

Effectiveness of Structural Family Therapy on Emotional Reactivity and Relationship Obsessive-Compulsive Symptoms in Women with Experience of Spousal Infidelity

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ABSTRACT

The present study aimed to determine the effectiveness of structural family therapy in reducing emotional reactivity and relationship obsessive-compulsive symptoms among women with experience of spousal infidelity. This applied quasi-experimental study employed a pretest-posttest design with an experimental group and a wait-list control group. The statistical population consisted of married women who had experienced marital infidelity by their husbands and had sought counseling and psychological services at Nirvana Counseling and Psychological Services Center in Shiraz, Iran, in 2024. Using convenience sampling, 34 eligible women were recruited and randomly assigned to the structural family therapy group ($n = 17$) or control group ($n = 17$). The experimental group participated in nine weekly structural family therapy sessions, each lasting approximately 75 minutes, while the control group received no intervention during the study period. Data were collected using the Emotion Reactivity Scale and the Relationship Obsessive-Compulsive Inventory. Data were analyzed using analysis of covariance in IBM SPSS Statistics version 26, with pretest scores entered as covariates. The significance level was set at $p < .05$. After controlling for pretest scores, structural family therapy produced a statistically significant reduction in emotional reactivity compared with the control group, $F(1, 31) = 13.499$, $p = .001$, partial $\eta^2 = .303$, with an observed statistical power of .945. The intervention also significantly reduced relationship obsessive-compulsive symptoms, $F(1, 31) = 12.162$, $p = .009$, partial $\eta^2 = .282$, with an observed power of .922. Thus, group membership accounted for 30.3% of the adjusted variance in posttest emotional reactivity and 28.2% of the adjusted variance in posttest relationship obsessive-compulsive symptoms. Structural family therapy was effective in reducing both emotional reactivity and relationship obsessive-compulsive symptoms among women who had experienced spousal infidelity. By restructuring dysfunctional interaction patterns, clarifying family boundaries, and strengthening the marital subsystem, this approach may help reduce affective instability and obsessive relationship-centered concerns in women coping with marital betrayal.

Key words: Structural family therapy; Emotional reactivity; Relationship obsessive-compulsive symptoms; Marital infidelity; Women

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Introduction

Marital relationships are among the most psychologically significant interpersonal contexts in adulthood because they provide emotional security, intimacy, companionship, identity validation, and a framework for

mutual support. When this relational system is disrupted by infidelity, however, the consequences can extend well beyond dissatisfaction with the marriage and may affect emotional regulation, cognitive processing, trust, attachment security, and day-to-day relational functioning. Infidelity is commonly understood as a violation of the implicit or explicit expectations of exclusivity within a committed romantic relationship and is associated with considerable psychological distress for both partners, particularly for the injured partner. Research has indicated that marital infidelity may produce intense feelings of betrayal, anger, grief, shame, anxiety, confusion, and loss of relational security, while also destabilizing assumptions about the partner and the continuity of the relationship (1). The impact of such experiences is not limited to the immediate discovery of betrayal; rather, reactions may persist through recurrent doubts, hypervigilance, intrusive thoughts, emotional instability, and uncertainty about whether the relationship can be trusted or repaired. From an attachment-informed perspective, infidelity has therefore been conceptualized as a potentially traumatic relational event that can create enduring aftershocks in the injured partner's emotional and interpersonal functioning (2).

The psychological consequences of infidelity are particularly salient because the injured partner is often required to process two contradictory realities simultaneously: the desire to preserve an emotionally important relationship and the recognition that a major relational boundary has been violated. This tension may generate sustained relational uncertainty, including doubts regarding the partner's commitment, the meaning of the betrayal, the future of the relationship, and the injured partner's own relational worth. Recent work has emphasized that relational uncertainty following marital infidelity can become an organizing feature of the post-betrayal experience, affecting communication, emotional responses, and interpretation of subsequent partner behavior (3). Such uncertainty may be intensified when the injured partner continuously searches for explanations, reassurance, or evidence concerning the spouse's feelings and intentions. Even when the couple remains together, recovery may be difficult because the betrayal can alter established patterns of closeness, power, dependency, and trust. Conversely, when relationships dissolve following infidelity, injured partners may experience complicated processes of recovery, identity reorganization, and emotional detachment, demonstrating that the psychological effects of infidelity often extend beyond the relational event itself (4).

One important psychological response that may emerge or intensify in the context of marital betrayal is heightened emotional reactivity. Emotional reactivity refers to the tendency to respond to emotionally salient stimuli with relatively strong, rapid, or persistent affective reactions. It encompasses sensitivity to emotional cues, the intensity of emotional experiences, and the duration with which emotional states persist after activation. High emotional reactivity may manifest in rapid escalation of anger, sadness, fear, jealousy, or anxiety in response to interpersonal triggers and may complicate efforts to evaluate situations calmly and respond flexibly. Emotional reactivity is closely related to broader processes of emotion regulation and has been examined as an important factor in psychological distress and affective dysfunction (5). In relational contexts, particularly after infidelity, heightened emotional reactivity may be maintained by repeated exposure to reminders of betrayal, ambiguous partner behaviors, perceived inconsistencies, and concerns about future violations of trust. These emotionally charged reactions can subsequently interfere with constructive communication and reinforce dysfunctional interaction patterns between spouses.

