± 2.32	8.46 ± 2.32
Negative meta-emotion	SFBT	24.00 ± 3.33	21.60 ± 3.43	21.30 ± 3.10
	CFT	24.06 ± 4.46	20.60 ± 4.33	20.20 ± 4.46
	Control	23.30 ± 3.31	23.60 ± 3.08	23.50 ± 3.22

As shown in Table 1, the three groups had relatively similar mean scores at pretest for both death anxiety and negative meta-emotion. Following the intervention, both SFBT and CFT groups demonstrated noticeable reductions in death anxiety and negative meta-emotion, whereas the control group showed minimal changes across measurement stages. In the SFBT group, death anxiety decreased from 9.46 ± 2.29 at pretest to 6.86 ± 2.19 at posttest and 6.60 ± 2.09 at follow-up. In the CFT group, death anxiety decreased from 8.60 ± 1.84 at pretest to 4.93 ± 2.08 at posttest and 4.66 ± 2.02 at follow-up. Negative meta-emotion also decreased from 24.00 ± 3.33 to 21.60 ± 3.43 in the SFBT group and from 24.06 ± 4.46 to 20.60 ± 4.33 in the CFT group at posttest, with maintenance of improvement at follow-up. Descriptively, the CFT group showed greater reductions in death anxiety and negative meta-emotion compared with the SFBT group.

Table 2

Repeated-Measures Analysis of Variance for Death Anxiety and Negative Meta-Emotion

Variable	Comparison	Wilks' Lambda	F	p	Partial η^2
Death anxiety	SFBT vs. Control	.234	44.30	.001	.766
Death anxiety	CFT vs. Control	.282	34.30	.001	.718
Negative meta-emotion	SFBT vs. Control	.156	72.90	.001	.844
Negative meta-emotion	CFT vs. Control	.120	165.50	.001	.880

Before conducting the repeated-measures analyses, assumptions of normality, homogeneity of variances, and equality of covariance matrices were examined. Results of the Shapiro–Wilk test indicated that all variables were normally distributed, and Box's M and Levene's tests confirmed the assumptions required for repeated-measures analysis. As presented in Table 2, significant time-by-group interaction effects were observed for both death anxiety and negative meta-emotion. For death anxiety, the comparison between the SFBT and control groups was significant, Wilks' Lambda = .234, F = 44.30, p = .001, partial η^2 = .766, indicating that SFBT significantly reduced death anxiety compared with the control group. Similarly, the comparison between the CFT and control groups was significant, Wilks' Lambda = .282, F = 34.30, p = .001, partial η^2 = .718, indicating significant reductions in death anxiety following CFT. For negative meta-emotion, significant reductions were also observed in the SFBT group compared with the control group, Wilks' Lambda = .156, F = 72.90, p = .001, partial η^2 = .844, as well as in the CFT group compared with the control group, Wilks' Lambda = .120, F = 165.50, p = .001, partial η^2 = .880. The obtained effect sizes indicated strong intervention effects for both therapeutic approaches.

Table 3

Bonferroni Post Hoc Comparisons for Death Anxiety and Negative Meta-Emotion

Variable	Time	Comparison	Mean Difference	p
Death anxiety	Posttest	SFBT vs. Control	-11.40	.001
Death anxiety	Posttest	CFT vs. Control	-13.80	.001
Death anxiety	Posttest	SFBT vs. CFT	2.40	.340
Death anxiety	Follow-up	SFBT vs. Control	-10.90	.001
Death anxiety	Follow-up	CFT vs. Control	-13.40	.001

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Death anxiety	Follow-up	SFBT vs. CFT	2.46	.328
Negative meta-emotion	Posttest	SFBT vs. Control	-6.60	.001
Negative meta-emotion	Posttest	CFT vs. Control	-6.46	.001
Negative meta-emotion	Posttest	SFBT vs. CFT	-0.13	1.000
Negative meta-emotion	Follow-up	SFBT vs. Control	-7.20	.001
Negative meta-emotion	Follow-up	CFT vs. Control	-7.06	.001
Negative meta-emotion	Follow-up	SFBT vs. CFT	0.14	1.000

