

Article history: Received 19 June 2024 Revised 02 September 2024 Accepted 10 September 2024 Published online 01 October 2024

Applied Family Therapy Journal

Volume 5, Issue 5, pp 93-102



E-ISSN: 3041-8798

The Effectiveness of Stress Inoculation Training (SIT) on Co-Parenting Quality and Interpersonal Obsessive-Compulsive Symptoms in Mothers

Zahra. Rasouli 6, Masoumeh. Abdollahi 6, Majid. Shamsaee 6, Mehran. Haidarinia 6

Master of Clinical psychology, Islamic Azad University, Roodehen branch, Tehran, Iran
 PhD Student, Department of Psychology, Kerman Branch, Islamic Azad University, Kerman, Iran
 M.A., in Family counseling, Kharazmi University, Tehran, Iran
 PhD Student in Counseling, Shahid Chamran University of Ahvaz, Ahvaz, Iran

* Corresponding author email address: m.abdollahi323@gmail.com

Article Info

Article type:

Original Research

How to cite this article:

Rasouli, Z., Abdollahi, M., Shamsaee, M., & Haidarinia, M. (2024). The Effectiveness of Stress Inoculation Training (SIT) on Co-Parenting Quality and Interpersonal Obsessive-Compulsive Symptoms in Mothers. *Applied Family Therapy Journal*, 5(5), 93-102.

http://dx.doi.org/10.61838/kman.aftj.5.5.11



© 2024 the authors. Published by KMAN Publication Inc. (KMANPUB), Ontario, Canada. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

ABSTRACT

Objective: This study aims to evaluate the effectiveness of Stress Inoculation Training (SIT) on improving co-parenting quality and reducing interpersonal obsessive-compulsive symptoms in mothers with Obsessive-Compulsive Disorder (OCD).

Method: This study employed a randomized controlled trial (RCT) design with 30 mothers diagnosed with OCD, randomly assigned to either the intervention group (n = 15) or the control group (n = 15). The intervention group received eight 60-minute SIT sessions over eight weeks. Co-parenting quality and interpersonal obsessive-compulsive symptoms were assessed at baseline, post-intervention, and four-month follow-up using validated questionnaires. Data were analyzed using Analysis of Variance (ANOVA) with repeated measurements and Bonferroni post-hoc tests, conducted via SPSS-27.

Findings: The intervention group showed significant improvements in coparenting quality from baseline (M = 48.67, SD = 8.92) to post-intervention (M = 58.92, SD = 7.41), with effects maintained at the four-month follow-up (M = 56.80, SD = 7.93). Interpersonal obsessive-compulsive symptoms significantly decreased from baseline (M = 30.53, SD = 6.47) to post-intervention (M = 22.17, SD = 5.32), with sustained reductions at follow-up (M = 24.40, SD = 5.89). The ANOVA results indicated significant effects of time (p < .001) and group (p < .001), as well as significant time-by-group interactions (p < .001) for both variables.

Conclusion: SIT significantly enhances co-parenting quality and reduces interpersonal obsessive-compulsive symptoms in mothers with OCD. These improvements were maintained at the four-month follow-up, indicating the intervention's long-term efficacy. SIT offers a promising therapeutic approach for addressing the unique challenges faced by parents with OCD.

Keywords: Stress Inoculation Training, Co-Parenting Quality, Obsessive-Compulsive Disorder, Mothers, Randomized Controlled Trial, Cognitive-Behavioral Therapy, Mental Health Intervention.

1. Introduction

bsessive-Compulsive Disorder (OCD) is a prevalent mental health condition characterized by persistent, intrusive thoughts (obsessions) and repetitive behaviors (compulsions) aimed at reducing the distress caused by these thoughts. The disorder affects individuals across various age groups, manifesting differently in children and adults (Algin et al., 2018). OCD is associated with significant impairment in daily functioning and can coexist with other mental health conditions, including depression, anxiety, and schizophrenia (Behere et al., 2021; Sterk et al., 2011). Given its chronic nature and the substantial burden it imposes on individuals and their families, understanding and addressing OCD is crucial.

One critical aspect of OCD that has garnered increasing attention is its impact on family dynamics, particularly coparenting quality. Co-parenting refers to the way parents work together in raising their children, encompassing support, communication, and the division of responsibilities. Effective co-parenting is vital for the healthy development of children and the well-being of parents. However, OCD symptoms can strain co-parenting relationships. For instance, a parent with OCD may struggle with obsessive thoughts about their child's safety or engage in compulsive behaviors that disrupt family routines (Levy et al., 2020). Additionally, the stress and preoccupation associated with managing OCD symptoms can reduce a parent's capacity to participate fully in co-parenting, leading to conflicts and reduced parenting quality (Pontillo et al., 2020).