Emotional reactivity in married women may also be influenced by underlying interpersonal representations, the capacity to understand mental states, and the quality of emotional processing within close relationships. Research has shown that object-relational characteristics may predict emotional reactivity and that mentalization capacity can play an important mediating role in how married women interpret and respond to emotionally meaningful interpersonal situations (6). When the marital relationship has been compromised by infidelity, the injured partner's interpretation of the spouse's behavior may become particularly sensitive to threat, rejection, abandonment, or concealment. A limited capacity to contextualize these experiences or to distinguish current evidence from emotionally driven interpretations may further increase the intensity and persistence of affective responses. Reliable measurement of emotional reactivity is therefore especially relevant in studies concerning marital distress. The Persian version of the Emotion Reactivity Scale has demonstrated satisfactory psychometric properties, supporting its use in evaluating emotional sensitivity, intensity, and persistence within Iranian populations (7).

Alongside heightened emotional reactivity, women who have experienced spousal infidelity may become vulnerable to excessive doubts and obsessive concerns centered on the marital relationship. Relationship obsessive-compulsive symptoms represent a specific pattern of intrusive doubts, preoccupations, and repetitive checking or reassurance-seeking behaviors focused on intimate relationships. These symptoms can include persistent uncertainty about one's feelings toward a partner, doubts about whether the relationship is "right," repeated concerns regarding the partner's feelings, and compulsive attempts to achieve certainty about relational compatibility or emotional commitment. The concept of relationship-centered obsessive-compulsive symptoms was systematically examined by Doron and colleagues, who demonstrated that such symptoms can be identified even in nonclinical populations and are meaningfully associated with relationship distress and maladaptive psychological functioning (8). This line of research provided an important foundation for conceptualizing obsessive-compulsive processes that are specifically organized around romantic relationships rather than around more traditionally recognized obsessive themes.

Subsequent research expanded this conceptualization by proposing that relationship obsessive-compulsive disorder involves a combination of intrusive relational doubts, compulsive attempts to reduce uncertainty, and maladaptive beliefs concerning relationships and the self. A central conceptual framework suggested that individuals experiencing relationship obsessive-compulsive symptoms may repeatedly monitor their feelings, compare their relationship with imagined alternatives, seek reassurance, test their attraction to the partner, or interpret fluctuations in closeness as evidence that something is fundamentally wrong (9). Such processes can create a self-reinforcing cycle in which attempts to achieve certainty paradoxically increase doubt and distress. In the context of spousal infidelity, this process may become especially intense because some degree of relational doubt is objectively grounded in a real violation of trust. As a result, adaptive caution and trauma-related vigilance may become intertwined with maladaptive obsessional thinking, repeated checking, reassurance seeking, and inability to tolerate relational ambiguity.

Research on the vulnerability mechanisms associated with relationship obsessive-compulsive symptoms further suggests that relationship-centered concerns are influenced by both relational and self-related vulnerabilities. The double relationship-vulnerability hypothesis proposes that obsessive concerns about intimate relationships may be intensified when individuals hold fragile self-perceptions alongside

dysfunctional beliefs about relationships, love, and partner suitability (10). These vulnerabilities may be particularly relevant after infidelity, when an injured partner may question personal attractiveness, adequacy, lovability, or worth while simultaneously doubting the partner's commitment and the authenticity of the relationship. Later research demonstrated that relationship obsessive-compulsive symptoms can cause substantial functional interference and are associated with maladaptive beliefs concerning the importance of relationships and the consequences of making an incorrect relational decision (11). Thus, relationship obsessive-compulsive symptoms should not be viewed simply as excessive concern about one's marriage; rather, they may represent a clinically meaningful pattern in which uncertainty, intrusive cognitions, emotional distress, and compulsive responding become interconnected.

Individual cognitive characteristics can further contribute to the severity of relationship obsessive-compulsive symptoms. Perfectionistic expectations regarding oneself, one's partner, or the relationship may increase the perceived need for certainty and make ordinary fluctuations in intimacy or satisfaction more difficult to tolerate. In an Iranian sample, ego strength was found to play a mediating role in the association between dimensions of perfectionism and relationship obsessive-compulsive symptoms, suggesting that intrapsychic resources may influence the extent to which rigid expectations develop into persistent relational obsessions (12). The availability of culturally appropriate measurement tools has also facilitated research in this area. The Persian form of the Partner-Related Obsessive-Compulsive Symptoms Inventory has demonstrated acceptable factorial validity, reliability, and associations with indicators of marital adjustment, supporting its use in Iranian populations (13). More recent research has also shown that relationship obsessive-compulsive symptoms may be associated with lower romantic relationship quality, maximization tendencies, and problematic social media use, indicating that contemporary relational contexts can provide additional opportunities for comparison, checking, and dissatisfaction (14).

The emotional and cognitive consequences of infidelity are not generated solely within the individual. Marital relationships function as interconnected systems in which the behavior, beliefs, emotional responses, and communication patterns of one partner influence those of the other. Repeated accusations, withdrawal, reassurance seeking, secrecy, defensive behavior, monitoring, conflict escalation, or emotional disengagement can gradually develop into stable dysfunctional patterns that maintain psychological distress. Power dynamics are particularly relevant in distressed couple relationships because influence, decision-making, dependency, and perceived control can shape how partners communicate and respond to conflict. Systemic family therapy literature has increasingly emphasized that therapists must attend to power arrangements within couple relationships rather than treating distress exclusively as an individual phenomenon (15). Following infidelity, such dynamics may become even more pronounced because the injured partner may seek transparency and control while the unfaithful partner may respond with defensiveness or avoidance, thereby strengthening cycles of mistrust and emotional escalation.