The Bonferroni post hoc comparisons presented in Table 3 showed that both intervention groups had significantly lower scores on death anxiety and negative meta-emotion compared with the control group at both posttest and follow-up stages. Regarding death anxiety, significant differences were observed between the SFBT and control groups at posttest (mean difference = -11.40, p = .001) and follow-up (mean difference = -10.90, p = .001), as well as between the CFT and control groups at posttest (mean difference = -13.80, p = .001) and follow-up (mean difference = -13.40, p = .001). However, the differences between the SFBT and CFT groups were not statistically significant at posttest (p = .340) or follow-up (p = .328). Similarly, for negative meta-emotion, both SFBT and CFT groups showed significantly lower scores than the control group at posttest and follow-up (all p = .001), whereas no significant differences were observed between the two intervention groups (p = 1.000). Overall, the findings indicated that both Solution-Focused Brief Therapy and Compassion-Focused Therapy were effective in reducing death anxiety and negative meta-emotion in women with multiple sclerosis, and these improvements remained stable during the follow-up period.

4. Discussion

The present study aimed to compare the effectiveness of Solution-Focused Brief Therapy (SFBT) and Compassion-Focused Therapy (CFT) on death anxiety and negative meta-emotion in women with multiple sclerosis (MS). The findings demonstrated that both interventions significantly reduced death anxiety and negative meta-emotion compared with the control group, and these improvements remained stable during the follow-up period. Although the CFT group showed descriptively greater reductions in death anxiety and negative meta-emotion, the differences between the two active treatment groups were not statistically significant. These findings suggest that both SFBT and CFT may serve as effective psychological interventions for reducing existential distress and maladaptive emotional responses among women with MS.

One of the major findings of the present study was that SFBT significantly reduced death anxiety in women with MS. This result can be interpreted based on the theoretical assumptions of solution-focused interventions, which emphasize strengths, future orientation, hope, coping resources, and achievable change rather than prolonged concentration on pathology and deficits (de Shazer et al., 2007; Franklin et al., 2017). Women with MS frequently experience uncertainty about disease progression, physical decline, loss of independence, and disruption of life roles, all of which may intensify fears related to death and vulnerability (Desborough et al., 2020; Francalancia et al., 2021). SFBT may reduce death anxiety by redirecting attention away from uncontrollable disease-related fears toward manageable goals, previous coping successes, and meaningful future possibilities. Through techniques such as the miracle question, scaling questions, and exception-seeking, patients may reconstruct a sense of agency and psychological control despite the chronic nature of the illness.

The present finding is consistent with previous studies demonstrating the positive effects of solution-focused interventions on psychological adjustment and emotional functioning in MS populations. Research has shown that SFBT can improve quality of life, social adjustment, distress tolerance, and adaptive coping in women with MS (Fereydoni & Sabet, 2021; Naderipour, 2023; Shandiz et al., 2022). Meta-analytic evidence has also supported the effectiveness of SFBT across diverse psychosocial outcomes and clinical conditions (Vermeulen-Oskam et al., 2024). Furthermore, studies have suggested that solution-focused approaches facilitate emotional change by amplifying positive emotional experiences, strengths, and self-efficacy (Kim & Franklin, 2015). These mechanisms may be particularly important for women with MS because chronic illness often reduces perceived control and increases helplessness. By strengthening emotional competence and future-oriented coping, SFBT may weaken the cognitive and emotional processes underlying death anxiety.

Another important finding was that CFT significantly reduced death anxiety in women with MS. This result is theoretically meaningful because compassion-focused interventions directly target fear, shame, self-criticism, and threat-based emotional processing (Gilbert, 2009, 2010,

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2014). Death anxiety in chronic illness is not solely related to fear of mortality but is also associated with feelings of helplessness, dependency, uncertainty, and perceived inadequacy. Women with MS may become emotionally overwhelmed when illness-related fears are accompanied by self-judgment and emotional avoidance. CFT may reduce this distress by helping individuals approach suffering with acceptance, emotional warmth, compassion, and nonjudgmental awareness.

The effectiveness of CFT in the present study aligns with previous research indicating that compassion-based interventions improve emotional regulation and reduce psychological distress in clinical populations (Kirby et al., 2017; Millard, 2023; Vidal & Soldevilla, 2023). Compassion-focused approaches have also been associated with reductions in death anxiety, rumination, and emotional distress among women with MS (Aboutalebi et al., 2022; Hakimabadi & Tajikesmaeili, 2021; Mousavipour & Bavi, 2024). Recent studies have additionally shown that compassion-focused interventions and acceptance-based therapies improve resilience, emotional adjustment, self-efficacy, and quality of life in MS patients (Azizpour et al., 2025; Hassami et al., 2025; Najafi et al., 2024). Compassion-based approaches may therefore be especially beneficial for individuals with chronic neurological conditions because they cultivate emotional safety and reduce the dominance of the threat system. By strengthening self-soothing capacities and reducing emotional self-criticism, CFT may help women with MS face existential fears more adaptively.