Interpersonal relationships are significantly affected by OCD. Interpersonal obsessive-compulsive symptoms, such as fears of harming others or concerns about relationships, can exacerbate the challenges faced by individuals with OCD in maintaining healthy social interactions. These symptoms are often driven by dysfunctional interpersonal schemas and high levels of perfectionism (Aydin et al., 2012). The presence of these symptoms can complicate coparenting, as the affected parent may become overly critical or anxious about their parenting role, further straining the relationship with their co-parent and impacting overall family harmony.

Stress Inoculation Training (SIT) is a cognitivebehavioral intervention designed to help individuals manage stress by developing coping skills and resilience. SIT has shown promise in various contexts, including reducing anxiety, enhancing performance under stress, and improving overall mental health. This intervention involves teaching individuals to recognize stressors, use relaxation techniques, and implement problem-solving strategies to cope effectively with stress (Fischer et al., 2023). Given the chronic stress associated with managing OCD symptoms and the potential impact on co-parenting quality, SIT could be a valuable tool for mothers with OCD.

The theoretical framework for this study is grounded in cognitive-behavioral theories of stress and coping. According to these theories, stress arises from an individual's perception of a threat and their ability to cope with it. SIT is based on the premise that individuals can be "inoculated" against stress by developing coping skills and resilience (Chamberlain et al., 2016). By teaching mothers with OCD to recognize and manage their stressors, SIT aims to reduce the impact of stress on their co-parenting and interpersonal relationships.

OCD can significantly disrupt family dynamics, particularly co-parenting relationships. Studies have shown that parents with OCD often experience heightened anxiety and stress related to their parenting roles, which can lead to conflicts and reduced co-parenting quality (Blum et al., 2022). These parents may also engage in compulsive behaviors that disrupt family routines and create tension within the household. For example, a parent with contamination fears may impose strict cleaning rituals that are difficult for the family to follow, leading to frustration and conflict (Tümkaya et al., 2015).

Interpersonal OCD symptoms, such as fears of harming others or concerns about relationships, can further exacerbate the challenges faced by parents with OCD. These symptoms are often associated with dysfunctional interpersonal schemas and perfectionism, which can lead to excessive anxiety and preoccupation with parenting tasks (Chen et al., 2018). For instance, a parent with fears of harming their child may avoid certain activities or become overly critical of their own parenting, which can negatively impact the parent-child relationship and overall family dynamics (Guo et al., 2022).

SIT is an effective intervention for managing stress in various contexts. It involves teaching individuals to recognize their stressors, use relaxation techniques, and implement problem-solving strategies to cope with stress. SIT has been shown to reduce anxiety, enhance performance under stress, and improve overall mental health (Pruchno & Resch, 1989). In the context of OCD, SIT could help parents manage the chronic stress associated with their symptoms,

leading to improved co-parenting quality and reduced interpersonal OCD symptoms (Sun et al., 2019).

This study aims to evaluate the effectiveness of SIT on co-parenting quality and interpersonal obsessive-compulsive symptoms in mothers with OCD. The primary objectives are to determine whether SIT can improve co-parenting interactions and reduce the severity of interpersonal obsessive-compulsive symptoms. The secondary objectives include assessing the sustainability of these effects over a four-month follow-up period.

2. Methods and Materials

2.1. Study design and Participant

This study employed a randomized controlled trial (RCT) design to evaluate the effectiveness of Stress Inoculation Training (SIT) on Co-Parenting Quality and Interpersonal Obsessive-Compulsive Symptoms in mothers. participants were 30 mothers from Tehran (district 5), randomly assigned to either the intervention group or the control group, with 15 participants in each group. Inclusion criteria included being a mother with at least one child under 12 years old and exhibiting moderate to high levels of stress and obsessive-compulsive symptoms. Exclusion criteria included severe psychiatric disorders, psychotherapy, or pharmacological treatment for stress or obsessive-compulsive symptoms. The study included a follow-up period of four months after the completion of the intervention.

Participants in the intervention group underwent the SIT program, which consisted of eight 60-minute sessions over eight weeks. The control group did not receive any intervention during this period. Both groups were assessed at three points: baseline (pre-intervention), post-intervention (immediately after the completion of the eight sessions), and follow-up (four months post-intervention). The assessment included validated questionnaires for Co-Parenting Quality and Interpersonal Obsessive-Compulsive Symptoms.

2.2. Measures

2.2.1. Co-Parenting Quality

To measure Co-Parenting Quality, the study utilized the Co-Parenting Relationship Scale (CRS), developed by Feinberg, Brown, and Kan (2012). The CRS is a comprehensive tool designed to assess various dimensions of co-parenting interactions between parents. The scale includes 35 items divided into seven subscales: Endorsement

of Partner's Parenting, Division of Labor, Support/Undermining, Child-Rearing Disagreements, Joint Family Management, Exposure of Child to Conflict, and Parenting-Based Closeness. Each item is scored on a 7-point Likert scale, ranging from "strongly disagree" to "strongly agree." The total score and subscale scores are calculated by averaging the relevant items, with higher scores indicating better co-parenting quality. The CRS has demonstrated high validity and reliability in multiple studies, ensuring its robustness and applicability in various research contexts (Delvecchio et al., 2015; Han & Lee, 2019; Katz & Low, 2004; Lucarelli et al., 2017; Qian et al., 2020).

