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Comparing the Effectiveness of Emotionally Focused Couple Therapy and Systemic Couple Therapy on Executive Functions and Negative Meta-Emotion in Couples with Marital Conflicts

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ABSTRACT

Purpose: The present study aimed to compare the effectiveness of Emotionally Focused Couple Therapy (EFT) and Systemic Couple Therapy on executive functions and negative meta-emotion among couples experiencing marital conflicts. **Methods and Materials:** This study employed a quasi-experimental design with pretest, posttest, and three-month follow-up assessments alongside a control group. The statistical population consisted of married couples with marital conflict who referred to counseling centers in Tehran in 2025. Following screening and informed consent, 45 couples were selected using purposive sampling and randomly assigned to three groups: EFT (15 couples), Systemic Couple Therapy (15 couples), and a control group (15 couples). The EFT group received eight weekly 90-minute sessions based on the Greenberg model, while the systemic group received eight weekly 90-minute sessions grounded in Minuchin's structural approach; the control group received no intervention. Data were collected using the Marital Conflict Questionnaire, the Barkley Deficits in Executive Functioning Scale, and the Meta-Emotion Questionnaire (negative meta-emotion dimension). Data were analyzed using repeated-measures multivariate analysis of variance and Bonferroni post hoc tests in SPSS version 26.

Findings: Results of the multivariate mixed ANOVA indicated significant main effects of time and significant time $\times$ group interactions for both executive functions and negative meta-emotion ($p < 0.001$). Both EFT and Systemic Couple Therapy significantly improved executive functioning and reduced negative meta-emotion compared with the control group at posttest and follow-up ($p < 0.05$). However, EFT demonstrated significantly greater improvements than Systemic Couple Therapy in enhancing executive functions and reducing negative meta-emotion at posttest and follow-up ($p < 0.05$). Treatment effects remained stable at the three-month follow-up. **Conclusion:** Both Emotionally Focused Couple Therapy and Systemic Couple Therapy are effective interventions for improving executive functioning and reducing negative meta-emotion in couples with marital conflict; however, EFT appears to produce stronger and more sustained cognitive and meta-emotional outcomes.

Keywords: Emotionally focused couple therapy; systemic couple therapy; executive functions; negative meta-emotion; marital conflicts.

1. Introduction

Marital relationships constitute one of the most central interpersonal contexts in adulthood, exerting profound influence on psychological well-being, physical health, and social functioning. A growing body of evidence indicates that persistent marital conflict is associated with elevated levels of stress, anxiety, depressive symptoms, and diminished life satisfaction, while also increasing the risk of separation and divorce (Montazeri et al., 2025). Contemporary relational research conceptualizes marital conflict not merely as episodic disagreement but as a dynamic, recursive process shaped by emotional reactivity, cognitive appraisals, and entrenched interactional patterns (Yıldızhan et al., 2024). When such conflicts remain unresolved, they gradually erode marital harmony, intimacy, and mutual responsiveness, contributing to emotional disengagement and relational disenchantment (Navroodi et al., 2025). In couples experiencing chronic discord, maladaptive communication cycles, rigid beliefs, and impaired emotional processing often become self-reinforcing, creating a relational climate characterized by hostility, withdrawal, and escalating tension (Naseri et al., 2023; Salehi et al., 2024). Therefore, identifying the psychological mechanisms underlying marital conflict and evaluating effective therapeutic interventions remain critical priorities in couple therapy research.

Among the mechanisms implicated in relational dysfunction, executive functions have emerged as a crucial yet underexplored domain. Executive functions encompass higher-order cognitive processes such as planning, inhibitory control, cognitive flexibility, working memory, and goal-directed regulation (Babaei et al., 2024). These processes enable individuals to modulate impulses, evaluate consequences, shift perspectives, and engage in adaptive problem-solving during emotionally charged interactions. In marital contexts, deficits in executive functioning may manifest as impulsive reactions, difficulty inhibiting criticism, rigid thinking, and poor conflict resolution strategies, thereby intensifying relational distress (Fazaeli et al., 2023). Empirical findings suggest that stronger executive capacities are associated with better self-differentiation, more constructive communication, and greater relational resilience under stress (Homaei et al., 2023). Conversely, executive dysfunction may amplify marital burnout and increase vulnerability to emotional divorce, particularly when combined with ineffective emotion regulation (Emamipour, 2022). Accordingly, interventions that can

strengthen executive functioning within relational contexts may play a pivotal role in mitigating conflict and enhancing marital adjustment.