Structural family therapy offers a theoretically relevant framework for addressing such interactional patterns. Developed within a systemic tradition, structural family therapy conceptualizes psychological and relational difficulties in terms of the organization of the family system, including its boundaries, subsystems, hierarchy, transactional patterns, and recurring rules of interaction. Rather than focusing only on intrapsychic symptoms, the structural approach examines how problematic behaviors are embedded in and maintained by relational structures. Therapeutic interventions typically involve joining with the family

system, identifying dysfunctional transactional patterns, enacting interactions in sessions, clarifying boundaries, restructuring alliances, strengthening appropriate subsystems, and facilitating more adaptive patterns of communication and interaction (16). In the context of couples affected by infidelity, these techniques may be particularly valuable because the betrayal often reorganizes marital roles and boundaries, disrupts the marital subsystem, and produces repetitive cycles of conflict, emotional pursuit, withdrawal, and uncertainty.

Structural family therapy has been applied to marital conflict because it allows therapists to work directly with interactional patterns rather than relying solely on verbal discussion of individual complaints. Case-based evidence has illustrated the application of structural family therapy as a mediation process in marital conflict, emphasizing the restructuring of relational patterns and the modification of dysfunctional family organization (17). Similarly, the integration of structural family therapy principles with approaches targeting emotional and behavioral dysregulation has been proposed for high-conflict couples, highlighting the value of combining systemic restructuring with strategies that address intense emotional responses (18). These observations are particularly pertinent for women experiencing both heightened emotional reactivity and obsessive relational concerns after infidelity, because both outcomes may be reinforced by repetitive couple interactions. For example, intrusive doubts may trigger reassurance seeking, which may evoke defensiveness or avoidance from the partner, which in turn increases emotional arousal and uncertainty, thereby perpetuating the cycle.

Evidence from broader family-intervention research also supports the proposition that changing relational and emotional environments can influence clinically meaningful outcomes. Family interventions targeting expressed emotion have demonstrated beneficial effects in clinical populations, suggesting that modifying emotionally charged interaction patterns within families can contribute to improved psychological functioning (19). Although the clinical context of such research differs from marital infidelity, it provides support for the broader systemic assumption that emotional responses are affected by the interpersonal environment and can be modified through structured family-based intervention. Structural family therapy may therefore reduce emotional reactivity by reorganizing conflictual interaction patterns, increasing clarity of boundaries, strengthening communication, and reducing emotionally provocative transactions. At the same time, restructuring the marital subsystem may reduce the uncertainty and repetitive interpersonal checking that can sustain relationship obsessive-compulsive symptoms.

Contemporary intervention research on relationship obsessive-compulsive symptoms also demonstrates that these symptoms are modifiable rather than fixed. A randomized controlled trial examining a cognitive-behavioral mobile intervention designed to promote couples' resilience to relationship obsessive-compulsive symptoms reported meaningful benefits, suggesting that targeted interventions can reduce maladaptive relational cognitions and improve resilience in intimate relationships (20). Such findings are important because they indicate that relationship-centered obsessive symptoms can respond to psychological intervention. However, most existing approaches have emphasized cognitive-behavioral mechanisms, whereas comparatively less attention has been given to systemic interventions that target the relational context in which obsessive doubts and emotional reactions occur. This gap may be particularly significant among women coping with spousal infidelity, because their doubts are embedded in an actual relational

rupture and may therefore be maintained not only by individual cognitive vulnerabilities but also by ongoing interactional patterns, disrupted boundaries, power imbalances, and weakened marital structure.

The combined examination of emotional reactivity and relationship obsessive-compulsive symptoms is therefore theoretically and clinically justified. Following spousal infidelity, emotional activation may increase the salience of intrusive doubts, while obsessive rumination and reassurance seeking may further intensify emotional responses. Structural family therapy may interrupt this reciprocal process by modifying the relational structures that repeatedly activate emotional and cognitive distress. Despite substantial literature on the consequences of infidelity, relationship obsessive-compulsive symptoms, emotional reactivity, and systemic family interventions, comparatively limited evidence is available regarding the effectiveness of structural family therapy for simultaneously addressing emotional reactivity and relationship-centered obsessive-compulsive symptoms among women who have experienced spousal infidelity, particularly within the Iranian sociocultural context. Accordingly, the aim of the present study was to determine the effectiveness of structural family therapy in reducing emotional reactivity and relationship obsessive-compulsive symptoms among women with experience of spousal infidelity.

Methods and Materials

Study Design and Participants

This applied study employed a quasi-experimental pretest–posttest design with an experimental group and a wait-list control group. The statistical population consisted of married women who had experienced marital infidelity by their husbands and had sought counseling or psychological services at Nirvana Counseling and Psychological Services Center in Shiraz, Iran, during 2024. Using convenience sampling, 34 women who met the eligibility criteria were recruited and subsequently assigned through simple random allocation to either the structural family therapy group ($n = 17$) or the wait-list control group ($n = 17$). Both groups completed assessments before and after the intervention. Eligibility criteria included being a married woman aged 20–45 years, having been married for at least one year, having experienced marital infidelity by the husband with at least one year having elapsed since its occurrence or disclosure, possessing sufficient literacy to understand and complete the self-report questionnaires, providing informed consent, and being willing and able to participate in the intervention and assessment procedures. Women were excluded if they had a diagnosed chronic medical condition or psychiatric disorder that could interfere with participation, had a history of substance misuse or dependence, had initiated divorce or marital separation proceedings, had themselves engaged in reciprocal marital infidelity, had received psychotherapy during the three months preceding enrollment or concurrently with the study intervention, or were absent from more than one treatment session. After initial screening and confirmation of eligibility, participants received information regarding the purpose, procedures, confidentiality safeguards, and voluntary nature of the study and then completed the pretest measures of emotional reactivity and relationship obsessive-compulsive symptoms. The experimental group participated in a structural family therapy intervention based on Minuchin's structural family therapy framework. The program consisted of nine weekly sessions, each lasting approximately 75 minutes. The first session focused on establishing the therapeutic relationship, introducing participants to the treatment process, and clarifying the rationale and therapeutic goals. The second session introduced the fundamental concepts of structural family therapy, including communication patterns, family