2.2.2. Interpersonal Obsessive-Compulsive Symptoms

The study assessed Interpersonal Obsessive-Compulsive Symptoms using the Obsessive-Compulsive Inventory-Revised (OCI-R), created by Foa et al. (2002). The OCI-R is a widely recognized instrument for evaluating the severity of obsessive-compulsive symptoms across different dimensions. This self-report questionnaire consists of 18 items, which are grouped into six subscales: Washing, Checking, Ordering, Obsessing, Hoarding, and Neutralizing. Each item is rated on a 5-point scale from 0 (not at all) to 4 (extremely), reflecting the degree of distress or frequency of symptoms. Subscale scores and the total score are obtained by summing the relevant items, with higher scores indicating more severe symptoms. The OCI-R has been extensively validated and found to have excellent reliability and validity across diverse populations, making it a reliable tool for assessing obsessive-compulsive symptoms in both clinical and research settings (Doron et al., 2014; Gorelik et al., 2023; Levy et al., 2020; Vicheva et al., 2020).

2.3. Intervention

2.3.1. Stress Inoculation Training (SIT)

The Stress Inoculation Training (SIT) intervention in this study is designed to enhance Co-Parenting Quality and reduce Interpersonal Obsessive-Compulsive Symptoms in mothers. The intervention consists of eight 60-minute sessions, each targeting specific skills and techniques to manage stress and improve co-parenting dynamics (Hasanzadeh et al., 2013). The sessions are structured as follows:

Session 1: Introduction and Psychoeducation

The first session introduces participants to the concept of Stress Inoculation Training. Mothers are provided with an overview of the intervention's goals and structure. The session includes psychoeducation on stress, its effects on mental health, and how it specifically impacts co-parenting and interpersonal relationships. Participants are encouraged to share their experiences and expectations, fostering a supportive group environment.

Session 2: Identifying Stressors and Cognitive Restructuring

In the second session, participants learn to identify their specific stressors related to co-parenting and interpersonal relationships. Cognitive restructuring techniques are introduced to help mothers recognize and challenge negative thought patterns. Through guided exercises, they practice reframing these thoughts to reduce their impact on stress levels and improve their responses to co-parenting challenges.

Session 3: Relaxation Techniques

This session focuses on teaching relaxation techniques such as deep breathing, progressive muscle relaxation, and guided imagery. These techniques are practiced in-session, with the aim of helping mothers develop skills to manage physiological responses to stress. Participants are encouraged to practice these techniques regularly at home to enhance their effectiveness.

Session 4: Problem-Solving Skills

The fourth session introduces problem-solving skills to help mothers effectively address and manage co-parenting conflicts and other stress-inducing situations. Participants are guided through a structured problem-solving model, which includes identifying problems, generating potential solutions, evaluating options, and implementing action plans. Role-playing exercises are used to practice these skills.

Session 5: Communication Skills

Effective communication is crucial for successful coparenting. This session focuses on enhancing communication skills, including active listening, assertiveness, and expressing emotions constructively. Participants engage in role-playing scenarios to practice these skills, receiving feedback and support from the group and the facilitator.

Session 6: Anger Management and Emotional Regulation In the sixth session, mothers learn strategies for managing anger and regulating their emotions. Techniques such as identifying anger triggers, using relaxation methods to deescalate anger, and employing cognitive restructuring to reframe anger-inducing thoughts are practiced. The session aims to help participants maintain emotional control in coparenting interactions.

Session 7: Enhancing Social Support and Self-Care

This session emphasizes the importance of social support and self-care in managing stress. Participants explore ways to strengthen their support networks and identify activities that promote their well-being. Strategies for seeking and accepting support, as well as incorporating self-care routines into daily life, are discussed and planned.

Session 8: Review and Maintenance

The final session reviews the skills and techniques learned throughout the intervention. Participants discuss their progress, share successes and challenges, and develop maintenance plans to sustain their gains. Strategies for relapse prevention and ongoing practice of SIT techniques are emphasized. The session concludes with a group reflection on the overall experience and the positive changes achieved.

2.4. Data Analysis

Data analysis was performed using SPSS-27 software. The primary statistical method employed was Analysis of Variance (ANOVA) with repeated measurements to compare the changes in Co-Parenting Quality and Interpersonal Obsessive-Compulsive Symptoms between the intervention and control groups over time. This analysis allowed for the examination of within-subjects effects (changes over time), between-subjects effects (differences between the groups), and interaction effects (differences in changes over time between the groups). To further analyze significant findings, Bonferroni post-hoc tests were conducted, which helped in identifying specific time points where differences between the groups were statistically significant. The level of significance was set at p < 0.05 for all tests.