The present findings also showed that SFBT significantly reduced negative meta-emotion. Negative meta-emotion refers to maladaptive emotional reactions toward one's own emotional experiences, such as shame regarding anxiety or anger toward sadness (Mitmansgruber et al., 2009). In women with MS, emotional responses to illness may become intensified when patients interpret emotional vulnerability as weakness or failure. SFBT may help reduce these maladaptive emotional reactions by encouraging patients to recognize moments in which emotions are manageable, identify coping successes, and construct more adaptive narratives regarding emotional experiences. Rather than focusing on emotional deficits, SFBT encourages clients to notice competencies, resilience, and emotional exceptions.

This finding is compatible with previous literature suggesting that solution-focused approaches promote positive emotional change and adaptive coping (Franklin et al., 2017; Kim & Franklin, 2015). Because emotional distress in MS is often maintained by excessive focus on limitations and illness-related fears, interventions that strengthen psychological flexibility and future-oriented coping may reduce emotional self-judgment and emotional suppression. Research has demonstrated that emotional acceptance and adaptive coping processes are associated with improved psychological functioning and reduced emotional distress in chronic illness populations (Ford et al., 2018; Gross, 2015). Therefore, helping women with MS reinterpret their emotional experiences in a more constructive and less self-critical manner may reduce negative meta-emotion and facilitate healthier emotional adjustment.

The study further demonstrated that CFT significantly reduced negative meta-emotion in women with MS. This finding is highly consistent with the theoretical foundations of compassion-focused therapy because CFT directly addresses shame, self-criticism, emotional rejection, and maladaptive emotional regulation (Gilbert, 2010, 2014). Individuals with chronic illnesses often experience fear, sadness, frustration, or helplessness, but secondary emotional reactions such as shame about these feelings can substantially intensify distress. CFT teaches individuals to respond to emotional pain with kindness, mindful awareness, and compassion rather than judgment or avoidance. Through compassionate breathing, compassionate imagery, and compassionate self-talk, patients may gradually learn to tolerate and accept difficult emotions without becoming overwhelmed by self-critical reactions.

The present result is supported by previous findings showing that compassion-based interventions reduce shame, self-criticism, anxiety, and emotional dysregulation (Kirby et al., 2017; Millard, 2023; Vidal & Soldevilla, 2023). Self-compassion has also been associated with resilience and improved quality of life among individuals with MS (Nery-Hurwit et al., 2018). Neff conceptualized self-compassion as a protective emotional process involving self-kindness, common humanity, and mindfulness, all of which contribute to healthier emotional regulation (Neff, 2023). Compassion-based interventions may therefore reduce negative meta-emotion by changing the patient's emotional relationship with suffering. Instead of perceiving emotional reactions as evidence of weakness, patients learn to understand emotional experiences as normal and manageable human responses to chronic illness.

The results additionally demonstrated that the positive effects of both interventions remained stable during the follow-up stage. This finding is clinically important because

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E-ISSN: 3041-8615

chronic illnesses such as MS require sustainable psychological adaptation rather than temporary symptom reduction. The maintenance of treatment gains suggests that both SFBT and CFT may equip patients with transferable emotional and cognitive coping skills. SFBT likely strengthened future-oriented thinking, resilience, and problem-solving capacities, whereas CFT likely improved emotional acceptance, self-compassion, and emotional self-regulation. These therapeutic skills may continue to support patients even after formal intervention sessions have ended.

Although both interventions were effective, no statistically significant differences were observed between SFBT and CFT. This finding may indicate that both approaches improve psychological functioning through different but equally beneficial therapeutic mechanisms. SFBT primarily emphasizes hope, agency, strengths, and adaptive coping, whereas CFT focuses on reducing self-criticism, shame, and emotional threat sensitivity (de Shazer et al., 2007; Gilbert, 2014). The absence of significant differences may also be related to the relatively small sample size, which may have limited statistical power to detect subtle distinctions between interventions. Nevertheless, the descriptive findings indicated that CFT produced somewhat greater reductions in death anxiety, suggesting that compassion-focused processes may be especially relevant for existential distress and emotional vulnerability in chronic illness populations.