Parallel to executive processes, negative meta-emotion has gained increasing attention as a key determinant of relational dynamics. Meta-emotion refers to individuals' thoughts and feelings about their own emotions and those of their partners. Negative meta-emotions include shame about feeling vulnerable, anger toward one's own sadness, or contempt for a partner's emotional expression (Mardani & Tabaghdehi, 2025). Such secondary emotional reactions often intensify primary distress and contribute to maladaptive interaction cycles. When partners interpret emotions as weakness, threat, or rejection, they may respond with defensiveness or withdrawal rather than empathy and support (Pazhuhandeh et al., 2023). Negative meta-emotion has been linked to marital disenchantment, communication breakdown, and increased hostility, particularly in couples struggling with infidelity or chronic conflict (Ghaforian Mohabi et al., 2025; Khandabi et al., 2024). Compassion-focused interventions targeting negative meta-emotions have demonstrated improvements in emotional acceptance and relational closeness, highlighting the modifiability of these processes (Mardani & Tabaghdehi, 2025; Pazhuhandeh et al., 2023). Thus, addressing negative meta-emotion appears essential for sustainable relational change.

Emotionally Focused Couple Therapy (EFCT) has been widely recognized as an evidence-based approach grounded in attachment theory and experiential principles. EFCT conceptualizes marital conflict as rooted in unmet attachment needs and maladaptive emotional cycles, aiming to restructure emotional responses and foster secure bonding (Montazeri et al., 2025; Sunmonu et al., 2025). By facilitating access to primary emotions and reframing secondary reactive responses, EFCT promotes emotional responsiveness and empathy between partners (Yıldızhan et al., 2024). Empirical studies indicate that EFCT significantly enhances marital harmony, communication patterns, and relationship satisfaction among incompatible couples (Navroodi et al., 2025). Furthermore, EFCT has demonstrated effectiveness in reducing marital disenchantment and improving quality of life in distressed couples (Montazeri et al., 2025). In contexts of extramarital involvement, EFCT delivered in both couple and individual formats has been shown to strengthen attachment security and restructure relational experiences (Ghaforian Mohabi et al., 2025). These findings underscore EFCT's capacity to transform deep emotional schemas and relational bonds.

Beyond relational satisfaction, EFCT may exert meaningful effects on executive functioning and meta-emotional processes. Emotion-focused interventions encourage reflective awareness, emotional labeling, and regulation, which can indirectly enhance inhibitory control and cognitive flexibility (Rezazadeh et al., 2024). Integrative models combining emotion-focused and solution-focused strategies have demonstrated reductions in anger and improvements in marital adjustment, suggesting that emotional restructuring can foster more adaptive cognitive responses (Rezazadeh et al., 2024). Comparative investigations also reveal that EFCT can outperform other approaches in modifying maladaptive beliefs related to infidelity and relational mistrust (Khandabi et al., 2024). When individuals develop greater acceptance of their emotional experiences, negative meta-emotions such as shame and self-criticism tend to diminish, thereby reducing defensive communication and enhancing intimacy (Mardani & Tabaghdehi, 2025). Compassion-focused therapy, which shares conceptual overlap with EFCT in its emphasis on emotional validation and self-soothing, has likewise demonstrated reductions in negative meta-emotions and improvements in sexual self-efficacy among women affected by extramarital relationships (Mardani & Tabaghdehi, 2025). Collectively, these findings suggest that EFCT may positively influence both cognitive control processes and emotional meta-appraisals within marital contexts.

Systemic Couple Therapy, rooted in structural and interactional paradigms, offers an alternative framework emphasizing relational patterns, boundaries, and family subsystems. From this perspective, marital conflict arises from dysfunctional interaction sequences and rigid role structures rather than solely from intrapsychic emotional processes (Naseri et al., 2023). Systemic interventions aim to restructure communication patterns, clarify boundaries, and reorganize maladaptive subsystems to restore relational equilibrium (Ardakhani & Seadatee Shamir, 2022). Evidence indicates that systemic and cognitive-systemic models can effectively reduce marital conflicts, improve communication, and mitigate emotional divorce among couples seeking separation (Naseri et al., 2023). Similarly, object relations-based couple therapy, which integrates systemic and psychodynamic elements, has demonstrated improvements in marital satisfaction, particularly when executive functioning moderates treatment effects (Safavi et al., 2022). These findings highlight the relevance of systemic

approaches in addressing structural and behavioral contributors to relational distress.