3. Findings and Results

The sample consisted of 30 mothers, with a mean age of 35.67 years (SD = 5.23) in the intervention group and 36.33 years (SD = 4.89) in the control group. In terms of marital status, 25 participants (83.33%) were married, 3 (10.00%) were single, and 2 (6.67%) were divorced. Regarding educational attainment, 10 participants (33.33%) had completed high school, 14 (46.67%) had a bachelor's degree, and 6 (20.00%) had a postgraduate degree. Employment status varied, with 18 participants (60.00%) employed full-time, 7 (23.33%) employed part-time, and 5 (16.67%)

unemployed. The average number of children per participant was 2.13 (SD = 0.92), with no significant differences between the intervention and control groups.

The descriptive statistics for co-parenting quality and interpersonal obsessive-compulsive symptoms are presented

in Table 1. The mean and standard deviation (SD) for each variable at baseline, post-intervention, and four-month follow-up are included for both the intervention and control groups.

 Table 1

 Descriptive Statistics for Co-Parenting Quality and Interpersonal Obsessive-Compulsive Symptoms

Group	Time	Co-Parenting Quality (Mean ± SD)	Interpersonal Obsessive-Compulsive Symptoms (Mean ± SD)
Intervention Group	Baseline	48.67 ± 8.92	30.53 ± 6.47
	Post-Intervention	58.92 ± 7.41	22.17 ± 5.32
	4-Month Follow-Up	56.80 ± 7.93	24.40 ± 5.89
Control Group	Baseline	49.20 ± 9.11	31.13 ± 6.68
	Post-Intervention	50.07 ± 8.95	29.87 ± 6.23
	4-Month Follow-Up	49.93 ± 8.66	30.27 ± 6.52

The descriptive statistics indicate that the intervention group showed an increase in co-parenting quality from baseline (M = 48.67, SD = 8.92) to post-intervention (M = 58.92, SD = 7.41), and a slight decrease at the four-month follow-up (M = 56.80, SD = 7.93). Similarly, the intervention group showed a decrease in interpersonal obsessive-compulsive symptoms from baseline (M = 30.53, SD = 6.47) to post-intervention (M = 22.17, SD = 5.32), with a slight increase at the four-month follow-up (M = 24.40, SD = 5.89). The control group did not show significant changes in either variable over the three time points.

Before conducting the primary analyses, we checked and confirmed the assumptions of normality, homogeneity of variances, and sphericity. The Shapiro-Wilk test indicated that the distribution of scores for co-parenting quality (W = 0.965, p = 0.418) and interpersonal obsessive-compulsive

symptoms (W = 0.972, p = 0.503) did not significantly deviate from normality. Levene's test for equality of variances showed that the assumption of homogeneity was met for both co-parenting quality (F(1, 28) = 1.73, p = 0.198) and interpersonal obsessive-compulsive symptoms (F(1, 28) = 1.55, p = 0.223). Mauchly's test of sphericity was non-significant for co-parenting quality ($\chi^2(2) = 4.72$, p = 0.094) and interpersonal obsessive-compulsive symptoms ($\chi^2(2) = 5.18$, p = 0.075), confirming that the sphericity assumption was satisfied. Therefore, the assumptions required for conducting ANOVA with repeated measurements were all met.

The ANOVA results are presented in Table 2. The analysis included within-subjects factors (time) and between-subjects factors (group), as well as the interaction between time and group.

Table 2

Analysis of Variance (ANOVA) for Co-Parenting Quality and Interpersonal Obsessive-Compulsive Symptoms

Source	SS	df	MS	F	р	η^2
Co-Parenting Quality						
Time	1384.67	2	692.34	12.89	<.001	.31
Group	1824.27	1	1824.27	33.96	<.001	.54
Time * Group	1246.53	2	623.27	11.61	<.001	.28
Error (within groups)	3001.23	56	53.59			
Interpersonal OCD						
Time	1025.47	2	512.73	9.87	<.001	.26
Group	1334.37	1	1334.37	25.71	<.001	.48
Time * Group	1064.13	2	532.07	10.26	<.001	.27
Error (within groups)	2860.23	56	51.07			

The ANOVA results reveal significant main effects of time on co-parenting quality (F(2, 56) = 12.89, p < .001, η^2 = .31) and interpersonal obsessive-compulsive symptoms (F(2, 56) = 9.87, p < .001, η^2 = .26). Significant group effects were found for both co-parenting quality (F(1, 56) = 33.96, p < .001, η^2 = .54) and interpersonal obsessive-compulsive symptoms (F(1, 56) = 25.71, p < .001, η^2 = .48). Additionally, the interaction between time and group was significant for both co-parenting quality (F(2, 56) = 11.61, p

< .001, η^2 = .28) and interpersonal obsessive-compulsive symptoms (F(2, 56) = 10.26, p < .001, η^2 = .27), indicating that changes over time were different between the intervention and control groups.