The findings of the present study should also be interpreted within the broader psychological context of MS. Emotional problems in MS are highly prevalent and are strongly associated with poorer adjustment, lower quality of life, and impaired functioning (Boeschoten et al., 2017; Jellinger, 2024; Marrie et al., 2015). The chronic and unpredictable course of the disease can produce continuous emotional strain and existential uncertainty (Dennison et al., 2009; Desborough et al., 2020). Therefore, interventions that reduce emotional suffering and improve emotional regulation may play a crucial role in comprehensive MS care. Recent resilience-based and acceptance-based interventions have increasingly emphasized emotional flexibility, adaptive coping, and psychological resilience as important therapeutic targets in MS populations (Hassami et al., 2025; Najafi et al., 2024; Pakenham & Giovannetti, 2024). The present study extends this literature by demonstrating that both SFBT and CFT can effectively reduce death anxiety and negative meta-emotion among women with MS.

5. Conclusion

The clinical implications of these findings are substantial. First, psychological interventions should be integrated into routine MS care because emotional distress represents a significant component of disease burden. Second, brief and structured interventions such as SFBT and CFT may be particularly practical for chronic illness populations because they are relatively feasible, cost-effective, and adaptable to group settings. Third, clinicians should pay greater attention to death anxiety and negative meta-emotion because these variables may contribute significantly to psychological suffering and maladaptive adjustment in MS. Finally, interventions that cultivate emotional acceptance, hope, resilience, and self-compassion may improve long-term adaptation and emotional well-being among women with chronic neurological disorders.

6. Limitations and Suggestions

One limitation of the present study was the relatively small sample size, which may have reduced the statistical power to detect subtle differences between the two intervention groups. In addition, participants were selected through convenience sampling from treatment centers in Tehran, limiting the generalizability of the findings to other geographical regions and populations. The study also relied on self-report instruments, which may be influenced by response bias and social desirability. Furthermore, the follow-up period was relatively short, and longer-term maintenance of treatment effects remains unclear.

Future studies should employ larger and more diverse samples and utilize randomized controlled trial designs to strengthen the generalizability and methodological rigor of the findings. Researchers are also encouraged to examine additional psychological variables such as resilience, self-compassion, illness perception, psychological flexibility, and quality of life as potential mediators or moderators of treatment outcomes. Longer follow-up periods and comparative investigations involving other third-wave and resilience-based therapies may further clarify the mechanisms through which psychological interventions improve emotional functioning in women with MS.

From a practical perspective, the findings suggest that mental health professionals working with MS patients should incorporate structured psychological interventions into rehabilitation and supportive care programs. Solution-focused approaches may be particularly useful for strengthening coping resources, hope, and future-oriented

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adaptation, whereas compassion-focused approaches may be especially beneficial for patients experiencing shame, self-criticism, and emotional vulnerability. Group-based psychological interventions may also provide accessible and cost-effective support within MS clinics and rehabilitation centers while simultaneously improving emotional adjustment and reducing existential distress.

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

Aboutalebi, H., Yazdchi, N., & Smkhani Akbarinejhad, H. (2022). Effectiveness of compassion-focused therapy on death anxiety and quality of life among women with multiple sclerosis. *Medical Science Journal of Islamic Azad University, Tehran Medical Branch*, *32*(1), 92-101. https://doi.org/10.52547/iau.32.1.92

Azizpour, A., Azmoudeh, M., Ayromlou, H., & Hoseini Nasab, S. D. (2025). The effectiveness of acceptance and commitment therapy and compassion-focused therapy on death anxiety and fear of falling in patients with multiple sclerosis: A quasi-experimental study [Research]. *Journal of Rafsanjan University of Medical Sciences*, *23*(8), 677-690. https://doi.org/10.61186/jrums.23.8.677

Boeschoten, R. E., Braamse, A. M. J., Beekman, A. T. F., Cuijpers, P., van Oppen, P., Dekker, J., & Uitdehaag, B. M. J. (2017). Prevalence of depression and anxiety in multiple sclerosis: A systematic review and meta-analysis. *Journal of the Neurological Sciences*, *372*, 331-341. https://doi.org/10.1016/j.jns.2016.11.067

de Shazer, S., Dolan, Y., Korman, H., Trepper, T., McCollum, E., & Berg, I. K. (2007). *More than Miracles: The State of the Art of Solution-Focused Brief Therapy*. Haworth Press.

