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Comparing the Effectiveness of Mentalization-Based Therapy and Emotion-Focused Therapy on Obsessive-Compulsive Symptoms and Caregiving Burden in Mothers of Children with Attention-Deficit/Hyperactivity Disorder

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ABSTRACT

This study aimed to compare the effectiveness of mentalization-based therapy and emotion-focused therapy on obsessive-compulsive symptoms and caregiving burden among mothers of children with attention-deficit/hyperactivity disorder. This quasi-experimental study used a pretest-posttest-follow-up design with two experimental groups and one control group. The statistical population included mothers of children aged 6 to 12 years diagnosed with attention-deficit/hyperactivity disorder who had attended clinics in Tehran during the previous year. Forty-five participants were selected through voluntary sampling and randomly assigned to mentalization-based therapy, emotion-focused therapy, and control groups. Data were collected using the Maudsley Obsessive-Compulsive Inventory and the Caregiving Burden Scale. Assessments were conducted at pretest, posttest, and three-month follow-up. Data were analyzed using descriptive statistics, repeated-measures mixed analysis of variance, tests of variance homogeneity, and Bonferroni post hoc comparisons in SPSS version 26. The between-group analysis showed no significant differences among the three groups in obsessive-compulsive symptom components, including checking ($F=1.376$, $p=.264$, $\eta^2=.061$), washing ($F=1.202$, $p=.311$, $\eta^2=.054$), slowness-repetition ($F=2.158$, $p=.128$, $\eta^2=.093$), and doubt-conscientiousness ($F=.518$, $p=.599$, $\eta^2=.024$). For caregiving burden, significant between-group effects were found for general strain ($F=8.067$, $p=.001$, $\eta^2=.278$) and hopelessness ($F=6.335$, $p=.004$, $\eta^2=.232$), whereas loneliness, emotional involvement, and environmental burden were not significant. Bonferroni comparisons indicated significant differences in general strain between mentalization-based therapy and emotion-focused therapy ($p=.014$) and between mentalization-based therapy and control ($p=.001$). Hopelessness differed significantly between mentalization-based therapy and control ($p=.003$). Mentalization-based therapy and emotion-focused therapy did not produce significant between-group effects on obsessive-compulsive symptoms, but mentalization-based therapy showed stronger effectiveness in reducing selected dimensions of caregiving burden, particularly general strain and hopelessness.

Keywords: Mentalization-Based Therapy; Emotion-Focused Therapy; Obsessive-Compulsive Symptoms; Caregiving Burden; Attention-Deficit/Hyperactivity Disorder; Mothers

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Introduction

Attention-deficit/hyperactivity disorder (ADHD) is one of the most common neurodevelopmental disorders of childhood and is characterized by persistent patterns of inattention, hyperactivity, and impulsivity that are developmentally inappropriate and interfere with academic, social, familial, and behavioral functioning. Although ADHD is clinically diagnosed in the child, its consequences are rarely limited to the child alone. The disorder affects the entire family system, particularly mothers, who often assume the primary caregiving role and face the continuous demands of behavioral supervision, emotional regulation, educational follow-up, conflict management, and coordination with schools and treatment centers. The chronicity of ADHD-related difficulties makes caregiving a prolonged and multidimensional stressor, especially when children display challenging behaviors, emotional dysregulation, noncompliance, and difficulties in peer and family relationships. In this context, the psychological functioning of mothers becomes a central issue, because maternal distress can both result from and contribute to the persistence of maladaptive parent-child interaction patterns.

Parents of children with ADHD frequently encounter repeated and unpredictable behavioral challenges, including impulsive reactions, difficulty following rules, low frustration tolerance, restlessness, academic disorganization, and emotional outbursts. These symptoms require constant monitoring and can reduce mothers' perceived competence in caregiving. Studies on families of children with ADHD have shown that parental stress is influenced by the severity of child symptoms, family resources, parenting beliefs, and the availability of emotional and social support. In particular, parenting stress among families of children with ADHD has been associated with the practical and emotional demands of managing the child's daily behavior, educational difficulties, and interpersonal problems (1). Similarly, parents who manage children with challenging behaviors often describe caregiving as a demanding process that requires continuous adaptation, emotional endurance, and problem-solving under pressure (2). Therefore, the family burden associated with ADHD must be understood not only as a consequence of the child's symptoms but also as a relational and emotional condition that affects the mental health of caregivers.

Among family members, mothers often experience the most direct exposure to caregiving burden because they are commonly responsible for daily routines, school-related responsibilities, emotional support, and behavioral control. Caregiving burden refers to the physical, psychological, emotional, social, and environmental strain that emerges when a caregiver must continuously respond to the needs of a dependent family member. In mothers of children with ADHD, this burden may appear as fatigue, helplessness, loneliness, irritability, emotional overinvolvement, and a reduced sense of personal control. Social support has been repeatedly identified as a protective factor in family and caregiving contexts. Mothers of children diagnosed with ADHD may experience lower perceived social support and higher levels of burnout, which can negatively influence their child-rearing attitudes and psychological adjustment (3). Broader family research also indicates that social support, self-esteem, depression, and anxiety are closely interrelated, suggesting that insufficient relational resources may intensify psychological vulnerability in parents exposed to chronic stress (4). Accordingly, caregiving burden in mothers of children with ADHD is not merely a practical problem but also an emotional and relational phenomenon.