subsystems, boundaries, and identification of dominant family structures. The third session emphasized structural therapeutic techniques such as joining, imitation, reframing, and enactment of transactional patterns. During the fourth session, recurrent dysfunctional transactional patterns and relational triangles associated with marital and family difficulties were identified and enacted. The fifth session concentrated on restructuring maladaptive transactional patterns through effective communication, negotiation, and development of alternative interactional patterns. The sixth session addressed the identification and clarification of family boundaries, enhancement of mutual support, development of effective strategies for managing marital conflict, and examination of roles and expectations within family subsystems. The seventh session emphasized strengthening the marital subsystem, restructuring problematic family interactions, enactment of dysfunctional patterns, boundary making, and therapeutic intensification. The eighth session involved providing feedback regarding the flexibility of family boundaries and existing behavioral patterns, practicing adaptive relational roles, and applying newly acquired interactional patterns to everyday marital situations. The ninth session reviewed therapeutic changes, examined indicators of improvement, consolidated adaptive patterns of interaction, summarized the treatment process, and administered the posttest measures. The control group received no psychological intervention during the corresponding study period and remained on a waiting list. Immediately following completion of the intervention, both groups completed the same measures administered at baseline. Given the sensitive nature of marital infidelity and the potential psychological vulnerability of the participants, ethical safeguards were observed throughout the research process. Participation was voluntary, the purpose and procedures of the study were explained prior to enrollment, and participants were informed that they could discontinue their participation at any time without adverse consequences. Verbal informed consent was obtained from all participants. Confidentiality of personal information and questionnaire responses was assured, no identifying information was recorded on the research instruments, and the findings were analyzed and reported only in aggregate form.

Data Collection Tools

Emotional reactivity was assessed using the Emotion Reactivity Scale developed by Nock, Wedig, Holmberg, and Hooley in 2008. The Emotion Reactivity Scale is a 21-item self-report instrument designed to measure individual differences in emotional responding across three interrelated dimensions of emotional sensitivity, emotional intensity, and emotional persistence. Each item is rated on a five-point Likert scale ranging from 0, indicating “not at all like me,” to 4, indicating “completely like me,” with higher total scores reflecting greater emotional reactivity. The developers of the original instrument reported excellent internal consistency for the total scale, with a Cronbach's alpha coefficient of .95, while internal consistency coefficients for the emotional sensitivity, emotional intensity, and emotional persistence dimensions were .90, .80, and .78, respectively. Evidence supporting the reliability and validity of the Persian version has also been reported. Moghbeli Hanzaei and colleagues found convergent correlations of .33 with health anxiety and .41 with anxiety sensitivity and reported Cronbach's alpha and test–retest reliability coefficients of .92 and .72, respectively. Habibi and colleagues likewise reported an internal consistency coefficient of .90 for the overall scale. In the present study, Cronbach's alpha for the Emotion Reactivity Scale was .79, indicating acceptable internal consistency within the study sample.

Relationship obsessive-compulsive symptoms were assessed using the Relationship Obsessive-Compulsive Inventory developed by Doron, Derby, Szepsenwol, and Talmor in 2012. The instrument consists of 12 items assessing three central domains of relationship-centered obsessive-compulsive concerns, including doubts and preoccupations regarding one's feelings of love toward the partner, perceived rightness or suitability of the relationship, and perceptions of the partner's feelings of love toward the respondent. Items are scored on a five-point Likert scale ranging from 0, indicating “not at all,” to 4, indicating “very much,” with higher scores indicating greater severity of relationship obsessive-compulsive symptoms. In the original psychometric evaluation, test–retest reliability coefficients for the subscales ranged from .66 to .92, and Cronbach's alpha for the overall instrument was .93. The Persian version has also demonstrated satisfactory psychometric properties. Ghomian and colleagues reported a Cronbach's alpha coefficient of .88 for the total score and coefficients ranging from .74 to .79 for the subscales. They additionally demonstrated evidence of convergent and discriminant validity through correlations between relationship obsessive-compulsive symptoms and marital adjustment ranging from $-.27$ to $-.56$. In another Iranian study, Dehghin and colleagues reported a Cronbach's alpha coefficient of .94 for the instrument. In the present sample, the Cronbach's alpha coefficient for the Relationship Obsessive-Compulsive Inventory was .81, demonstrating satisfactory internal consistency. For the purposes of the present study, only the measures corresponding directly to the two primary study outcomes, namely emotional reactivity and relationship obsessive-compulsive symptoms, were included in the statistical analyses and reporting.