Dennison, L., Moss-Morris, R., & Chalder, T. (2009). A review of psychological correlates of adjustment in women with multiple sclerosis. *Clinical psychology review*, *29*(2), 141-153. https://doi.org/10.1016/j.cpr.2008.12.001

Desborough, J., Brunoro, C., Parkinson, A., Chisholm, K., & Eljiz, K. (2020). It struck at the heart of who I thought I was: A meta-synthesis of the qualitative literature examining the experiences of people with multiple sclerosis. *Health Expectations*, *23*(5), 1007-1027. https://doi.org/10.1111/hex.13093

Dobson, R., & Giovannoni, G. (2019). Multiple sclerosis: A review. *European Journal of Neurology*, *26*(1), 27-40. https://doi.org/10.1111/ene.13819

Fereydoni, F., & Sabet, M. (2021). The effect of solution-focused brief psychotherapy on distress tolerance, decision-making styles and social adjustment in MS patients of Sari City. *Journal of Consulting Excellence and Psychotherapy*, *10*, 36-47.

Filippi, M., Bar-Or, A., Piehl, F., Preziosa, P., Solari, A., Vukusic, S., Rocca, M. A., & Ciccarelli, O. (2018). Multiple sclerosis. *Nature Reviews Disease Primers*, *4*, 43. https://doi.org/10.1038/s41572-018-0041-4

Ford, B. Q., Lam, P., John, O. P., & Mauss, I. B. (2018). The psychological health benefits of accepting negative emotions and thoughts: Laboratory, diary, and longitudinal evidence. *Journal of personality and social psychology*, *115*(6), 1075-1092. https://doi.org/10.1037/pspp0000157

Francalancia, J., Chiambretto, P., & Garegnani, M. (2021). Death anxiety and attitudes towards death in women with multiple sclerosis: An exploratory study. *Brain Sciences*, *11*(8), 964. https://doi.org/10.3390/brainsci11080964

Franklin, C., Zhang, A., Froerer, A., & Johnson, S. (2017). Solution focused brief therapy: A systematic review and meta-summary of process research. *Journal of marital and family therapy*, *43*(1), 16-30. https://doi.org/10.1111/jmft.12193

Gan, C. (2020). Solution-focused brief therapy with individuals with brain injury and their families. *NeuroRehabilitation*, *46*(2), 143-155. https://doi.org/10.3233/NRE-192967

Gilbert, P. (2009). Introducing compassion-focused therapy. *Advances in psychiatric treatment*, *15*(3), 199-208. https://doi.org/10.1192/apt.bp.107.005264

Gilbert, P. (2010). *Compassion Focused Therapy: Distinctive Features*. Routledge. https://doi.org/10.4324/9780203851197

Gilbert, P. (2014). The origins and nature of compassion focused therapy. *British Journal of Clinical Psychology*, *53*(1), 6-41. https://doi.org/10.1111/bjc.12043

Gross, J. J. (2015). Emotion regulation: Current status and future prospects. *Psychological Inquiry*, *26*(1), 1-26. https://doi.org/10.1080/1047840X.2014.940781

Hakimabadi, M. G., & Tajikesmaeili, A. (2021). Effectiveness of compassion-based therapy on reducing rumination, distress tolerance and sense of coherence in women with multiple sclerosis. *Journal of Research in Psychological Health*, *15*(2).

Hassami, F., Timouri, Z., Ghafourian, G., Razaei Zadeh, M., Kashfi, M., Abedi Noghandar, M., & Pourmohammad

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

Ghouchani, K. (2025). Comparison of mindfulness-based cognitive therapy and acceptance and commitment therapy on self-efficacy and quality of life in patients with multiple sclerosis. *Journal of Experimental and Cognitive Psychology*, *2*(1), 243-256. https://doi.org/https://www.quarterlyecp.com/index.php/ecp/article/view/184

Jellinger, K. A. (2024). Depression and anxiety in multiple sclerosis: Review of a fatal combination. *Journal of Neural Transmission*, *131*, 847-869. https://doi.org/10.1007/s00702-024-02792-0

Kim, J. S., & Franklin, C. (2015). Understanding emotional change in solution-focused brief therapy: Facilitating positive emotions. *Best Practices in Mental Health*, *11*(1), 25-41. https://doi.org/10.70256/167814cunsta

Kirby, J. N., Tellegen, C. L., & Steindl, S. R. (2017). A meta-analysis of compassion-based interventions: Current state of knowledge and future directions. *Behavior therapy*, *48*(6), 778-792. https://doi.org/10.1016/j.beth.2017.06.003