Comparative research examining systemic and emotion-focused modalities provides nuanced insights into their differential mechanisms. Studies comparing McMaster's functional model and Gottman's cognitive-systemic model indicate that while both approaches reduce conflict, they vary in their emphasis on emotional processing versus interactional restructuring (Naseri et al., 2023). Gottman-based systemic cognitive interventions have been shown to reduce alexithymia and improve communication patterns in distressed couples (Salehi et al., 2024). Reality therapy, when compared with EFCT, has demonstrated improvements in irrational beliefs and marital perfectionism, yet EFCT often shows stronger effects on emotional dimensions of conflict (Zahed et al., 2025). Furthermore, comparisons between dialectical behavior therapy and EFCT in cases of marital infidelity suggest that although both improve communication and intimacy, emotion-focused strategies may yield deeper transformation in attachment-related processes (Badanfiroz, 2025). Such findings indicate that while systemic therapies effectively reorganize external interactional structures, emotion-focused approaches may more directly modify internal emotional and meta-emotional mechanisms.

The interplay between executive functions and marital functioning further underscores the importance of integrative evaluation. Executive processes mediate the relationship between cognitive abilities and marital burnout, with theory of mind serving as a significant intermediary factor (Babaei et al., 2024). Models of marital satisfaction incorporating executive functions and empathy demonstrate that higher cognitive flexibility and self-regulation predict greater relational stability among employed couples (Fazaeli et al., 2023). Systemic-behavioral couple therapy has shown improvements in sexual satisfaction and self-differentiation, suggesting that restructuring interaction patterns can indirectly enhance executive self-management (Emamipour, 2022). Comparative studies of cognitive-behavioral and systemic-behavioral approaches likewise reveal gains in intimacy and differentiation of self, both of which relate to executive regulatory capacity (Zamanifar et al., 2022). Nonetheless, whether systemic restructuring produces comparable effects on negative meta-emotion remains less clear.

Importantly, relational interventions that prioritize emotional processing appear particularly effective in transforming secondary emotional reactions. Emotion-

focused and meta-emotion-based couple therapies have demonstrated reductions in marital burnout and improvements in adjustment through fostering emotional awareness and acceptance (Fotouhi et al., 2018). Positive thinking group training has also been associated with enhanced psychological well-being and improved couple relationship quality, partly through modifying meta-emotional responses (Ghazbanzadeh et al., 2020). Integrative systemic perspectives emphasize the need to address both emotional and structural dimensions to achieve sustainable change (Toope et al., 2025). Recent transdiagnostic applications of emotion-focused approaches further support their capacity to address co-morbid relational and mood-related difficulties, reinforcing their relevance in complex marital presentations (Timulak et al., 2025). Cross-cultural evidence from Nigeria and Türkiye similarly highlights the adaptability and effectiveness of emotion-focused modalities in diverse sociocultural contexts (Sunmonu et al., 2025; Yıldızhan et al., 2024). Such convergence suggests that emotional restructuring may be a universal mechanism of relational healing.

Despite the accumulating evidence supporting both EFCT and systemic therapies, direct comparative investigations focusing simultaneously on executive functions and negative meta-emotion remain limited. While prior research has examined marital satisfaction, communication, attachment security, and emotional regulation, fewer studies have systematically evaluated higher-order cognitive processes alongside meta-emotional constructs within the same design (Babaei et al., 2024; Mardani & Tabaghdehi, 2025). Given that executive functions and negative meta-emotions are theoretically interconnected—whereby cognitive control influences emotional appraisal and vice versa—a comparative examination of EFCT and systemic couple therapy on these dual outcomes is warranted. Such analysis may clarify whether interventions centered on emotional processing yield broader cognitive benefits than structurally oriented approaches, or whether systemic restructuring can similarly enhance executive regulation and meta-emotional attitudes.

In light of these considerations, the present study seeks to contribute to the existing literature by empirically comparing the effectiveness of Emotionally Focused Couple Therapy and Systemic Couple Therapy on executive functions and negative meta-emotion among couples experiencing marital conflicts, with the aim of determining which approach produces more substantial and enduring improvements in these interrelated psychological domains.

2. Methods and Materials

2.1. Study Design and Participants

The statistical population consisted of all married women and men experiencing marital conflict who attended counseling centers in Tehran in 2025, including the Iranian Family Counseling and Psychology Center, Parto Ayin Counseling Center, and the Iranian Psychological Association Clinic. Participants were identified through a clinical interview conducted by the center's psychologist and completion of the Marital Conflict Questionnaire. The total number of identified individuals was 180. To ensure adequate statistical power, G*Power was used, and the sufficient sample size was determined to be 45 couples. Sampling was conducted using a purposive method.