One of the psychological manifestations that may become intensified under chronic caregiving stress is obsessive-compulsive symptomatology. Obsessive-compulsive symptoms include intrusive thoughts,

repetitive doubts, checking, washing, slowness, repetition, and compulsive behaviors performed to reduce anxiety or prevent feared outcomes. In caregiving contexts, especially when mothers are continuously concerned about the safety, behavior, performance, and future of their child, repetitive worry and compulsive control strategies may become more salient. Although obsessive-compulsive disorder is a distinct clinical condition, obsessive-compulsive symptoms can exist dimensionally and may be exacerbated by emotional dysregulation, intolerance of uncertainty, anger, impulsivity, and maladaptive coping patterns. Recent evidence has emphasized the role of difficulties in emotion regulation, impulsivity, and anger in predicting obsessive-compulsive disorder symptoms, highlighting the emotional mechanisms that may contribute to obsessive-compulsive tendencies (5). From a clinical perspective, obsessive-compulsive symptoms must be conceptualized through both cognitive and emotional mechanisms, because compulsive control often functions as an attempt to manage internal distress, uncertainty, and threat perception. Psychiatric terminology also emphasizes that obsessive and compulsive phenomena include both intrusive mental content and repetitive behavioral responses, making comprehensive assessment necessary in clinical and research settings (6).

The psychological vulnerability of mothers of children with ADHD may also be understood through the construct of resilience. Resilience refers to the dynamic capacity to adapt, recover, and maintain functioning in the face of adversity. In caregiving situations, resilience is not a fixed trait but an adaptive process shaped by biological, psychological, relational, and contextual factors. Contemporary resilience research emphasizes the need for precise conceptualization, multidimensional measurement, and attention to the mechanisms through which individuals maintain or regain psychological balance after stress exposure (7). Biological and genomic perspectives also suggest that resilience is a complex construct influenced by interactions between individual vulnerabilities and environmental conditions (8). For mothers of children with ADHD, resilience may determine whether caregiving demands lead to chronic psychological burden or become manageable through flexible coping, emotional awareness, reflective functioning, and social support. Therefore, interventions that enhance emotional processing and reflective capacities may indirectly reduce caregiving burden and psychological symptoms.

The importance of psychological interventions for parents of children with ADHD has been increasingly emphasized in recent literature. Parent-focused interventions seek to improve not only child outcomes but also parental self-efficacy, psychological flexibility, emotional regulation, and the quality of parent-child interactions. For example, acceptance and commitment-based parenting training has been investigated for improving parent-child interaction, maternal self-efficacy, and psychological flexibility among mothers of children with ADHD (9). Schema therapy has also been applied to mothers of children with ADHD to target distress tolerance, resilience, emotion regulation, and parenting styles, reflecting the growing recognition that parental schemas and emotional patterns are important therapeutic targets (10). Moreover, randomized clinical evidence comparing emotion-focused and behavioral parent training in families of school-aged children with ADHD indicates that parent-oriented treatment models are increasingly being examined as structured approaches for improving family functioning and parental adjustment (11). Similarly, online mindfulness-based intervention protocols for parents of children with ADHD demonstrate the expansion of accessible and preventive intervention formats for this population (12). These developments suggest that

intervention research in ADHD is moving beyond child symptom management toward the emotional and relational functioning of parents.

Mindfulness-based and reflective parenting interventions are especially relevant because ADHD-related parenting requires the ability to pause, observe, interpret, and respond rather than react automatically. Previous research on mindful parenting, social thinking, and exercise has shown that psychological and behavioral interventions can improve quality of life in children with ADHD, suggesting that interventions targeting awareness, regulation, and social cognition may benefit the broader ADHD-related family system (13). However, when mothers themselves experience obsessive-compulsive symptoms and caregiving burden, interventions must specifically address the psychological processes that maintain distress. Two therapeutic approaches appear particularly relevant in this respect: mentalization-based therapy and emotion-focused therapy. Both approaches attend to internal experience, interpersonal meaning, emotional regulation, and the transformation of maladaptive responses, but they do so through different conceptual and clinical mechanisms.

Mentalization-based therapy is rooted in the concept of mentalization, which refers to the capacity to understand one's own behavior and the behavior of others in terms of intentional mental states, including feelings, beliefs, desires, needs, and goals. Mentalization allows individuals to interpret interpersonal events with flexibility rather than certainty, to regulate emotional arousal, and to maintain a coherent sense of self and other under stress. Bateman and Fonagy describe mentalization-based treatment as a structured therapeutic approach designed to strengthen reflective functioning and improve the capacity to understand mental states in emotionally charged interpersonal contexts (14). The mechanisms of change in mentalization-based therapy are closely related to improving the individual's ability to identify and reflect on internal experiences, reduce misinterpretations of others' intentions, and maintain psychological balance during relational stress (15). For mothers of children with ADHD, this therapeutic approach may be especially valuable because child behaviors are often intense, ambiguous, and frustrating. When a mother can interpret a child's impulsivity, inattentiveness, or defiance through a more reflective lens, she may experience less anger, helplessness, and compulsive control, thereby reducing caregiving strain.

Mentalization-based approaches have also been extended to children and families, emphasizing the developmental importance of understanding mental states in parent-child relationships. Mentalization-based treatment for children and families provides a time-limited framework for strengthening reflective capacities and improving relational functioning (16). In the context of ADHD, the mother's ability to mentalize can be repeatedly disrupted by child-related stressors, such as behavioral dysregulation, school problems, and social difficulties. Under high arousal, mothers may shift from reflective understanding to automatic assumptions, such as interpreting the child's behavior as intentional disobedience, personal failure, or uncontrollable threat. Such interpretations may intensify obsessive checking, excessive monitoring, repeated reassurance-seeking, and caregiving exhaustion. Therefore, mentalization-based therapy may reduce psychological burden by helping mothers distinguish between observable behavior and inferred intention, tolerate uncertainty, and respond to the child's needs with greater emotional clarity and flexibility.

Emotion-focused therapy represents another clinically relevant approach for mothers of children with ADHD. This therapy is based on the assumption that emotions are central to psychological organization,

meaning-making, self-experience, and interpersonal functioning. Emotion-focused therapy aims to help individuals access, symbolize, regulate, transform, and make adaptive use of emotional experience. Greenberg and Watson conceptualize emotion-focused therapy as a treatment model that works directly with emotional processing and emotional transformation, particularly in conditions where maladaptive emotional schemes maintain psychological distress (17). In mothers exposed to chronic caregiving stress, emotions such as guilt, shame, anger, fear, sadness, and helplessness may become either suppressed or expressed in maladaptive forms. If these emotions are not processed effectively, they may contribute to anxiety, compulsive behavior, interpersonal tension, and caregiving burden. Therefore, emotion-focused therapy may help mothers identify primary and secondary emotions, transform maladaptive emotional responses, and develop more compassionate and regulated responses toward themselves and their children.