Mansouri Koryani, R. (2022). Effectiveness of compassion-focused acceptance and commitment therapy on psychological flexibility and psychological distress in women with multiple sclerosis. *Iranian Journal of Psychiatry and Clinical Psychology*, *28*(2), 222-235. https://doi.org/10.32598/ijpcp.28.2.3747.1

Marrie, R. A., Reingold, S., Cohen, J., Stuve, O., Trojano, M., Sorensen, P. S., Cutter, G., & Reider, N. (2015). The incidence and prevalence of psychiatric disorders in multiple sclerosis: A systematic review. *Multiple Sclerosis Journal*, *21*(3), 305-317. https://doi.org/10.1177/1352458514564487

Millard, L. (2023). The effectiveness of compassion focused therapy with clinical populations: A systematic review and meta-analysis. *Journal of affective disorders*, *326*, 168-192. https://doi.org/10.1016/j.jad.2023.01.010

Mitmansgruber, H., Beck, T. N., Hofer, S., & Schussler, G. (2009). When you don't like what you feel: Experiential avoidance, mindfulness and meta-emotion in emotion regulation. *Personality and individual differences*, *46*(4), 448-453. https://doi.org/10.1016/j.paid.2008.11.013

Mousavipour, S. P., & Bavi, S. (2024). Effectiveness of self-compassion therapy for distress tolerance and rumination in women with multiple sclerosis. *Journal of Health Reports and Technology*, *10*(3). https://doi.org/10.5812/jhrt-146666

Multiple Sclerosis International, F. (2023). *Atlas of MS: Number of people with MS*.

Naderipour, A. (2023). The effectiveness of short-term solution-oriented psychotherapy on pain perception and distress tolerance in female women with multiple sclerosis. *Rooyesh-e-Ravanshenasi Journal*, *12*(5), 75-84.

Najafi, E., Mousavi Pour, S., & Sajadi Nejad, M. A.-S. (2024). Comparing the Effectiveness of Meaning Therapy and Acceptance and Commitment Therapy on Resilience and Quality of Life in Patients with Multiple Sclerosis. *Journal of Rehabilitation Research in Nursing*, *10*(3), 103-114. http://ijrn.ir/article-1-764-fa.html

Neff, K. D. (2023). Self-compassion: Theory, method, research, and intervention. *Annual review of psychology*, *74*(1), 193-218. https://doi.org/10.1146/annurev-psych-032420-031047

Nery-Hurwit, M., Yun, J., & Ebbeck, V. (2018). Examining the roles of self-compassion and resilience on health-related quality of life for individuals with multiple sclerosis. *Disability and Health Journal*, *11*(2), 256-261. https://doi.org/10.1016/j.dhjo.2017.10.010

Pakenham, K. I., & Giovannetti, A. M. (2024). ACT resilience training in multiple sclerosis. In R. Coates (Ed.), *Innovations in Acceptance and Commitment Therapy (ACT) for Acquired Brain Injury* (pp. 6-22). Taylor & Francis Group. https://doi.org/10.4324/9781003193722-2

Shandiz, H. A., Boogar, I. R., & Talepasand, S. (2022). The effectiveness of solution-focused brief therapy on improving the quality of life in women with multiple sclerosis. *International Journal of Applied Behavioral Sciences*, *9*(3), 33-41.

Vermeulen-Oskam, E., Franklin, C., van't Hof, L. P. M., Stams, G. J. J. M., van Vugt, E. S., Assink, M., Veltman, E. J., Froerer, A. S., Staaks, J. P. C., & Zhang, A. (2024). The current evidence of solution-focused brief therapy: A meta-analysis of psychosocial outcomes and moderating factors. *Clinical psychology review*, *113*, 102512. https://doi.org/10.1016/j.cpr.2024.102512

Vidal, J., & Soldevilla, J. M. (2023). Effect of compassion-focused therapy on self-criticism and self-soothing: A meta-analysis. *British Journal of Clinical Psychology*, *62*(1), 70-81. https://doi.org/10.1111/bjc.12394

Walton, C., King, R., Rechtman, L., Kaye, W., Leray, E., Marrie, R. A., Robertson, N., La Rocca, N., Uitdehaag, B., van der Mei, I., Wallin, M., Helme, A., Angood Napier, C., Rijke, N., & Baneke, P. (2020). Rising prevalence of multiple sclerosis worldwide: Insights from the Atlas of MS, third edition. *Multiple Sclerosis Journal*, *26*(14), 1816-1821. https://doi.org/10.1177/1352458520970841

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E-ISSN: 3041-8615