Intervention

The structural family therapy intervention was conducted in nine weekly sessions, each lasting approximately 75 minutes, based on Minuchin's structural family therapy framework. The first session focused on establishing the therapeutic relationship, introducing participants, and explaining the goals and rationale of treatment. The second session introduced the main principles of structural family therapy, including communication patterns, family subsystems, boundaries, and dominant family structures. The third session focused on practicing structural techniques such as joining, imitation, reframing, and enactment of transactional patterns. In the fourth session, recurrent dysfunctional interaction patterns and relational triangles associated with marital difficulties were identified and enacted. The fifth session emphasized restructuring maladaptive transactional patterns through effective communication, negotiation, and development of alternative interactional patterns. The sixth session addressed clarification of family boundaries, enhancement of mutual support, effective coping with marital conflict, and examination of roles and expectations within family subsystems. The seventh session focused on strengthening the marital subsystem, restructuring problematic interactions, boundary making, enactment, and therapeutic intensification. The eighth session involved providing feedback on existing behaviors and boundary flexibility, practicing new relational roles, and applying adaptive interaction patterns to everyday marital situations. The final session reviewed therapeutic changes, reinforced progress, consolidated newly developed interaction patterns, summarized the intervention, and completed the posttest assessment.

Data Analysis

Data were analyzed using IBM SPSS Statistics version 26. Initially, descriptive statistics, including the mean and standard deviation, were calculated to summarize emotional reactivity and relationship obsessive-compulsive symptom scores in the structural family therapy and control groups at the pretest and posttest stages. Before conducting the primary inferential analyses, the statistical assumptions required for covariance analysis were examined. These included assessment of the normality of score distributions, homogeneity of error variances, linearity of the relationship between the covariate and dependent variables, and homogeneity of regression slopes across the experimental and control groups. After confirming the adequacy of these assumptions, analysis of covariance was employed separately for the study outcomes to determine whether the posttest scores of women receiving structural family therapy differed significantly from those of women in the wait-list control group after statistically controlling for their corresponding pretest scores. In these analyses, group membership constituted the independent variable, posttest emotional reactivity and relationship obsessive-compulsive symptom scores constituted the dependent variables, and the corresponding pretest scores were entered as covariates. The magnitude of the intervention effects was evaluated using the effect-size indices provided by the covariance analyses, and statistical significance was determined at an alpha level of .05.

Findings and Results

A total of 34 married women with a history of spousal infidelity completed the study, including 17 participants in the structural family therapy group and 17 participants in the control group. The mean age of participants was 36.11 years ($SD = 6.30$) in the structural family therapy group and 35.88 years ($SD = 7.73$) in the control group. Of the total sample, 11 participants (32.4%) were aged 20–30 years, 16 (47.1%) were aged 31–40 years, and 7 (20.6%) were aged 41 years or older. Regarding duration of marriage, 8 participants (23.5%) had been married for 2–3 years, 17 (50.0%) for 4–5 years, and 9 (26.5%) for 6 years or longer. In terms of educational attainment, 19 participants (55.9%) had a high-school diploma or lower level of education, 9 (26.5%) held an associate degree, and 6 (17.6%) had a bachelor's degree or higher.

Table 1. Descriptive Statistics for Emotional Reactivity and Relationship Obsessive-Compulsive Symptoms at Pretest and Posttest

Outcome	Group	Pretest M	Pretest SD	Posttest M	Posttest SD
Emotional reactivity	Structural family therapy	17.58	3.01	14.88	2.14
	Control	18.11	3.27	18.29	3.13
Relationship obsessive-compulsive symptoms	Structural family therapy	16.11	1.49	13.35	1.15
	Control	15.94	2.19	16.10	1.93

As shown in Table 1, the pretest means for emotional reactivity and relationship obsessive-compulsive symptoms were relatively similar between the structural family therapy and control groups. Following the intervention, the mean emotional reactivity score in the structural family therapy group decreased from 17.58 ($SD = 3.01$) at pretest to 14.88 ($SD = 2.14$) at posttest, representing a reduction of 2.70 points. In contrast, the corresponding mean in the control group changed only slightly from 18.11 ($SD = 3.27$) to 18.29 ($SD = 3.13$). A similar pattern was observed for relationship obsessive-compulsive symptoms. The mean score in the structural family therapy group decreased from 16.11 ($SD = 1.49$) at pretest to 13.35 ($SD = 1.15$)

at posttest, corresponding to a reduction of 2.76 points, whereas the control group showed a slight increase from 15.94 (SD = 2.19) to 16.10 (SD = 1.93). These descriptive findings indicated reductions in both emotional reactivity and relationship obsessive-compulsive symptoms among participants receiving structural family therapy, while scores in the control group remained relatively stable.

Before conducting the analysis of covariance, the relevant statistical assumptions were examined. The Shapiro–Wilk tests for emotional reactivity and relationship obsessive-compulsive symptoms at both pretest and posttest were nonsignificant ($p > .05$), supporting the assumption of normality. Specifically, the Shapiro–Wilk statistics for emotional reactivity were .985 ($p = .423$) at pretest and .950 ($p = .120$) at posttest, while the corresponding values for relationship obsessive-compulsive symptoms were .948 ($p = .110$) and .965 ($p = .711$), respectively. In addition, all skewness and kurtosis coefficients were within the acceptable range of ± 2 , providing further evidence of approximate normality. The homogeneity of error variances was examined using Levene's test, and all significance values exceeded .05. For emotional reactivity, Levene's test yielded $F(1, 32) = 2.057$, $p = .440$ at pretest and $F(1, 32) = 5.805$, $p = .082$ at posttest. For relationship obsessive-compulsive symptoms, the corresponding values were $F(1, 32) = 4.588$, $p = .231$ at pretest and $F(1, 32) = 2.836$, $p = .102$ at posttest. Thus, the assumptions of normality and homogeneity of error variances were satisfied, supporting the use of covariance analysis for evaluating the intervention effects.