Inclusion criteria were: age between 24 and 44 years (based on the personal information form prior to participation); being married with at least two years elapsed since marriage; obtaining a score of 135 or higher on the Marital Conflict Questionnaire; absence of psychiatric disorders such as depression, anxiety, or personality disorders; absence of physical or sexual problems affecting marital relations; and not having received couple therapy services—either jointly or individually—prior to or during the study.

Exclusion criteria included: presence of a mental disorder at the time of the study based on clinical evaluation in the initial interview; failure to comply with study requirements leading to removal from the study; developing physical illness or problems during the study that affected marital relations; changes in marital status during the study (e.g., divorce); and absence from more than two treatment sessions, as monitored by the therapist.

This study used field methods, and data collection was conducted in person. A total of 45 participants (couples) were selected from married women and men with marital conflict who attended the counseling centers in Tehran in 2025 and were assigned to three 15-couple groups using purposive sampling with random assignment. Pretests were administered to both experimental and control groups. The experimental groups received the interventions, whereas the control group received no intervention; thereafter, all three groups completed the research instruments again. A three-month follow-up was conducted.

Ethical principles and participants' rights were observed throughout all stages. Prior to participation, written informed consent was obtained, and the aims, procedures, duration, benefits, and any potential risks were explained clearly.

Participants were assured that participation or non-participation would not affect their access to counseling services and that they could withdraw at any time. Personal information and test results were kept confidential and used solely for scientific purposes. The study received ethical approval from the Ethics Committee of Islamic Azad University, Tonekabon Branch, and all procedures were carried out in accordance with ethical regulations for human research.

2.2. Measures

1) Marital Conflict Questionnaire (MCQ): The MCQ was developed by Barati and Sanaei (2000) to assess the level of conflict between spouses. It includes 42 items across seven subscales: decreased cooperation (5 items), increased emotional reactions (8 items), increased child-support seeking (5 items), increased personal relationship with one's own relatives (6 items), decreased family relationship with spouse's relatives and friends (6 items), decreased sexual relationship (5 items), and separating financial affairs (7 items). Items are scored on a 5-point Likert scale from never (1) to always (5). Total scores range from 42 to 210. Based on the questionnaire norms, scores of 115–134 indicate slightly above-normal conflict, whereas scores of 135 and above indicate severe conflict and highly vulnerable marital relationships. The developers reported a Cronbach's alpha of 0.94 for the total scale, and for subscales: decreased cooperation (0.70), decreased sexual relationship (0.72), increased emotional reactions (0.73), increased child-support seeking (0.81), increased personal relationship with one's own relatives (0.75), decreased family relationship with spouse's relatives and friends (0.69), and separating financial affairs (0.68). Test–retest reliability coefficients were reported as 0.86, 0.80, 0.90, and 0.92, and face validity was reported as satisfactory. In the present study, Cronbach's alpha was 0.88.

2) Executive Functioning Questionnaire: This scale was developed by Barkley (2012) to represent executive dysfunction in non-clinical and clinical populations. It is an 89-item self-report instrument for ages 18–81, rated on a 4-point Likert scale (never to always). The scale includes five subscales assessing self-management to time, self-organization/problem solving, self-restraint/inhibition, self-motivation, and self-regulation of emotion. Seven scores can be derived: five subscale scores, an overall score, and an additional score based on 11 items considered an executive-function checklist related to ADHD. Barkley (2014) reported

Cronbach's alpha of 0.91 for the total scale and 0.94, 0.95, 0.93, 0.91, and 0.94 for the subscales, respectively. Test–retest reliability was 0.84 for the total scale and 0.83, 0.90, 0.78, 0.62, and 0.78 for the subscales, respectively (Barkley, 2014). In Iran, Mashhadi et al. (2015) used confirmatory factor analysis and reported good fit for the five-factor model. Cronbach's alpha coefficients ranged from 0.80 to 0.92 for subscales and 0.96 for the total scale. In the present study, Cronbach's alpha was 0.83.