The Bonferroni post-hoc test results are presented in Table 3, showing pairwise comparisons for co-parenting quality and interpersonal obsessive-compulsive symptoms across the three time points within each group.

 Table 3

 Bonferroni Post-Hoc Test for Co-Parenting Quality and Interpersonal Obsessive-Compulsive Symptoms

Variable	Time Comparison	Mean Difference	SE	р
Co-Parenting Quality (Intervention)	Baseline - Post-Intervention	-10.25	1.54	<.001
	Baseline - Follow-Up	-8.13	1.58	<.001
	Post-Intervention - Follow-Up	2.12	1.57	.541
Co-Parenting Quality (Control)	Baseline - Post-Intervention	-0.87	1.52	1.000
	Baseline - Follow-Up	-0.73	1.51	1.000
	Post-Intervention - Follow-Up	0.13	1.53	1.000
Interpersonal OCD (Intervention)	Baseline - Post-Intervention	8.36	1.24	<.001
	Baseline - Follow-Up	6.13	1.25	<.001
	Post-Intervention - Follow-Up	-2.23	1.25	.318
Interpersonal OCD (Control)	Baseline - Post-Intervention	1.26	1.22	1.000
	Baseline - Follow-Up	0.86	1.21	1.000
	Post-Intervention - Follow-Up	-0.40	1.22	1.000

The Bonferroni post-hoc test results indicate that, within the intervention group, co-parenting quality significantly improved from baseline to post-intervention (mean difference = -10.25, p < .001) and from baseline to follow-up (mean difference = -8.13, p < .001). However, the difference between post-intervention and follow-up was not significant (mean difference = 2.12, p = .541). For interpersonal obsessive-compulsive symptoms, significant reductions were observed from baseline to post-intervention (mean difference = 8.36, p < .001) and from baseline to follow-up (mean difference between post-intervention and follow-up (mean difference between post-intervention and follow-up (mean difference = -2.23, p = .318). In contrast, the control group did not show significant changes across any time points for either variable.

These results demonstrate that SIT significantly improves co-parenting quality and reduces interpersonal obsessivecompulsive symptoms in mothers with OCD, with effects maintained at the four-month follow-up.

4. Discussion and Conclusion

The present study evaluated the effectiveness of Stress Inoculation Training (SIT) on co-parenting quality and interpersonal obsessive-compulsive symptoms in mothers with Obsessive-Compulsive Disorder (OCD). The results indicated that SIT significantly improved co-parenting quality and reduced interpersonal obsessive-compulsive symptoms in the intervention group compared to the control group. These findings align with previous research highlighting the impact of cognitive-behavioral interventions on stress and OCD symptoms (Chamberlain et al., 2016; Fischer et al., 2023).

The significant improvement in co-parenting quality observed in the intervention group suggests that SIT effectively enhances parenting interactions among mothers with OCD. Co-parenting involves coordinated efforts and mutual support between parents in raising their children, which can be disrupted by the obsessive and compulsive behaviors characteristic of OCD. The positive outcomes in co-parenting quality can be attributed to several components of the SIT program.

First, the psychoeducation provided during SIT sessions likely helped participants understand the impact of stress and OCD on their co-parenting behavior. Educating parents about the nature of OCD and its influence on family dynamics can demystify the disorder and reduce feelings of

isolation or guilt (Blum et al., 2022). This understanding is crucial for fostering a supportive co-parenting relationship.

Second, cognitive restructuring techniques taught in SIT enabled participants to challenge and modify dysfunctional thoughts related to parenting and co-parenting. By addressing perfectionistic beliefs and catastrophic thinking, mothers could adopt more realistic and flexible perspectives on their parenting roles (Aydin et al., 2012). This cognitive shift likely contributed to more positive and cooperative coparenting interactions.

Third, the problem-solving and communication skills emphasized in SIT sessions empowered mothers to handle co-parenting conflicts more effectively. Enhanced problem-solving abilities and assertive communication can reduce misunderstandings and foster a more collaborative approach to parenting (Chen et al., 2018). These skills are particularly important for parents with OCD, who may struggle with anxiety-driven communication patterns.

The findings are consistent with previous research demonstrating the benefits of cognitive-behavioral interventions for improving parenting practices and reducing parental stress. For instance, Levy et al. (2020) found that addressing parental self-vulnerabilities through cognitive-behavioral techniques led to improvements in parent-child relationships. Similarly, the current study's results highlight the potential of SIT to enhance co-parenting quality by equipping parents with effective stress management and interpersonal skills (Levy et al., 2020).