Table 2. Analysis of Covariance for the Effects of Structural Family Therapy on Emotional Reactivity and Relationship Obsessive-Compulsive Symptoms

Outcome	F	df	p	Partial η^2	Observed Power
Emotional reactivity	13.499	1, 31	.001	.303	.945
Relationship obsessive-compulsive symptoms	12.162	1, 31	.009	.282	.922

As presented in Table 2, after statistically controlling for the corresponding pretest scores, the effect of group on posttest emotional reactivity was statistically significant, $F(1, 31) = 13.499$, $p = .001$, partial $\eta^2 = .303$, with an observed statistical power of .945. This finding indicated that women who received structural family therapy had significantly lower emotional reactivity scores at posttest than women in the control group after adjustment for baseline differences. The partial eta-squared value showed that approximately 30.3% of the variance in posttest emotional reactivity was associated with group membership after controlling for pretest emotional reactivity. The effect of group on relationship obsessive-compulsive symptoms was also statistically significant, $F(1, 31) = 12.162$, $p = .009$, partial $\eta^2 = .282$, with an observed power of .922. Accordingly, women in the structural family therapy group demonstrated significantly lower posttest relationship obsessive-compulsive symptom scores than participants in the control group after controlling for baseline scores. The corresponding effect size indicated that approximately 28.2% of the variance in posttest relationship obsessive-compulsive symptoms was associated with the intervention condition. Overall, the covariance analyses demonstrated that structural family therapy was effective in reducing both emotional reactivity and relationship obsessive-compulsive symptoms among women with experience of spousal infidelity.

Discussion and Conclusion

The present study examined the effectiveness of structural family therapy in reducing emotional reactivity and relationship obsessive-compulsive symptoms among women with experience of spousal infidelity. The findings demonstrated that, after controlling for pretest scores, structural family therapy produced significant reductions in both emotional reactivity and relationship obsessive-compulsive symptoms compared with the wait-list control condition. Specifically, the intervention accounted for 30.3% of the variance in posttest emotional reactivity and 28.2% of the variance in posttest relationship obsessive-compulsive symptoms. These effect sizes indicate that the intervention was associated with meaningful changes in both outcomes. The descriptive pattern supported the inferential findings, as emotional reactivity and relationship obsessive-compulsive symptoms decreased in the intervention group while remaining relatively unchanged in the control group. Taken together, the results suggest that structural family therapy may be effective in modifying both heightened affective responding and maladaptive relationship-centered obsessive processes in women who have experienced marital betrayal.

The first major finding was that structural family therapy significantly reduced emotional reactivity. This result can be interpreted in light of the interpersonal and systemic nature of emotional activation within distressed marital relationships. Emotional reactivity is not merely an isolated intrapersonal response; it is often triggered, intensified, and maintained through recurring interpersonal exchanges, especially when the relationship contains unresolved mistrust, conflict, or perceived threat. Previous research has emphasized the central role of emotional sensitivity, intensity, and persistence in affective dysregulation and has shown that heightened emotional reactivity is closely associated with broader difficulties in emotion regulation (5). In the context of spousal infidelity, relational cues such as delayed responses, perceived secrecy, emotional distance, ambiguous behavior, or conflict can become highly salient triggers that reactivate fear, anger, sadness, jealousy, and insecurity. Structural family therapy may reduce this reactivity by altering the interactional environment in which these emotional responses occur.

This interpretation is also compatible with evidence indicating that emotional reactivity among married women is associated with interpersonal representations and mentalization-related capacities. Habibi and colleagues reported that emotional reactivity can be predicted by object-relational factors and that mentalization capacity plays an important mediating role in this association (6). When a woman has experienced marital betrayal, the meaning assigned to a partner's behavior may become strongly influenced by expectations of rejection, concealment, or further betrayal. Structural family therapy may help reduce emotionally loaded interpretations by making recurrent interactional patterns more explicit, increasing awareness of roles and expectations within the marital subsystem, and providing opportunities for partners to enact and reorganize maladaptive transactions in a controlled therapeutic setting. Through these mechanisms, the intervention may reduce the rapid escalation of negative affect and increase the participant's ability to respond more flexibly to relational stressors.

The finding regarding emotional reactivity is also theoretically consistent with structural family therapy principles. This approach assumes that dysfunctional family structures, unclear boundaries, rigid alliances, maladaptive hierarchies, and repetitive transactional patterns can perpetuate emotional and behavioral difficulties (16). Following infidelity, family and marital boundaries may become unstable, and spouses may enter repetitive cycles of accusation, withdrawal, monitoring, defensiveness, and emotional disengagement.

By identifying and restructuring these cycles, strengthening the marital subsystem, clarifying boundaries, and modifying maladaptive interactions, structural family therapy may reduce the frequency and intensity of emotionally provocative exchanges. The intervention used in the present study included enactment, reframing, boundary clarification, restructuring of dysfunctional transactional patterns, and strengthening of the marital subsystem. These techniques may have directly contributed to the observed reduction in emotional reactivity by changing the immediate relational conditions that repeatedly triggered emotional distress.

The present finding is also supported by prior work on structural approaches with distressed couples. Finney and Tadros emphasized the usefulness of integrating structural family therapy with strategies targeting emotional dysregulation in high-conflict couples, particularly when dysfunctional interaction patterns and intense affective responses mutually reinforce one another (18). Similarly, Ulya described the application of structural family therapy in the mediation of marital conflict, illustrating how restructuring relational organization and modifying problematic interaction patterns can facilitate improvement in couple functioning (17). Although these studies were conducted in different clinical contexts, their conceptual implications are highly relevant to the present findings. Women who have experienced spousal infidelity are likely to encounter recurrent emotionally charged interactions, and reducing the structural conditions that perpetuate these exchanges may help lower emotional reactivity.