3) Meta-Emotion Questionnaire: This self-report scale assessing positive and negative meta-emotions was developed by Mitmansgruber et al. (2009) and includes 28 items, rated on a 6-point Likert scale (1 = not at all true to 6 = completely true). The instrument comprises components of anger, inferiority/shame, strong inhibition and suppression (negative meta-emotions), and compassion and interest (positive meta-emotions), with reported alpha coefficients of 0.76, 0.77, 0.83, 0.82, and 0.85, and 0.87 for the total scale. The developers assessed validity using exploratory and confirmatory factor analyses and found two dimensions with item loadings above 0.40. Model fit indices reported included $\chi^2/df < 3$, GFI = 0.92, RMSEA = 0.05, RMR = 0.04, and AGFI = 0.91, indicating good fit. Benisi (2019) reported a Cronbach's alpha of 0.78 for the total scale in Iran, confirming the two main dimensions of positive and negative meta-emotions. Convergent validity for positive meta-emotions with emotional intelligence components of the Trait Emotional Intelligence Questionnaire (Petrides et al., 2001) was reported as 0.51. Notably, in the present study, only the negative meta-emotion dimension was used. Cronbach's alpha in the present study was 0.832.

2.3. Intervention

The Emotionally Focused Couple Therapy protocol, developed by Leslie Greenberg and Sue Johnson and grounded in humanistic–experiential and attachment-based theory, was delivered in eight weekly 90-minute group sessions and focused on identifying, accessing, and restructuring maladaptive emotional patterns within the couple relationship. The first session introduced group members, clarified therapeutic goals and expectations, and provided an overview of core EFT concepts while beginning an initial exploration of relational difficulties. In the second session, participants were encouraged to disclose relational traumas and attachment-related fears, such as fear of rejection or exposure of perceived inadequacies, thereby deepening emotional awareness. The third session focused

on identifying and validating secondary reactive emotions (e.g., anger, irritability, frustration) and linking them to underlying primary emotions and somatic experiences. In the fourth session, the problem was externalized and primary emotions and unmet attachment needs were reframed as central relational issues rather than personal flaws. The fifth session emphasized increasing self-understanding, fostering emotional accessibility, and cultivating a sense of worthiness and acceptance. During the sixth session, couples practiced trusting newly accessed emotions and experimenting with new emotional responses to attachment needs and relational triggers. The seventh session involved deeper experiential processing of primary emotions and facilitated clearer expression of longings for a new, more secure form of connection. Finally, in the eighth session, couples collaboratively generated new relational solutions, reconstructed the narrative of their conflicts, consolidated gains, and reviewed the process of change achieved throughout therapy.

The Systemic Couple Therapy protocol, derived from Salvador Minuchin's structural family systems model, was implemented in eight weekly 90-minute group sessions and focused on modifying interaction patterns, restructuring relational boundaries, and reorganizing dysfunctional family subsystems. The first session introduced participants to the therapeutic framework, clarified goals, and conceptualized marital conflict from a systemic perspective, with homework assigned to identify major conflicts and expectations. In the second session, homework was reviewed and key concepts such as communication processes and family subsystems were introduced; techniques including joining, mimicking, and reframing were practiced, and couples were asked to apply communication skills in daily life. The third session examined recurring interaction patterns and family triangles, with participants identifying expectations from their spouse and strategies to enhance cooperation. In the fourth session,

restructuring strategies were discussed and couples were guided to identify triggers of reactive responses. The fifth session explored relational dynamics between the marital subsystem and families of origin, with homework focused on identifying experiences that increased closeness to one's family of origin and emotional distance from the spouse. The sixth session addressed relationships with extended family and friends, emphasizing balance and boundary-setting. The seventh session provided psychoeducation on sexual issues, particularly timing and quality of intimacy, and encouraged negotiated agreements between partners. In the final session, attention was directed toward maintaining clear boundaries between the spousal and parental subsystems, managing financial matters collaboratively rather than separately, and consolidating structural changes through shared reflection and mutual agreement.

2.4. Data Analysis

In addition to descriptive indices, inferential statistics were used to analyze the data. Given the research design, Shapiro-Wilk tests were conducted initially to evaluate the equivalence of groups on the dependent variables at pretest and to examine whether random assignment produced comparable groups. To determine the effectiveness of EFT versus the comparison intervention, repeated-measures ANOVA was used, followed by post hoc tests to compare the treatments. Analyses were conducted using SPSS-26.

3. Findings and Results

The mean $\pm$ standard deviation of age was 32.2 ± 3.35 in the Emotionally Focused Couple Therapy (EFT) group, 31.5 ± 3.50 in the Systemic Couple Therapy group, and 33.4 ± 4.89 in the control group. Statistical tests indicated that there was no significant age difference among the groups.