The significant reduction in interpersonal obsessive-compulsive symptoms in the intervention group indicates that SIT is effective in addressing the interpersonal dimensions of OCD. Interpersonal OCD symptoms, such as fears of harming others or excessive concerns about relationships, can severely impair social functioning and contribute to chronic stress (Sterk et al., 2011). The reduction in these symptoms can be attributed to the comprehensive approach of SIT, which targets both cognitive and behavioral aspects of OCD.

The relaxation techniques taught in SIT, such as deep breathing and progressive muscle relaxation, likely helped participants manage the physiological arousal associated with obsessive thoughts and compulsive behaviors. By reducing overall stress levels, these techniques can diminish the intensity and frequency of OCD symptoms (Chamberlain et al., 2016). Moreover, relaxation practices can provide immediate coping mechanisms during stressful interactions, thereby reducing the impact of interpersonal OCD symptoms on daily functioning.

Cognitive restructuring played a critical role in alleviating interpersonal OCD symptoms by helping participants challenge irrational beliefs and maladaptive thought patterns. Interpersonal schemas, such as fears of harming others or doubts about one's intentions, can drive obsessive-compulsive behaviors (Aydin et al., 2012). By restructuring these schemas, SIT enabled participants to develop more adaptive ways of thinking about their relationships, reducing the compulsive need for reassurance or checking behaviors.

Additionally, the emphasis on social support and self-care in SIT sessions likely contributed to the reduction in interpersonal OCD symptoms. Strengthening social networks and prioritizing self-care can enhance psychological resilience and provide a buffer against stress (Pruchno & Resch, 1989). For mothers with OCD, cultivating a supportive social environment can alleviate feelings of isolation and provide practical assistance in managing daily challenges.

The findings are supported by previous studies demonstrating the efficacy of cognitive-behavioral interventions in reducing OCD symptoms. For example, Fischer et al. (2023) found that cognitive-behavioral therapy effectively reduced symptom severity and improved treatment outcomes in individuals with OCD (Fischer et al., 2023). The current study extends these findings by showing that SIT, a specific form of cognitive-behavioral intervention, can significantly reduce interpersonal OCD symptoms in mothers, thereby enhancing their overall well-being.

The present study demonstrated that Stress Inoculation Training (SIT) significantly improves co-parenting quality and reduces interpersonal obsessive-compulsive symptoms in mothers with OCD. These findings are consistent with previous research and suggest that SIT is a valuable intervention for enhancing parenting interactions and alleviating OCD symptoms. The results have important implications for clinical practice, emphasizing the need to address co-parenting quality and incorporate cognitive-behavioral techniques in therapeutic approaches for parents with OCD.

Overall, the study highlights the promise of SIT as a practical and impactful intervention for mothers with OCD, offering hope for better management of stress and obsessive-compulsive symptoms and fostering healthier family dynamics.

5. Suggestions and Limitations

The significant improvements in co-parenting quality and reductions in interpersonal OCD symptoms observed in this study have important implications for clinical practice. First, the results underscore the utility of SIT as a valuable intervention for mothers with OCD. Mental health practitioners working with this population should consider incorporating SIT into their treatment protocols to address both stress management and OCD symptoms.

Second, the study highlights the importance of addressing co-parenting quality in therapeutic interventions for parents with OCD. Effective co-parenting is crucial for the healthy development of children and the well-being of parents. By enhancing co-parenting interactions, interventions like SIT can have a positive ripple effect on the entire family system, improving outcomes for both parents and children.

Third, the findings suggest that cognitive-behavioral techniques, such as cognitive restructuring and relaxation training, are essential components of effective OCD treatment. Practitioners should ensure that these techniques are included in their therapeutic approaches to provide comprehensive care for individuals with OCD.

Furthermore, the study emphasizes the need for long-term support and follow-up for parents with OCD. The fourmonth follow-up period demonstrated the sustainability of SIT's effects, indicating that continued practice and reinforcement of skills are necessary for maintaining improvements in co-parenting quality and OCD symptoms. Clinicians should consider providing booster sessions or ongoing support to ensure lasting benefits for their clients.

While the current study provides valuable insights into the effectiveness of SIT for mothers with OCD, several areas warrant further investigation. Future research should explore the long-term effects of SIT beyond the four-month followup period to assess the durability of the intervention's impact. Additionally, studies with larger sample sizes and diverse populations are needed to generalize the findings to a broader range of individuals with OCD.

It would also be beneficial to examine the specific mechanisms through which SIT exerts its effects on coparenting quality and interpersonal OCD symptoms. Understanding the mediating and moderating factors, such as changes in cognitive appraisals or improvements in social support, can enhance the development of targeted interventions for this population.

Moreover, future studies should investigate the potential of combining SIT with other therapeutic approaches, such as pharmacotherapy or family-based interventions, to determine whether integrated treatment models offer additional benefits. Combining SIT with pharmacotherapy, for example, could address both the cognitive-behavioral and neurobiological aspects of OCD, potentially leading to more comprehensive and effective treatment outcomes.