Empirical support for emotion-focused and emotional therapies has grown across different clinical populations. Emotional therapy has been shown to reduce anxiety, depression, and difficulty in emotion regulation, demonstrating its relevance for psychological problems maintained by maladaptive emotional processing (18). Although such findings are not specific to mothers of children with ADHD, they support the broader assumption that interventions targeting emotion regulation can reduce psychological distress. In the context of the present study, emotion-focused therapy may be expected to reduce obsessive-compulsive symptoms and caregiving burden by helping mothers process anxiety, frustration, and emotional exhaustion more adaptively. This is particularly important because caregiving burden often contains both external demands and internal emotional reactions. Without emotional processing, mothers may rely on repetitive control, avoidance, overprotection, or emotional withdrawal, all of which can maintain psychological distress.

Despite the theoretical relevance of both mentalization-based therapy and emotion-focused therapy, comparative research on their effectiveness among mothers of children with ADHD remains limited. Existing parent-focused interventions have largely emphasized behavioral management, mindfulness, acceptance, schema change, or general parenting skills, while fewer studies have directly compared interventions that target reflective functioning and emotional processing. This gap is important because mothers of children with ADHD may require more than behavioral training; they may need interventions that address how they interpret child behavior, regulate emotional arousal, tolerate uncertainty, and process caregiving-related distress. Obsessive-compulsive symptoms and caregiving burden are clinically meaningful outcomes because they reflect both individual psychological vulnerability and the strain of the caregiving relationship. Comparing mentalization-based therapy and emotion-focused therapy can therefore clarify whether strengthening reflective functioning or transforming emotional experience is more effective in reducing these maternal difficulties.

Given the chronic and multidimensional demands of caring for a child with ADHD, identifying effective psychological interventions for mothers is essential for improving both maternal well-being and family functioning. Mothers who experience lower caregiving burden may be better able to respond calmly and consistently to their children, maintain supportive interactions, and engage more effectively in therapeutic and educational planning. Likewise, reducing obsessive-compulsive symptoms may decrease maladaptive control strategies and improve psychological flexibility in caregiving. Therefore, examining the comparative

effectiveness of mentalization-based therapy and emotion-focused therapy can contribute to both clinical practice and intervention research in families of children with ADHD.

The present study aimed to compare the effectiveness of mentalization-based therapy and emotion-focused therapy on obsessive-compulsive symptoms and caregiving burden among mothers of children with attention-deficit/hyperactivity disorder.

Methods and Materials

Study Design and Participants

The present study was conducted using a quasi-experimental design with a three-group pretest, posttest, and follow-up structure. The statistical population consisted of all mothers of children aged 6 to 12 years with attention-deficit/hyperactivity disorder who had attended clinical centers in Tehran during the previous year. The final sample included 45 mothers of children with ADHD, whose children included 23 girls and 22 boys. Participants were selected through voluntary sampling and were then randomly assigned to three groups: mentalization-based therapy, emotion-focused therapy, and control. For sampling, treatment clinics in Tehran were first categorized according to six urban regions. Then, several clinics were selected using simple random sampling, and six clinics, including Mehr Clinic, Zendegi-e Khob Clinic, Mehrsa Clinic, Shayesteh Clinic, Sadeghoun Clinic, and Baran Clinic, were chosen for recruitment. During a six-month period, the researcher attended the selected clinics three days per week. Psychiatrists and psychologists working in these centers were informed about the study and referred children aged 6 to 12 years with symptoms of attention-deficit/hyperactivity disorder to the research therapist. The children were then evaluated using the DSM-5-based K-SADS-PL diagnostic interview form and clinical diagnostic interviews conducted by collaborating psychologists and psychiatrists. After diagnosis, assessment of eligibility criteria, and confirmation of participation conditions, the therapist provided informed consent forms to the parents. Mothers who agreed to participate and signed the consent form entered the intervention process as members of the research sample.

Data Collection

The Maudsley Obsessive-Compulsive Inventory was used to assess obsessive-compulsive symptoms. This questionnaire was developed by Hodgson and Rachman in 1977 to examine the type and domain of obsessive problems. It consists of 30 true-false items, half keyed as true and half keyed as false, and includes four subscales: checking, washing, slowness-repetition, and doubt-conscientiousness. In its initial validation at Maudsley Hospital, the questionnaire was able to distinguish 50 patients with obsessive-compulsive symptoms from 50 neurotic patients. Subsequent content analysis of responses from 100 patients identified four major components corresponding to different forms of obsessive complaints. The instrument is brief and easy to administer and is considered useful for assessing treatment-related changes, although it contains only two items directly related to obsessive thoughts and does not measure the severity of disability caused by symptoms. Previous studies have confirmed its validity and reliability in clinical samples. In Iran, the reliability of the instrument has been reported as acceptable, with a coefficient of .89. In scoring, each response consistent with the scoring key receives one point, whereas inconsistent responses receive zero; higher scores indicate a wider range of obsessive-compulsive symptoms.

The Caregiving Burden Scale was used to assess caregiving burden among mothers. This questionnaire, derived from the work of Elmståhl and colleagues in 1996, contains 22 items and measures five domains of caregiving burden: general strain, isolation or loneliness, disappointment or hopelessness, emotional involvement, and environment. The Persian version of the scale has undergone validation and normalization, and its psychometric properties have been reported as satisfactory. Internal consistency has been assessed using Cronbach's alpha, with an overall reliability coefficient of .93. Criterion validity was examined through correlations between the Persian version of the caregiving burden instrument and the Persian versions of the Beck Anxiety Inventory and Beck Depression Inventory. Reliability was also evaluated using internal consistency and test-retest methods. In the test-retest procedure, a group of participants completed the questionnaire twice with a two-week interval, and the intraclass correlation coefficient was used to examine stability. The reported test-retest reliability coefficient was .96. Evidence from previous validation work supports the face validity, construct validity, internal consistency, and stability of the questionnaire; therefore, it was considered appropriate for measuring caregiving burden in the present study.