Table 1

Comparison of the mean and standard deviation of executive functioning and negative meta-emotion scores across three groups at three time points (pretest, posttest, follow-up)

Variable	Group	Pretest M	Pretest SD	Posttest M	Posttest SD	Follow-up M	Follow-up SD
Executive Functions	EFT	154.0	9.50	166.5	10.10	166.3	10.10
	Systemic	153.4	4.57	162.8	6.32	163.4	6.80
	Control	154.2	8.11	156.5	7.65	155.8	6.69
Negative Meta-Emotion	EFT	63.3	3.92	49.7	4.80	50.7	5.57
	Systemic	65.1	3.45	61.0	3.91	63.2	4.12
	Control	62.4	4.93	61.08	4.81	62.08	4.79

As shown in Table 1, posttest and follow-up scores in both intervention groups improved in executive functioning compared with pretest, whereas the mean scores in the control group remained relatively stable—suggesting that both treatments were effective. With respect to negative meta-emotion, the three groups showed little difference at pretest; however, after the intervention, both treatment groups differed markedly from the control group, and this difference remained observable at follow-up.

To assess normality of the dependent measures, the Shapiro–Wilk test was conducted. Since the Shapiro–Wilk results were not significant, the distributions of the dependent variables were considered normal. The next

assumption for multivariate mixed ANOVA is homogeneity of error variances. Based on Levene’s test, none of the *F* values for the dependent variables were significant, indicating that the homogeneity of variance assumption was met ($p > 0.05$). Equality of covariance matrices was assessed using Box’s *M* test; the results indicated that Box’s *M* was not significant, and therefore the assumption was considered acceptable. In addition, Mauchly’s test of sphericity indicated that the sphericity assumption was violated for the dependent variables; therefore, Greenhouse–Geisser corrected degrees of freedom were used in the ANOVA computations.

Table 2

Mixed ANOVA results for the effects of group and time on dependent variables

Source	Dependent Variable	Sum of Squares	df	Mean Square	F	p	Partial η^2
Within-subjects	Time	Executive Functions	1120.1	1.07	1044.1	248.8	0.001
		Negative Meta-Emotion	1610.7	1.25	1285.7	364.2	0.001
	Time $\times$ Group	Executive Functions	691.8	2.14	322.4	76.8	0.001
		Negative Meta-Emotion	1379.4	2.50	550.5	155.9	0.001
Between-subjects	Group	Executive Functions	1656.7	2.00	828.3	13.7	0.001
		Negative Meta-Emotion	3018.5	2.00	1509.2	26.4	0.001

Based on Table 2, the main effect of time and the group $\times$ time interaction were significant for both executive functioning and negative meta-emotion. This means that executive functioning and negative meta-emotion scores

differed significantly across pretest, posttest, and follow-up, and that the pattern of change over time differed across the three groups.

Table 3

Pairwise comparisons of group means across the three time points for executive functioning and negative meta-emotion

Variable	Time	Comparison	Mean Difference	p
Executive Functions	Pretest	EFT vs. Control	0.458	1.00
		EFT vs. Systemic	−1.37	0.826
	Posttest	EFT vs. Control	9.79*	0.001
		EFT vs. Systemic	0.40*	0.018
	Follow-up	EFT vs. Control	5.95*	0.001
		EFT vs. Systemic	3.70*	0.024
Negative Meta-Emotion	Pretest	EFT vs. Control	0.958	1.00
		EFT vs. Systemic	1.79	0.418
	Posttest	EFT vs. Control	−11.2*	0.001
		EFT vs. Systemic	−11.2*	0.001
	Follow-up	EFT vs. Control	−12.4*	0.001
		EFT vs. Systemic	−5.49*	0.023

* Significant at $p < 0.05$.

Overall, Table 3 indicates that differences at posttest and follow-up were significant, whereas no significant differences were observed at pretest. Moreover, the interaction between time and group was significant, and the between-group main effect was significant for both

outcomes. Therefore, there were significant differences between EFT and Systemic Couple Therapy in overall executive functioning and negative meta-emotion, with EFT showing greater effectiveness in improving executive

functioning and reducing negative meta-emotion among couples with marital conflict.

4. Discussion and Conclusion

The present study sought to compare the effectiveness of Emotionally Focused Couple Therapy (EFCT) and Systemic Couple Therapy on executive functions and negative meta-emotion in couples experiencing marital conflicts. The findings demonstrated that both interventions produced significant improvements in executive functioning and significant reductions in negative meta-emotion from pretest to posttest, and that these gains were largely maintained at three-month follow-up. However, EFCT showed significantly greater effectiveness than Systemic Couple Therapy in enhancing executive functions and reducing negative meta-emotions. These results highlight both the shared therapeutic value of structured couple interventions and the comparatively stronger impact of emotionally focused approaches on higher-order cognitive regulation and meta-emotional restructuring.