The observed reduction in emotional reactivity may further be understood through the literature on family-based interventions targeting expressed emotion. Family interventions designed to modify emotionally intense interaction patterns have been found to produce beneficial outcomes in clinical populations, supporting the broader assumption that emotional functioning can improve when the interpersonal environment is systematically modified (19). Although the specific population in that research differs from the current sample, the general mechanism is relevant: reducing emotionally provocative exchanges, increasing predictability, and reorganizing communication can create a less reactive relational climate. In women affected by infidelity, structural family therapy may therefore reduce emotional reactivity not only by changing individual coping but also by changing the relational context in which emotional arousal repeatedly occurs.

The second major finding was that structural family therapy significantly reduced relationship obsessive-compulsive symptoms. This finding is important because relationship obsessive-compulsive symptoms involve persistent doubts, intrusive thoughts, repeated checking, reassurance seeking, and excessive concern regarding one's feelings, the partner's feelings, and the suitability or correctness of the relationship. Doron and colleagues originally demonstrated that relationship-centered obsessive-compulsive symptoms can occur in nonclinical populations and are associated with meaningful distress and relationship impairment (8). The conceptual framework of relationship obsessive-compulsive disorder further emphasizes that maladaptive beliefs about relationships, intolerance of uncertainty, and repetitive attempts to achieve certainty can maintain these symptoms (9). In women who have experienced spousal infidelity, such processes may become especially pronounced because the relationship has been objectively destabilized by betrayal, creating a fertile context for recurrent doubts and reassurance-seeking behavior.

The current finding is consistent with the double relationship-vulnerability hypothesis, which proposes that relationship obsessive-compulsive symptoms are influenced by both relationship-related and self-

related vulnerabilities (10). Following infidelity, injured partners may simultaneously question the trustworthiness of the relationship and their own relational value, attractiveness, lovability, or adequacy. These concerns can reinforce one another and lead to persistent cognitive monitoring of the relationship. Structural family therapy may help interrupt this cycle by making interactional patterns more predictable, strengthening the marital subsystem, clarifying roles and boundaries, and reducing relational ambiguity. When the relational environment becomes more coherent and less chaotic, the perceived need for repetitive checking and reassurance may decrease.

The significant reduction in relationship obsessive-compulsive symptoms is also supported by research highlighting the role of maladaptive beliefs and functional interference in ROCD. Doron and colleagues demonstrated that ROCD symptoms are associated with substantial interference and dysfunctional beliefs about intimate relationships (11). Such beliefs may include exaggerated assumptions about the need for complete certainty, the importance of having the “right” feelings, and the catastrophic consequences of remaining in an imperfect relationship. Structural family therapy does not directly challenge these cognitions in the same manner as cognitive-behavioral therapy, but it may indirectly weaken them by changing the relational experiences that sustain uncertainty. Repeated enactment of dysfunctional interactions in therapy, followed by restructuring and feedback, may provide corrective relational experiences that reduce the perceived instability of the marriage and decrease the salience of obsessive doubts.

The present findings are also compatible with evidence concerning the psychological correlates of relationship obsessive-compulsive symptoms in Iranian populations. Dehghin and colleagues found that ego strength mediates the association between perfectionism and relationship obsessive-compulsive symptoms, suggesting that rigid standards and limited psychological resilience may increase vulnerability to obsessive relational concerns (12). In the context of infidelity, perfectionistic expectations regarding loyalty, emotional certainty, and relationship security may become especially difficult to reconcile with the lived experience of betrayal. Structural family therapy may reduce the pressure associated with such rigid expectations by helping participants differentiate between idealized relational assumptions and the practical realities of rebuilding trust and renegotiating boundaries. Furthermore, the satisfactory psychometric properties of Persian measures of relationship obsessive-compulsive symptoms support the validity of assessing this construct in Iranian samples (13).

The findings can also be explained in relation to contemporary research on the broader contexts associated with ROCD symptoms. Mancin and colleagues reported that lower romantic relationship quality, maximization tendencies, and social media addiction are associated with greater relationship obsessive-compulsive symptoms (14). These findings suggest that ROCD can be intensified by repeated comparison, dissatisfaction, and the pursuit of certainty or optimal relationship outcomes. Women coping with infidelity may be particularly prone to such comparison processes, especially if they repeatedly evaluate their own relationship against perceived alternatives or idealized relationships. Structural family therapy may reduce this pattern by shifting attention from comparison and uncertainty toward observable interactional structures, current boundaries, communication patterns, and concrete relational change.

The present result is further supported by evidence that relationship obsessive-compulsive symptoms can respond to psychological intervention. Gorelik and colleagues demonstrated that a cognitive-behavioral

mobile intervention designed to promote resilience to OCD symptoms produced beneficial outcomes (20). Although the present intervention was systemic rather than primarily cognitive-behavioral, both approaches may converge on a common therapeutic target: reducing maladaptive responses to relational uncertainty. Cognitive-behavioral interventions may do so by changing beliefs and compulsive behaviors, whereas structural family therapy may reduce uncertainty by reorganizing dysfunctional relational patterns. This distinction is particularly important in the context of infidelity, where uncertainty may be maintained not only by cognitive vulnerabilities but also by actual disturbances in trust, power, communication, and boundaries.