Interventions

The mentalization-based therapy protocol was implemented as a group intervention for mothers in the corresponding experimental group. The intervention focused on strengthening mothers' capacity to understand their own mental states and the mental states of their children, including thoughts, feelings, wishes, intentions, and emotional needs. Sessions emphasized increasing awareness of the relationship between internal experiences and observable behavior, especially in the context of managing children with attention-deficit/hyperactivity disorder. The therapeutic process encouraged participants to pause before reacting, consider multiple possible meanings behind their child's behavior, and distinguish between emotional assumptions and actual interpersonal cues. The intervention also targeted reflective functioning, regulation of affective responses, and the development of a more coherent understanding of self and child within stressful caregiving situations. Through therapist-guided discussion, experiential reflection, and group interaction, mothers were helped to identify moments in which intense stress, anger, worry, or helplessness disrupted their ability to mentalize and to replace automatic reactions with more reflective and adaptive responses.

The emotion-focused therapy protocol was delivered as a group intervention for mothers assigned to the second experimental group. This intervention was based on the central role of emotions in psychological functioning, interpersonal relationships, and caregiving adaptation. The sessions were designed to help mothers recognize, access, label, tolerate, and regulate their emotional experiences in relation to caring for a child with attention-deficit/hyperactivity disorder. The therapeutic process focused on identifying maladaptive emotional patterns, transforming secondary or reactive emotions, increasing emotional acceptance, and facilitating access to adaptive primary emotions such as sadness, compassion, assertive anger, and unmet relational needs. Mothers were encouraged to explore how emotional avoidance, suppression, guilt, anxiety, and frustration contributed to psychological distress and caregiving burden. The therapist used empathic attunement, experiential exploration, emotional awareness exercises, and meaning reconstruction to help participants process difficult caregiving-related emotions and develop more adaptive

emotional responses toward themselves and their children. The control group did not receive either of the two therapeutic interventions during the active phase of the study.

Data Analysis

Data were analyzed using both descriptive and inferential statistical methods. Descriptive statistics, including frequency, mean, and standard deviation, were used to summarize demographic characteristics and the scores of the research variables across the pretest, posttest, and follow-up stages. Before conducting inferential analyses, statistical assumptions were examined, including the normality of score distributions and homogeneity of variances. The Shapiro-Wilk test was used to evaluate normality, and the results indicated that the distributions of the main study variables were normal, allowing the use of parametric tests. To examine changes over time and compare the effectiveness of the interventions, mixed repeated-measures analysis of variance was applied. This approach made it possible to evaluate within-group changes across the three measurement stages as well as between-group differences among the mentalization-based therapy, emotion-focused therapy, and control groups. When significant effects were observed, Bonferroni post hoc comparisons were used to determine the specific differences between groups and between assessment stages. All statistical analyses were conducted using SPSS version 26, and the level of statistical significance was set at .05.

Findings and Results

The study sample consisted of 45 mothers of children diagnosed with attention-deficit/hyperactivity disorder who were randomly assigned to three groups: mentalization-based therapy, emotion-focused therapy, and control. Each group included 15 participants. The children of the participating mothers were aged 6 to 12 years and had been referred to selected clinics in Tehran with symptoms of attention-deficit/hyperactivity disorder. In terms of the children's gender distribution, the sample included 23 girls and 22 boys. The three study groups were assessed at three measurement stages, including pretest, posttest, and follow-up.

Table 1. Descriptive Statistics of Obsessive-Compulsive Symptoms and Caregiving Burden Across Groups and Measurement Stages

Variable	Group	Pretest M	Pretest SD	Posttest M	Posttest SD	Follow-up M	Follow-up SD
Checking	Mentalization-based therapy	1.67	0.617	1.13	0.352	1.13	0.352
Checking	Emotion-focused therapy	1.13	0.516	1.07	0.258	1.07	0.258
Checking	Control	1.20	0.414	1.13	0.516	1.13	0.516
Washing	Mentalization-based therapy	1.80	1.082	3.67	0.488	3.67	0.488
Washing	Emotion-focused therapy	2.87	1.125	3.47	0.516	3.47	0.516
Washing	Control	3.33	0.724	3.40	0.632	3.40	0.632
Slowness-repetition	Mentalization-based therapy	2.47	1.506	1.40	0.632	1.40	0.632
Slowness-repetition	Emotion-focused therapy	2.20	1.320	1.80	1.082	1.80	1.082
Slowness-repetition	Control	1.33	0.816	1.27	0.704	1.27	0.704
Doubt-conscientiousness	Mentalization-based therapy	2.87	0.834	1.93	0.704	1.93	0.704