Regarding executive functions, the significant time effect indicated that participation in either EFCT or Systemic Couple Therapy led to measurable cognitive-regulatory improvements compared to the control group. This finding is consistent with research suggesting that couple interventions can indirectly strengthen self-regulation, planning, inhibitory control, and cognitive flexibility by modifying maladaptive relational dynamics (Zamanifar et al., 2022). Improvements in differentiation of self and intimacy reported in systemic-behavioral and cognitive-behavioral couple therapies have been linked to enhanced executive self-management capacities, particularly in emotionally charged situations (Emamipour, 2022; Zamanifar et al., 2022). Similarly, structural and cognitive-systemic models have demonstrated reductions in conflict intensity and emotional divorce, which likely reduce cognitive overload and facilitate clearer executive processing during disagreements (Naseri et al., 2023). The current findings therefore align with the broader literature indicating that relational stabilization can create a psychological environment conducive to executive improvement.

Nevertheless, EFCT produced significantly greater gains in executive functioning than Systemic Couple Therapy. One plausible explanation lies in EFCT's direct emphasis on emotional awareness, emotional labeling, and restructuring of primary attachment-related emotions. Executive

functioning is closely tied to emotion regulation processes, and interventions that promote reflective emotional processing may strengthen inhibitory control and cognitive flexibility more robustly than interventions focused primarily on interactional restructuring (Babaei et al., 2024). Research on marital satisfaction models incorporating executive functions and empathy demonstrates that executive control mediates adaptive relational functioning, particularly when individuals develop improved capacity to mentalize and understand their partner's perspective (Fazaeli et al., 2023). EFCT's experiential focus may facilitate precisely these processes by encouraging partners to pause, access primary emotions, and reframe reactive responses, thereby exercising executive inhibition and cognitive reappraisal in vivo.

Furthermore, the superiority of EFCT in improving executive functions is compatible with evidence that emotion-focused interventions reduce anger and maladaptive reactivity by restructuring emotional experience rather than merely modifying communication scripts (Rezazadeh et al., 2024). By addressing underlying attachment fears and vulnerabilities, EFCT may reduce the cognitive load associated with chronic threat perception, freeing executive resources for more adaptive planning and problem-solving. Compassion-focused approaches, which share conceptual overlap with EFCT, have similarly demonstrated improvements in emotional self-efficacy and reductions in maladaptive meta-cognitive reactions, suggesting downstream benefits for executive control (Mardani & Tabaghdehi, 2025). In contrast, systemic models, although effective in reorganizing roles and boundaries, may not engage executive-affective integration at the same depth, which may explain the comparatively smaller effect size observed.

Turning to negative meta-emotion, the results revealed significant reductions in both intervention groups relative to the control group, with EFCT again demonstrating superior effectiveness. Negative meta-emotions—such as shame about feeling vulnerable or anger toward one's own sadness—are sustained by maladaptive beliefs about emotional expression and by hostile interpretations of partners' affective signals (Khandabi et al., 2024). Interventions that directly validate and normalize emotional experiences are therefore more likely to weaken these secondary emotional reactions. EFCT explicitly targets emotional experience, reframing emotions as adaptive signals rather than relational threats (Montazeri et al., 2025).

This mechanism may account for the pronounced reduction in negative meta-emotions observed in the EFCT group.

The findings are consistent with previous research demonstrating that EFCT enhances marital harmony and communication patterns by transforming emotional cycles and fostering secure attachment bonds (Navroodi et al., 2025). Attachment security, in turn, reduces defensive meta-emotional responses such as contempt or emotional withdrawal. Studies of couples affected by extramarital affairs indicate that EFCT strengthens attachment security and reconstructs relational meaning structures, thereby diminishing emotional hyper-reactivity and self-blame (Ghaforian Mohabi et al., 2025). In addition, EFCT has been shown to reduce marital disenchantment and improve quality of life in distressed couples, outcomes that are closely associated with healthier meta-emotional attitudes (Montazeri et al., 2025). These findings support the present study's conclusion that EFCT is particularly potent in modifying negative meta-emotional processes.