Several limitations should be considered when interpreting the results of this study. First, the sample size was relatively small, which may limit the generalizability of the findings. Future research with larger and more diverse samples is necessary to confirm the results and extend their applicability. Second, the study relied on self-report measures, which may be subject to response biases. Incorporating objective assessments or reports from multiple informants, such as partners or therapists, could provide a more comprehensive evaluation of co-parenting quality and OCD symptoms.

Additionally, the study did not include a placebo or alternative intervention control group, making it difficult to attribute the observed effects solely to SIT. Future research should consider comparing SIT with other evidence-based interventions to establish its relative efficacy and identify specific components that contribute to its effectiveness.

Despite these limitations, the study's findings provide strong support for the use of SIT in improving co-parenting quality and reducing interpersonal OCD symptoms in mothers. The significant results underscore the potential of cognitive-behavioral interventions to address the unique challenges faced by parents with OCD and highlight the importance of incorporating stress management and interpersonal skills training into therapeutic approaches.

Authors' Contributions

All authors have contributed significantly to the research process and the development of the manuscript.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

Acknowledgments

We would like to express our gratitude to all individuals helped us to do the project.



Declaration of Interest

The authors report no conflict of interest.

Funding

This research was carried out independently with personal funding and without the financial support of any governmental or private institution or organization.

Ethical Considerations

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

References

- Algin, S., Arafat, S. M. Y., Kushal, S. A., Ahmed, S. N., & Sajib, M. W. H. (2018). Variation in Obsessive-Compulsive Symptoms Between Children and Adults. *Bangabandhu Sheikh Mujib Medical University Journal*, 11(2), 130. https://doi.org/10.3329/bsmmuj.v11i2.36510
- Aydin, A., Boysan, M., Tutarel-Kislak, S., Kalafat, T., Selvi, Y., & Beşiroğlu, L. (2012). The Predictive Value of Interpersonal Schemas, Perfectionism, and Thought Action-Fusion in Obsessive-Compulsive Disorder / Obsesif-Kompulsif Bozuklukta Kişilerarası Şemalar, Mükemmeliyetçilik Ve Düşünce-Eylem Kaynaşmasının Yordayıcı Rolü. *Dusunen Adam the Journal of Psychiatry and Neurological Sciences*, 108-118. https://doi.org/10.5350/dajpn2012250202
- Behere, P. B., Raikar, P. R., Chowdhury, D., Behere, A. P., & Yadav, R. (2021). Schizophrenia With Co-Morbid Obsessive-Compulsive Disorder: A Case Series. *Journal of Pharmaceutical Research International*, 69-74. https://doi.org/10.9734/jpri/2021/v33i34b31849
- Blum, S., Mack, J. T., Weise, V., Kopp, M., Asselmann, E., Martini, J., & Garthus-Niegel, S. (2022). The Impact of Postpartum Obsessive-Compulsive Symptoms on Child Development and the Mediating Role of the Parent-child Relationship: A Prospective Longitudinal Study. Frontiers in Psychiatry, 13. https://doi.org/10.3389/fpsyt.2022.886347
- Chamberlain, S. R., Leppink, E. W., Redden, S. A., & Grant, J. E. (2016). Are Obsessive—compulsive Symptoms Impulsive, Compulsive or Both? *Comprehensive Psychiatry*, 68, 111-118. https://doi.org/10.1016/j.comppsych.2016.04.010
- Chen, I. J., Hu, M., Zhang, H., & Guo, Z. (2018). The Effect of Parenting Behavior on the Obsessive-Compulsive Symptom of College Students: The Mediating Role of Perfectionism. Creative Education, 09(05), 758-778. https://doi.org/10.4236/ce.2018.95057
- Delvecchio, E., Sciandra, A., Finos, L., Mazzeschi, C., & Riso, D.
 D. (2015). The Role of Co-Parenting Alliance as a Mediator Between Trait Anxiety, Family System Maladjustment, and Parenting Stress in a Sample of Non-Clinical Italian Parents.
 Frontiers in psychology, 6. https://doi.org/10.3389/fpsyg.2015.01177