Doubt-conscientiousness	Emotion-focused therapy	2.27	0.704	1.93	0.961	2.20	1.424
Doubt-conscientiousness	Control	2.00	0.845	1.93	0.884	1.93	0.884
Total obsessive-compulsive symptoms	Mentalization-based therapy	8.80	2.111	8.13	1.407	8.00	1.363
Total obsessive-compulsive symptoms	Emotion-focused therapy	8.47	1.552	8.27	1.981	8.20	1.971
Total obsessive-compulsive symptoms	Control	7.93	1.163	7.80	1.265	7.87	1.187
General strain	Mentalization-based therapy	21.47	3.204	14.93	2.492	14.93	2.492
General strain	Emotion-focused therapy	16.73	3.555	13.47	2.503	13.47	2.503
General strain	Control	13.80	1.699	13.87	1.642	13.87	1.642
Loneliness	Mentalization-based therapy	8.33	1.799	5.93	1.335	5.93	1.335
Loneliness	Emotion-focused therapy	6.87	1.598	5.40	1.121	5.40	1.121
Loneliness	Control	6.20	1.082	6.07	1.100	6.07	1.100
Hopelessness	Mentalization-based therapy	12.80	1.424	9.27	1.335	9.27	1.335
Hopelessness	Emotion-focused therapy	10.93	2.154	8.80	1.568	8.80	1.568
Hopelessness	Control	8.40	1.502	8.47	1.598	8.47	1.598
Emotional involvement	Mentalization-based therapy	8.27	1.387	6.20	1.265	6.20	1.265
Emotional involvement	Emotion-focused therapy	6.53	1.807	5.67	1.543	5.67	1.543
Emotional involvement	Control	6.00	1.309	5.87	1.187	5.87	1.187
Environment	Mentalization-based therapy	8.73	1.223	5.93	1.223	5.93	1.223
Environment	Emotion-focused therapy	7.40	1.724	5.27	1.831	5.27	1.831
Environment	Control	5.80	1.474	5.73	1.486	5.73	1.486
Total caregiving burden	Mentalization-based therapy	59.07	6.724	42.27	5.496	41.33	5.314
Total caregiving burden	Emotion-focused therapy	48.60	8.484	38.60	4.896	38.20	5.088
Total caregiving burden	Control	40.47	4.627	40.93	3.390	40.20	4.586

As shown in Table 1, the mean scores of most obsessive-compulsive symptom components decreased from pretest to posttest and follow-up in both intervention groups, except for washing, which increased in both mentalization-based therapy and emotion-focused therapy groups. The reduction in checking, slowness-repetition, doubt-conscientiousness, and total obsessive-compulsive symptoms was descriptively greater in the mentalization-based therapy group than in the emotion-focused therapy group. The control group showed only minor changes across the three measurement stages. Regarding caregiving burden, the mean scores of general strain, loneliness, hopelessness, emotional involvement, environment, and total caregiving burden decreased from pretest to posttest and follow-up in both treatment groups. These reductions were descriptively stronger in the mentalization-based therapy group than in the emotion-focused therapy group, while the control group remained relatively stable across time.

The assumptions for parametric analysis were examined before testing the research hypotheses. The Shapiro-Wilk test indicated that the distribution of the main study variables was normal across the three groups. For obsessive-compulsive symptoms, the significance values were .109 in the mentalization-based therapy group, .071 in the emotion-focused therapy group, and .278 in the control group. For caregiving burden, the values were .574, .519, and .514, respectively. The normality assumption was also supported for

resilience and psychophysical vulnerability, with all significance values exceeding .05. Therefore, the data met the normality assumption, and parametric statistical procedures were considered appropriate for hypothesis testing.

Table 2. Analysis of Variance for Between-Group Effects on Obsessive-Compulsive Symptoms and Caregiving Burden

Variable	Sum of Squares	df	Mean Square	F	p	Effect Size
Checking	1.170	2	0.585	1.376	.264	.061
Washing	2.593	2	1.296	1.202	.311	.054
Slowness-repetition	9.970	2	4.985	2.158	.128	.093
Doubt-conscientiousness	1.911	2	0.956	0.518	.599	.024
General strain	265.615	2	132.807	8.067	.001	.278
Loneliness	17.244	2	8.622	1.929	.158	.084
Hopelessness	90.133	2	45.067	6.335	.004	.232
Emotional involvement	27.437	2	13.719	2.627	.084	.111
Environment	31.111	2	15.556	2.386	.104	.103

As presented in Table 2, the between-group effects for the obsessive-compulsive symptom components were not statistically significant. Specifically, no significant differences were found among the mentalization-based therapy, emotion-focused therapy, and control groups in checking, washing, slowness-repetition, or doubt-conscientiousness. Therefore, the results did not support a significant differential effect of the two interventions on obsessive-compulsive symptom components. In contrast, significant between-group effects were observed for two components of caregiving burden. The results showed significant group differences in general strain, $F=8.067$, $p=.001$, $\eta^2=.278$, and hopelessness, $F=6.335$, $p=.004$, $\eta^2=.232$. However, the between-group effects for loneliness, emotional involvement, and environment were not statistically significant. These findings indicate that the interventions, particularly mentalization-based therapy, produced significant differences in selected dimensions of caregiving burden.

Table 3. Bonferroni Post Hoc Comparisons for Significant Caregiving Burden Components

Variable	Comparison Type	Comparison	Mean Difference	Standard Error	p
General strain	Between-group	Mentalization-based therapy vs. emotion-focused therapy	2.556	0.855	.014
General strain	Between-group	Mentalization-based therapy vs. control	3.267	0.855	.001
General strain	Between-group	Emotion-focused therapy vs. control	0.711	0.855	1.000
General strain	Within-group	Posttest vs. pretest	-3.244	0.274	<.001
General strain	Within-group	Pretest vs. follow-up	3.244	0.274	<.001
General strain	Within-group	Posttest vs. follow-up	0.000	0.000	<.001
Hopelessness	Between-group	Mentalization-based therapy vs. emotion-focused therapy	0.933	0.562	.313
Hopelessness	Between-group	Mentalization-based therapy vs. control	2.000	0.562	.003
Hopelessness	Between-group	Emotion-focused therapy vs. control	1.067	0.562	.194
Hopelessness	Within-group	Posttest vs. pretest	-1.867	0.114	<.001
Hopelessness	Within-group	Pretest vs. follow-up	1.867	0.114	<.001
Hopelessness	Within-group	Posttest vs. follow-up	0.000	0.000	<.001

As shown in Table 3, Bonferroni post hoc comparisons indicated that, for general strain, the difference between mentalization-based therapy and emotion-focused therapy was statistically significant, as was the

difference between mentalization-based therapy and the control group. However, the difference between emotion-focused therapy and the control group was not significant. These results indicate that mentalization-based therapy had a stronger effect than emotion-focused therapy and the control condition in reducing general strain. For hopelessness, the difference between mentalization-based therapy and the control group was statistically significant, whereas the differences between mentalization-based therapy and emotion-focused therapy and between emotion-focused therapy and control were not significant. Within-group comparisons also showed significant reductions from pretest to posttest and from pretest to follow-up for both general strain and hopelessness. The absence of meaningful change between posttest and follow-up suggests that the improvements achieved after the interventions were maintained during the follow-up period.