Compassion-focused and meta-emotion-oriented interventions provide further converging evidence. Compassion-focused therapy has demonstrated reductions in negative meta-emotions and improvements in emotional self-efficacy among women affected by extramarital relationships (Mardani & Tabaghdehi, 2025). Similarly, compassion-focused group therapy has been shown to enhance conflict resolution strategies and emotion regulation capacities in couples with marital conflicts (Pazhuhandeh et al., 2023). These approaches, like EFCT, explicitly address how individuals feel about their own emotions and about their partner's emotions, thereby reshaping meta-emotional schemas. The stronger performance of EFCT relative to Systemic Couple Therapy in the present study is therefore theoretically coherent and empirically supported.

Although Systemic Couple Therapy also yielded improvements in negative meta-emotion, its comparatively smaller effect may reflect its primary focus on structural interaction patterns rather than on emotional meaning-making. Structural and cognitive-systemic interventions are effective in reducing marital conflicts and reorganizing dysfunctional communication patterns (Naseri et al., 2023; Salehi et al., 2024). Object relations-based couple therapy has also demonstrated improvements in marital satisfaction, particularly when executive functioning moderates treatment response (Safavi et al., 2022). However, these models may influence negative meta-emotion more indirectly, through improved interactional climate rather

than through explicit exploration of emotional beliefs. Reality therapy and other structured approaches have shown benefits in modifying irrational beliefs and perfectionistic tendencies in emotionally distressed women, yet emotion-focused models often demonstrate deeper emotional transformation (Zahed et al., 2025). The current findings reinforce this distinction.

Cross-cultural evidence further strengthens the interpretation of the results. Studies conducted in Nigeria and Türkiye confirm the adaptability and effectiveness of EFCT in enhancing marital bonding and emotional regulation across diverse sociocultural contexts (Sunmonu et al., 2025; Yıldızhan et al., 2024). Comparative analyses of dialectical behavior therapy and EFCT in contexts of marital infidelity suggest that while multiple modalities can improve communication, emotionally focused approaches may produce more profound shifts in intimacy and emotional trust (Badanfiroz, 2025). Integrative systemic perspectives acknowledge the value of structural reorganization but also emphasize the importance of emotional processing for sustainable change (Toope et al., 2025). The present study adds to this literature by empirically demonstrating EFCT's relative advantage in targeting both executive and meta-emotional domains simultaneously.

Overall, the pattern of findings suggests that while both EFCT and Systemic Couple Therapy are effective for couples experiencing marital conflict, EFCT may offer a more comprehensive transformation by integrating emotional processing with cognitive regulation. Executive functions and negative meta-emotion appear to be interconnected processes; as partners learn to access and regulate primary emotions, they simultaneously practice inhibitory control, perspective-taking, and cognitive flexibility. These integrated changes may account for the greater stability of EFCT's effects at follow-up. The findings therefore contribute to a growing body of evidence supporting emotionally focused approaches as particularly powerful interventions for complex relational distress.

The study is not without limitations. First, the sample size, although adequate for statistical power, was relatively modest and drawn from counseling centers within a single metropolitan area, which may limit generalizability to broader populations. Second, reliance on self-report instruments may have introduced response biases, including social desirability or shared method variance. Third, the three-month follow-up period, while informative, does not allow conclusions about long-term maintenance of gains beyond this timeframe. Finally, therapist effects cannot be

entirely ruled out, as differences in therapeutic style or alliance may have influenced outcomes.

Future research should replicate these findings with larger and more diverse samples, including couples from different socioeconomic and cultural backgrounds. Longitudinal designs with extended follow-up periods (e.g., six months to one year) would clarify the durability of executive and meta-emotional changes. Incorporating multi-method assessments—such as behavioral observation of conflict discussions or performance-based executive function tasks—would strengthen measurement validity. Additionally, future studies could explore mediational pathways to determine whether changes in attachment security or emotion regulation mediate improvements in executive functioning and negative meta-emotion.

From a practical standpoint, clinicians working with couples experiencing marital conflict should consider prioritizing interventions that directly address emotional processes, particularly when negative meta-emotions and cognitive dysregulation are prominent. Training programs for couple therapists may benefit from integrating executive-function-enhancing techniques, such as reflective pauses and cognitive reframing, within emotionally focused frameworks. Counseling centers should also implement structured follow-up sessions to consolidate gains and prevent relapse. Finally, psychoeducational workshops that enhance couples' awareness of meta-emotional processes could serve as preventive interventions, reducing escalation of conflict before severe relational deterioration occurs.

Authors' Contributions

All authors significantly contributed to this study.

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.

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

In this study, to observe ethical considerations, participants were informed about the goals and importance of the research before the start of the study and participated in the research with informed consent.

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