The experience of infidelity itself likely plays a major role in the development and persistence of both emotional reactivity and relationship obsessive-compulsive symptoms. Fincham and May emphasized that infidelity is associated with significant psychological and relational consequences, including distress, conflict, and disruption of trust (1). Warach and Josephs further conceptualized infidelity as a form of attachment trauma capable of producing persistent aftershocks in emotional and relational functioning (2). These aftereffects may include hypervigilance, intrusive thoughts, and heightened sensitivity to cues of rejection or deception. Such patterns closely overlap with the constructs assessed in the present study, providing a plausible explanation for why both emotional reactivity and relationship obsessive-compulsive symptoms were elevated and why a systemic intervention aimed at restructuring the marital relationship produced improvement.

Recent work on relational uncertainty following infidelity further supports this interpretation. Zhong and Vangelisti emphasized that injured partners may experience persistent uncertainty regarding the relationship, the partner's intentions, and the future of the marriage (3). Relational uncertainty can increase emotional volatility and motivate repeated monitoring or reassurance seeking, which in turn may intensify both emotional reactivity and obsessive relationship-centered thinking. Structural family therapy may address these processes by increasing relational predictability and clarifying expectations, boundaries, and communication patterns. By helping partners reorganize their interactions, the intervention may reduce the ambiguity that fuels both emotional arousal and obsessive doubt.

The role of power dynamics should also be considered. Young and Seedall highlighted the importance of power in couple relationships and emphasized its relevance to systemic family therapy (15). After infidelity, power may become unevenly distributed as the injured partner seeks greater transparency, accountability, and control, while the other partner may resist monitoring or withdraw from emotionally demanding exchanges. These dynamics can generate repeated conflict and reinforce mistrust. Structural family therapy may help by making such patterns visible and reorganizing the relational hierarchy in a manner that promotes more balanced interaction, clearer boundaries, and more functional negotiation. This restructuring may contribute simultaneously to reduced emotional escalation and fewer compulsive attempts to obtain certainty.

The findings may also be understood in relation to recovery after infidelity. O'Connor and Canevello showed that recovery following infidelity involves complex processes of emotional adjustment and moving forward, particularly when the betrayal leads to relationship disruption (4). Even when couples remain together, the recovery process requires substantial cognitive and emotional reorganization. The present findings suggest that structural family therapy may facilitate this process by providing a structured context

in which maladaptive interactional patterns can be identified, enacted, challenged, and reorganized. Rather than focusing exclusively on the betrayal event, the intervention addresses the current relational system, which may be crucial for reducing persistent emotional and obsessional responses.

Overall, the results indicate that structural family therapy may be effective because it targets the systemic processes that link emotional dysregulation and obsessive relational concerns. Emotional reactivity may increase the intensity of relationship-related doubts, while obsessive doubts and reassurance seeking may provoke further conflict and emotional escalation. These processes can form a mutually reinforcing cycle. By restructuring dysfunctional interaction patterns, clarifying family boundaries, strengthening the marital subsystem, and improving communication, structural family therapy may interrupt this cycle at the relational level. The present findings therefore extend existing literature by suggesting that a systemic approach can produce meaningful improvements not only in broad marital functioning but also in specific psychological outcomes related to emotional reactivity and relationship obsessive-compulsive symptoms among women who have experienced spousal infidelity.

One limitation of the present study was the relatively small sample size, which may restrict the statistical power and generalizability of the findings to broader populations of women with experience of spousal infidelity. In addition, participants were recruited from a single counseling center in Shiraz through convenience sampling, which may have introduced selection bias and limited the representativeness of the sample. The study also relied on self-report measures, which can be affected by response biases, social desirability, and participants' willingness to disclose sensitive relational experiences. The absence of a follow-up assessment is another limitation, as the study design does not allow conclusions regarding the long-term maintenance of treatment effects. Moreover, the use of a wait-list control group rather than an active comparison intervention limits the extent to which the observed effects can be attributed specifically to structural family therapy techniques rather than to nonspecific therapeutic factors such as attention, support, and expectancy.

Future research should replicate the present study with larger and more diverse samples recruited from multiple clinical and community settings and across different cultural and socioeconomic contexts. Longer follow-up periods should be incorporated to determine whether reductions in emotional reactivity and relationship obsessive-compulsive symptoms are maintained over time. Future studies could also compare structural family therapy with other established interventions, such as cognitive-behavioral therapy, emotion-focused couple therapy, or integrative behavioral couple therapy, to clarify the relative and specific effects of different treatment approaches. Including partner reports, behavioral observations, clinician ratings, and physiological indicators of emotional arousal could provide a more comprehensive assessment of change. Researchers may also examine potential mediators and moderators of treatment response, including attachment insecurity, relational uncertainty, forgiveness, emotion regulation, perfectionism, ego strength, marital satisfaction, and severity or chronicity of the infidelity-related distress.

From a practical perspective, counselors and family therapists working with women who have experienced spousal infidelity may consider incorporating structural family therapy techniques when heightened emotional reactivity and persistent relationship-centered obsessive concerns are present. Clinical assessment should address not only individual symptoms but also the interactional patterns, boundaries, power dynamics, communication cycles, and subsystem functioning within the marital relationship.

Therapists may benefit from using enactment, reframing, boundary clarification, restructuring of repetitive conflict patterns, and strengthening of the marital subsystem to reduce emotionally provocative interactions and relational uncertainty. Counseling centers may also consider developing structured intervention protocols specifically for couples coping with infidelity and training practitioners to distinguish adaptive post-betrayal vigilance from maladaptive obsessive-compulsive relationship symptoms so that treatment can be tailored to the needs of each client.

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Authors' Contributions

All authors equally contributed to this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

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

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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