Discussion and Conclusion

The present study aimed to compare the effectiveness of mentalization-based therapy and emotion-focused therapy on obsessive-compulsive symptoms and caregiving burden among mothers of children with attention-deficit/hyperactivity disorder. The findings related to the first hypothesis showed that the between-group effects of mentalization-based therapy and emotion-focused therapy on the components of obsessive-compulsive symptoms, including checking, washing, slowness-repetition, and doubt-conscientiousness, were not statistically significant. Although descriptive results showed reductions in some obsessive-compulsive components, particularly in checking, slowness-repetition, doubt-conscientiousness, and total obsessive-compulsive symptoms in the intervention groups, these changes did not reach a statistically significant level when the groups were compared. Therefore, the first hypothesis was not supported, indicating that the two interventions did not produce a clear differential effect on obsessive-compulsive symptom components among mothers of children with ADHD.

This finding may be explained by the clinical nature of obsessive-compulsive symptoms. Obsessive-compulsive symptoms are often maintained by highly specific cognitive-behavioral mechanisms, including intrusive thoughts, exaggerated responsibility, intolerance of uncertainty, threat overestimation, compulsive checking, and ritualized attempts to reduce anxiety. Although mentalization-based therapy and emotion-focused therapy can improve reflective functioning, emotional awareness, and regulation of affect, they may not directly target compulsive rituals, avoidance patterns, or obsession-related cognitive appraisals. Therefore, the absence of a significant effect on obsessive-compulsive symptoms does not necessarily mean that the interventions were ineffective at the psychological level; rather, it may suggest that these approaches require greater symptom-specific adaptation when applied to obsessive-compulsive phenomena. This interpretation is consistent with evidence indicating that obsessive-compulsive symptoms are predicted by difficulties in emotion regulation, impulsivity, and anger, but also require focused attention to the mechanisms that organize compulsive behavior and obsessional thinking (5). From this perspective, emotional and reflective interventions may reduce some underlying vulnerabilities but may be insufficient as stand-alone protocols for measurable reductions in obsessive-compulsive symptoms within a brief intervention period.

The non-significant findings for obsessive-compulsive symptoms can also be interpreted in relation to the caregiving context of mothers of children with ADHD. In these mothers, obsessive-compulsive symptoms

may partly reflect chronic worry, overmonitoring, repeated checking of the child's behavior, and attempts to prevent negative outcomes in daily caregiving. Such patterns may become reinforced by the unpredictable and challenging behaviors of children with ADHD. Parents of children with ADHD frequently experience high stress because of difficulties in managing inattention, impulsivity, emotional outbursts, academic problems, and behavioral dysregulation (1). Parents who manage children with challenging behaviors often describe a continuous need for supervision and adaptive control, which may strengthen repetitive caregiving behaviors over time (2). Thus, some obsessive-compulsive-like behaviors in this population may be embedded in real caregiving demands and may not change substantially unless the intervention directly modifies daily parenting routines, cognitive appraisals of danger, and compulsive caregiving responses.

The second hypothesis was partially supported. The findings showed that mentalization-based therapy and emotion-focused therapy produced significant between-group differences in selected components of caregiving burden, specifically general strain and hopelessness. However, significant differences were not observed for loneliness, emotional involvement, and environmental burden. Bonferroni post hoc comparisons showed that mentalization-based therapy differed significantly from emotion-focused therapy and the control group in reducing general strain, while emotion-focused therapy did not differ significantly from the control group on this component. For hopelessness, the significant difference was observed between mentalization-based therapy and the control group, whereas the difference between emotion-focused therapy and control was not significant. These findings indicate that mentalization-based therapy had a stronger and more specific effect on reducing important dimensions of caregiving burden, particularly general strain and hopelessness, among mothers of children with ADHD.

The stronger effect of mentalization-based therapy on caregiving burden can be explained by the core mechanisms of this therapeutic approach. Mentalization-based therapy is designed to strengthen the individual's capacity to understand behavior in terms of intentional mental states, such as thoughts, emotions, wishes, beliefs, and needs. In caregiving situations involving a child with ADHD, mothers may frequently misinterpret impulsive, inattentive, or oppositional behaviors as intentional disobedience, rejection, failure, or disrespect. Such interpretations can intensify emotional exhaustion and caregiving strain. Mentalization-based therapy helps mothers pause, reflect, and consider alternative explanations for the child's behavior, thereby reducing automatic emotional reactions and rigid interpretations. This explanation is consistent with the theoretical foundations of mentalization-based treatment, which emphasizes the improvement of reflective functioning and the ability to understand self and others in emotionally charged interpersonal contexts (14). It also aligns with the proposed mechanisms of change in mentalization-based therapy, in which improvement occurs through enhanced awareness of mental states and more flexible interpretation of interpersonal experiences (15).

The reduction in hopelessness in the mentalization-based therapy group is particularly important. Hopelessness in mothers of children with ADHD may arise when the mother feels that the child's behavior is uncontrollable, caregiving efforts are ineffective, and future improvement is unlikely. Mentalization-based therapy may reduce hopelessness by helping mothers shift from a fixed and helpless interpretation of the child's behavior toward a more dynamic and understandable view of the child's internal states. When the child's behavior becomes more psychologically interpretable, the mother may experience greater perceived agency and lower despair. Mentalization-based approaches in child and family contexts emphasize the

importance of strengthening reflective capacities within parent-child relationships and improving relational functioning through understanding mental states (16). Therefore, the current finding suggests that mentalization-based therapy may be particularly suitable for mothers who experience caregiving burden as confusion, emotional exhaustion, and loss of hope in relation to their child's behavioral difficulties.