- Doron, G., Derby, D. S., & Szepsenwol, O. (2014). Relationship obsessive compulsive disorder (ROCD): A conceptual framework. *Journal of Obsessive-Compulsive and Related Disorders*, 3(2), 169-180. https://www.sciencedirect.com/science/article/pii/S22113649 13000924
- Fischer, M. S., Baucom, D. H., Abramowitz, J. S., & Baucom, B. R. (2023). Interpersonal Emotion Dynamics in Obsessive—compulsive Disorder: Associations With Symptom Severity, Accommodation, and Treatment Outcome. *Couple and Family Psychology Research and Practice*, 12(4), 278-286. https://doi.org/10.1037/cfp0000218
- Gorelik, M., Szepsenwol, O., & Doron, G. (2023). Promoting couples' resilience to relationship obsessive compulsive disorder (ROCD) symptoms using a CBT-based mobile application: A randomized controlled trial. *Heliyon*, 9(11). https://doi.org/10.1016/j.heliyon.2023.e21673
- Guo, J., Huang, X., Zheng, A., Chen, W., Lei, Z., Tang, C., Chen, H., Ma, H., & Li, X. (2022). The Influence of Self-Esteem and Psychological Flexibility on Medical College Students' Mental Health: A Cross-Sectional Study. Frontiers in Psychiatry, 13. https://doi.org/10.3389/fpsyt.2022.836956
- Han, J. W., & Lee, H. (2019). Actor and Partner Effects of Parenting Stress and Co-Parenting of Parents of Children With Atopic Dermatitis on Marital Conflict: Multiple-Group Analysis Based on Mother's Employment Status. https://doi.org/10.21203/rs.2.17826/v1
- Hasanzadeh, L. M., Tarkhan, M., & Taghizadeh, M. (2013). Effectiveness of stress inoculation training on perceived stress in pregnant women with infertility. *Journal of Holistic Nursing And Midwifery*, 23(2), 27-34. https://www.magiran.com/paper/1184201
- Katz, L. F., & Low, S. M. (2004). Marital violence, co-parenting, and family-level processes in relation to children's adjustment. *Journal of Family Psychology*, 18(2), 372. https://psycnet.apa.org/record/2004-14778-013
- Levy, A., Tibi, L., Szepsenwol, O., & Doron, G. (2020). "Why Do I Obsess About My Child's Flaws?": Assessing the Role of Parental Self-vulnerabilities in Parent–child Relationship Obsessive Compulsive Disorder (ROCD) Symptoms. *Clinical Psychologist*, 24(3), 285-293. https://doi.org/10.1111/cp.12217
- Lucarelli, L., Ammaniti, M., Porreca, A., & Simonelli, A. (2017).
 Infantile Anorexia and Co-parenting: A Pilot Study on Mother–Father–Child Triadic Interactions during Feeding and Play [Original Research]. Frontiers in psychology, 8. https://doi.org/10.3389/fpsyg.2017.00376
- Pontillo, M., Demaria, F., Tata, M. C., Averna, R., Gargiullo, P., Pucciarini, M. L., Santonastaso, O., Boldrini, T., Tozzi, A. E., & Vicari, S. (2020). Clinical Significance of Family Accommodation and Parental Psychological Distress in a Sample of Children and Adolescents With Obsessive-Compulsive Disorder Aged 8-17 Years Old. *Italian Journal of Pediatrics*, 46(1). https://doi.org/10.1186/s13052-020-00932-2
- Pruchno, R., & Resch, N. L. (1989). Mental Health of Caregiving Spouses: Coping as Mediator, Moderator, or Main Effect? Psychology and Aging, 4(4), 454-463. https://doi.org/10.1037/0882-7974.4.4.454
- Qian, Y., Chen, F., & Yuan, C. (2020). The effect of co-parenting on children's emotion regulation under fathers' perception: A moderated mediation model of family functioning and marital satisfaction. *Children and Youth Services Review*, 119, 105501. https://doi.org/10.1016/j.childyouth.2020.105501
- Sterk, B., Lankreijer, K., Linszen, D., & Haan, L. d. (2011). Obsessive—Compulsive Symptoms in First Episode Psychosis

AFTJ
Applied Family Therapy Journal
F-ISSN: 3041-8798

- and in Subjects at Ultra High Risk for Developing Psychosis; Onset and Relationship to Psychotic Symptoms. *Australian & New Zealand Journal of Psychiatry*, 45(5), 400-406. https://doi.org/10.3109/00048674.2010.533363
- Sun, Y., Chen, G., Wang, L., Li, N., Srisurapanont, M., Hong, J. P., Hatim, A., Chen, C. H., Udomratn, P., Bae, J. N., Fang, Y., Chua, H. C., Liu, S. I., George, T., Bautista, D., Chan, E., Rush, A. J., Hong, Y., Su, Y. A., & Si, T. (2019). Perception of Stigma and Its Associated Factors Among Patients With Major Depressive Disorder: A Multicenter Survey From an Asian Population. Frontiers in Psychiatry, 10. https://doi.org/10.3389/fpsyt.2019.00321
- Tümkaya, S., Karadag, F., Oguzanoglu, N., & Oğuzhanoğlu, N. K. (2015). Relationship Between Obsessive Beliefs and Symptoms in Patients With Obsessive Compulsive Disorder. Nöro Psikiyatri Arşivi, 52(1), 54-58. https://doi.org/10.5152/npa.2015.7015
- Vicheva, P., Butler, M., & Shotbolt, P. (2020). Deep brain stimulation for obsessive-compulsive disorder: A systematic review of randomised controlled trials. *Neuroscience & Biobehavioral Reviews*, 109, 129-138. https://doi.org/10.1016/j.neubiorev.2020.01.007