The findings concerning caregiving burden are also consistent with broader research on resilience and parental adjustment. Caregiving burden is not determined only by the severity of the child's symptoms; it is also shaped by the caregiver's capacity for psychological adaptation, emotional recovery, and flexible coping. Resilience research has emphasized that resilience is a dynamic process involving adaptation in the face of adversity rather than a fixed personal trait (7). Biological and psychological models also conceptualize resilience as a multidimensional construct influenced by both individual vulnerabilities and environmental conditions (8). Mentalization-based therapy may support resilience by increasing mothers' ability to reflect before reacting, tolerate uncertainty, and regulate distress during demanding caregiving moments. This may explain why general strain and hopelessness, which are closely related to the mother's perceived capacity to cope, showed significant improvement.

The results are also aligned with studies emphasizing the importance of parent-focused psychological interventions for families of children with ADHD. Interventions targeting parents can improve not only child-related outcomes but also parental self-efficacy, psychological flexibility, parent-child interaction, and emotional regulation. Parenting training based on acceptance and commitment has been shown to target parent-child interaction, maternal self-efficacy, and psychological flexibility in mothers of children with ADHD (9). Similarly, schema therapy has been applied to mothers of children with ADHD to improve distress tolerance, resilience, emotion regulation, and parenting styles (10). These findings support the present result by showing that maternal psychological processes are central therapeutic targets in ADHD-related family interventions. The current study extends this line of work by suggesting that mentalization-based therapy may be especially effective for reducing caregiving burden through reflective and relational mechanisms.

The results also have partial consistency with evidence supporting emotion-focused and emotional therapies. Emotion-focused therapy assumes that psychological distress is maintained by maladaptive emotional schemes and that therapeutic change occurs through awareness, acceptance, regulation, and transformation of emotional experience (17). Emotional therapy has also been shown to reduce anxiety, depression, and difficulty in emotion regulation in clinical populations (18). In the present study, emotion-focused therapy produced descriptive reductions in caregiving burden components, but these reductions were not consistently significant compared with the control group. One possible explanation is that emotion-focused therapy may require more time for emotional processing to translate into measurable reductions in caregiving burden. Another possibility is that mothers of children with ADHD may first need improved reflective understanding of the child's behavior before emotional transformation becomes stable and behaviorally effective. Therefore, the findings do not contradict the usefulness of emotion-focused therapy, but they suggest that, in this specific population and protocol, mentalization-based therapy may have had a more direct impact on perceived caregiving burden.

The present findings are also relevant to recent ADHD parent-intervention research. A randomized clinical trial comparing emotion-focused and behavioral parent training in families of school-aged children with ADHD highlights the growing importance of parent-oriented interventions that address emotional and

behavioral processes in family functioning (11). In addition, online mindfulness-based intervention protocols for parents of children with ADHD reflect the need for accessible approaches that enhance parental awareness, regulation, and adaptive coping (12). Earlier findings also indicate that mindful parenting, social thinking, and exercise can improve quality of life in children with ADHD, supporting the role of awareness-based and relational interventions in ADHD-related difficulties (13). The present study contributes to this field by showing that mothers' caregiving burden may be reduced through an intervention that strengthens reflective functioning, particularly in relation to general strain and hopelessness.

The non-significant findings for loneliness, emotional involvement, and environmental burden require careful interpretation. These components may depend more strongly on external and contextual factors than on individual psychological intervention alone. Loneliness may be affected by the availability of social support, family cooperation, and community resources. Emotional involvement may be related to long-standing family roles and attachment patterns, while environmental burden may reflect practical limitations such as financial strain, access to services, school support, and home responsibilities. Research has shown that perceived social support and burnout are important issues among mothers of children diagnosed with ADHD (3). Broader family research also indicates that social support interacts with psychological variables such as self-esteem, depression, and anxiety (4). Therefore, individual or group psychotherapy may reduce internal distress but may be less able to change burden dimensions that are strongly dependent on social and environmental conditions unless it is combined with family, school, or community-based support.

Overall, the findings suggest that mentalization-based therapy may be a more effective intervention than emotion-focused therapy for reducing selected caregiving-burden dimensions in mothers of children with ADHD, while neither intervention produced significant between-group reductions in obsessive-compulsive symptom components. This pattern indicates that caregiving burden and obsessive-compulsive symptoms may require different levels of therapeutic targeting. Caregiving burden, especially general strain and hopelessness, may respond to interventions that improve reflective functioning and emotional understanding in the caregiving relationship. In contrast, obsessive-compulsive symptoms may require more direct symptom-focused strategies in addition to reflective or emotional interventions. Accordingly, a combined model that integrates mentalization-based work with cognitive-behavioral techniques for obsessive-compulsive symptoms may be more effective for mothers who experience both caregiving burden and obsessional-compulsive patterns.

This study had several limitations that should be considered when interpreting the findings. First, the sample size was relatively small and included only 45 participants, which may have reduced the statistical power to detect smaller intervention effects, especially for obsessive-compulsive symptoms and some components of caregiving burden. Second, the sample was selected through voluntary sampling from clinics in Tehran, which limits the generalizability of the findings to mothers from other cities, rural areas, different socioeconomic groups, or non-clinical populations. Third, the study relied on self-report questionnaires, and participants' responses may have been influenced by social desirability, temporary emotional states, or personal interpretation of the questionnaire items. Fourth, the study focused only on mothers and did not include fathers, other caregivers, or direct child outcomes. Finally, the follow-up period was limited, and longer-term maintenance of treatment effects could not be fully evaluated.

Future studies should replicate this research with larger and more diverse samples to increase statistical power and improve generalizability. It is recommended that future research include fathers, other family caregivers, and children's behavioral and emotional outcomes in order to provide a more complete understanding of family-level change. Researchers should also examine longer follow-up periods to determine whether the effects of mentalization-based therapy and emotion-focused therapy remain stable over time. Future studies may compare these interventions with active control conditions, behavioral parent training, cognitive-behavioral therapy, mindfulness-based parenting, or combined intervention models. It would also be useful to investigate mediating mechanisms, such as reflective functioning, emotion regulation, parenting stress, psychological flexibility, and perceived social support, to clarify how and why each intervention produces change.

The findings suggest that psychological services for families of children with ADHD should include direct support for mothers and not focus only on child symptom management. Clinicians working with these families should assess caregiving burden, hopelessness, emotional exhaustion, and obsessive-compulsive symptoms as part of routine psychological evaluation. Mentalization-based strategies may be especially useful for helping mothers reinterpret child behavior, reduce automatic negative reactions, and respond with greater reflective capacity. Emotion-focused techniques may also be beneficial when mothers experience intense guilt, anger, sadness, or emotional suppression. In practice, an integrated intervention model may be most useful, combining reflective work, emotional processing, parenting skills, and symptom-focused strategies for obsessive-compulsive patterns. Such programs can be implemented in clinics, schools, and family counseling centers to improve maternal well-being and strengthen parent-child relationships.

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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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References

1. Si Y, Ma JL, Zhang J. Factors influencing parenting stress among Chinese families of children with attention-deficit/hyperactivity disorder. Children and Youth Services Review. 2020;116:105148. doi: 10.1016/j.childyouth.2020.105148.
2. Ringer N, Wilder J, Scheja M, Gustavsson A. Managing children with challenging behaviours: Parents'. 2020.
3. Polat H, Karakas SA. An examination of the perceived social support, burnout levels and child-raising attitudes of mothers of children diagnosed with attention deficit hyperactivity disorder in Turkey. International Journal of Caring Sciences. 2019;12(2):1165-74.
4. Duru E, Balkis M, Turkdogan T. Relational violence, social support, self-esteem, depression and anxiety: A moderated mediation model. Journal of Child and Family Studies. 2019;28(9):2404-14. doi: 10.1007/s10826-019-01509-2.
5. Besharat A, Mohammad Dehghani S, Masoudi M, Pourkhaghan F, Motahari S. Predicting obsessive-compulsive disorder symptoms on the basis of difficulties in emotion regulation, impulsivity, and anger. 2023.
6. Pour Afkari N. Comprehensive English-Persian Psychiatry Dictionary, Volume II. Tehran: Institute of Contemporary Culture; 2016.
7. Denckla CA, Cicchetti D, Kubzansky LD, Seedat S, Teicher MH, Williams DR, et al. Psychological resilience: An update on definitions, a critical appraisal, and research recommendations. European Journal of Psychotraumatology. 2020;11(1):1822064. doi: 10.1080/20008198.2020.1822064.
8. Choi KW, Stein MB, Dunn EC, Koenen KC, Smoller JW. Genomics and psychological resilience: A research agenda. Molecular Psychiatry. 2019;24(12):1770-8. doi: 10.1038/s41380-019-0457-6.
9. Jalilian M, Karami J, Parhoon H. The Effectiveness of Parenting Training Based on Acceptance and Commitment on Parent-Child Interaction, Self-Efficacy and Psychological Flexibility Of Mothers with Children with Attention Deficit/Hyperactivity Disorder. Journal of Rafsanjan University of Medical Sciences. 2025.
10. Rajaeizadeh MS, Khayatan F. Effectiveness of Schema Therapy on Distress Tolerance, Resilience, Emotion Regulation, and Parenting Styles in Mothers of Children with Attention-Deficit/Hyperactivity Disorder. Rooyesh-e-Ravanshenasi. 2025;14(2):123-34.
11. Zargarinejad G, Shortt JW, Eddy JM, Ebadi Zare S, Gharraee B, Farahani H, et al. A Randomized Clinical Trial Comparing the Effectiveness of Emotion-Focused and Behavioral Parent Training in Families of School-aged Children with Attention-Deficit/Hyperactivity Disorder. Child Psychiatry & Human Development. 2025:1–16. doi: 10.1007/s10578-025-01868-6.
12. Zhang ZJ, Lo HHM, Bögels SM, Cheung RY, Lau ENS, Lee EKP, et al. A Randomized Controlled Trial for Evaluating the Effects of an Online Mindfulness-Based Intervention for Parents of Children with Attention-Deficit/Hyperactivity Disorder: A Study Protocol. BMC Psychology. 2025;13(1):610. doi: 10.1186/s40359-025-02929-0.
13. Dehkordian P, Hamid N, Beshlideh K, Mehrabizadeh HM. The effectiveness of mindful parenting, social thinking, and exercise on quality of life in ADHD children. International Journal of Pediatrics. 2017;5:4295-302.
14. Bateman A, Fonagy P. Mentalization-Based Treatment for Personality Disorders: A Practical Guide. New York: Oxford University Press; 2016.
15. Fonagy P, Bateman AW. Mechanisms of change in mentalisation-based therapy with BPD. Journal of Clinical Psychology. 2016;62(4):411-30. doi: 10.1002/jclp.20241.
16. Midgley N, Ensink K, Lindqvist K, Malberg N, Muller N. Mentalization-Based Treatment for Children: A Time-Limited Approach. Washington, DC: American Psychological Association; 2017.

17. Greenberg L, Watson J. Emotion-Focused Therapy for Depression. Washington: American Psychological Association; 2022.

18. Asmari Barde Z, Khanjani S, Musavi Asl E, Dolatshahi B. The effectiveness of emotional therapy on anxiety, depression, and difficulty in regulating emotions in binge eating disorder. Iranian Journal of Psychiatry and Clinical Psychology. 2021;27(1):2-15. doi: 10.32598/ijpcp.27.1.3246.1.