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Maternal Emotional Exhaustion as a Mediator in the Association between Parenting Conflict, Emotion Regulation, Cognitive Flexibility, and Child Behavioral Problems

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Abstract

Introduction: Parenting dynamics and maternal psychological resources are critical to child development, yet the specific mechanisms linking these factors to child behavioral problems remain incompletely understood, particularly in non-Western contexts. This study investigated the mediating role of maternal emotional exhaustion in the associations between parenting conflict, emotion regulation, cognitive flexibility, and child behavioral problems.

Method: A descriptive-correlational design was employed. By using two-stage random cluster sampling, 204 mothers of primary school-aged children (aged 7–12 years) in Ardestan (2025–2026 academic year) were selected. Data were collected via the Parental Burnout Assessment (emotional exhaustion dimension), a short form of the Parenting Stress Index (parenting conflict subscale), the Emotion Regulation Questionnaire, the Cognitive Flexibility Inventory, and the Strengths and Difficulties Questionnaire. Analyses were conducted using Structural Equation Modeling (SEM) with maximum likelihood estimation.

Results: The structural model showed good fit (CFI=0.96, RMSEA=0.053). Parenting conflict, emotional suppression, and lower cognitive flexibility were significantly associated with higher maternal emotional exhaustion. Parenting conflict and lower cognitive flexibility directly predicted greater child behavioral problems, whereas the direct path from emotional suppression was non-significant. Maternal emotional exhaustion significantly mediated the associations of parenting conflict (indirect $\beta=0.04$), emotional suppression (indirect $\beta=0.03$), and cognitive flexibility (indirect $\beta=-0.03$) with child behavioral problems.

Conclusion: These findings suggest that higher parenting conflict and lower maternal psychological resources are associated with greater maternal emotional exhaustion, which in turn is linked to elevated child behavioral problems. Interventions targeting maternal emotional health may be beneficial; however, longitudinal research is required to clarify temporal sequencing.

Keywords: Parenting Conflict, Emotion Regulation, Cognitive Flexibility, Parental Burnout, Child Behavioral Problems

Introduction

Childhood is a foundational period for psychological and emotional development, and primary school-aged children are particularly vulnerable to a range of developmental challenges. Among these, child behavioral problems represent a significant concern for both families and educational systems [1]. These problems, broadly categorized into internalizing issues such as anxiety and depression, and externalizing issues such as aggression, oppositional defiance, and rule-breaking, can severely disrupt a child's

academic trajectory and social integration [2]. The transition to primary school places new academic and social demands on children, often exacerbating underlying behavioral tendencies if the child lacks adequate support [3]. The family environment, functioning as the primary socializing agent, plays an undisputed role in shaping children's behavioral outcomes. Within the family unit, mothers typically assume the role of primary caregiver, making maternal psychological health, parenting practices, and the overall emotional climate of the home critical determinants of child well-being [4]. When children exhibit behavioral difficulties, these often reflect not only individual vulnerabilities but also systemic distress within the family context, particularly concerning the psychological and emotional resources available to the mother [5]. Therefore, clarifying the pathways through which maternal psychological factors are associated with child behavioral problems remains of central importance for developmental psychology and family counseling.

A key interpersonal factor is parenting conflict, defined specifically as disagreements, undermining behaviors, and lack of cooperation between parents regarding child-rearing practices [6]. This construct is conceptually distinct from general marital discord: whereas marital conflict may involve broader relational tensions, parenting conflict is confined to the parental subsystem and directly exposes the child to inconsistent discipline, confusion, and emotional insecurity [7]. Research indicates that frequent clashes over rules and expectations are associated with heightened externalizing behaviors and emotional dysregulation in children [8]. Parenting conflict reduces the predictability of the home environment, requiring children to navigate contradictory parental demands [9]. Managing ongoing disagreements over parenting also consumes substantial psychological energy, leaving mothers feeling depleted and less capable of responding sensitively to their children's needs [10].

In parallel, mothers' intrapersonal psychological resources—particularly emotion regulation and cognitive flexibility—are associated with parenting quality and child adjustment [11]. Maternal emotion regulation refers to the ability to monitor, evaluate, and modify emotional reactions in response to parenting stressors [12]. Adaptive strategies such as cognitive reappraisal enable mothers to remain calm and supportive during challenging interactions, whereas greater reliance on expressive suppression has been linked to reactive or inconsistent parenting [13]. Cognitive flexibility, defined as the capacity to switch between multiple concepts and adjust behavior in novel or changing situations [14], allows mothers to generate alternative strategies when disciplinary approaches fail, to consider the child's perspective, and to adapt to the evolving developmental needs of school-aged children [15]. Lower cognitive flexibility may contribute to rigid parenting patterns that fail to address the underlying sources of a child's distress [16].

The cumulative demands of parenting conflict, difficulties in emotion regulation, and limited cognitive flexibility are theoretically expected to increase the risk of maternal emotional exhaustion [17]. Maternal emotional exhaustion constitutes a core dimension of parental burnout and is characterized by a profound sense of overwhelming fatigue and depletion of emotional resources specifically related to the parenting role [18]. Although parental burnout encompasses additional facets (loss of pleasure in parenting, emotional distancing, and discrepancy between ideal and actual parental self), the present study focuses on the emotional exhaustion dimension because it most directly indexes the depletion of psychological resources hypothesized to impair responsive caregiving. When mothers continuously navigate co-parenting disputes while struggling to regulate negative emotions or adapt their cognitive schemas, their psychological reserves may become drained [19]. Emotionally exhausted mothers are more likely to display reduced parental involvement, emotional distancing, or inconsistent responses, thereby limiting the supportive scaffolding necessary for children's behavioral regulation [20]. Consequently, maternal emotional exhaustion is posited as a key mediating mechanism that may help explain how interpersonal conflict and intrapersonal resource limitations are associated with child behavioral problems.

Despite established bivariate associations among these variables, a notable gap persists in the literature. Prior research has typically examined parenting conflict, emotion regulation, cognitive flexibility, or parental burnout in isolation or in pairwise combinations, rarely testing an integrated structural model in which maternal emotional exhaustion simultaneously mediates the pathways from both interpersonal (parenting conflict) and intrapersonal (emotion regulation and cognitive flexibility) predictors to child behavioral problems. Moreover, most existing studies have been conducted in Western samples; evidence from Iranian cultural contexts, where extended family structures and societal expectations surrounding motherhood may shape parenting dynamics differently, remains limited. The present study addresses this gap by testing a unified mediational model within an Iranian sample of mothers of primary school children.

Theoretical rationale for the proposed mediation draws on the balance between risks and resources (BR^2) model of parental burnout [21] and emotional security theory [22]. According to BR^2, parental burnout emerges when chronic risks (e.g., parenting conflict) outweigh available resources (e.g., adaptive emotion regulation and cognitive flexibility). Emotional exhaustion, as the central affective component of burnout, is expected to impair the mother's capacity to provide consistent, sensitive caregiving, thereby undermining the child's emotional security and increasing behavioral problems. Focusing specifically on mothers is justified by their predominant role as primary caregivers in the cultural context under study and by evidence that maternal psychological resources show particularly robust associations with child adjustment outcomes [4, 5].

Accordingly, the present study pursued the following objectives and hypotheses: (1) Parenting conflict, emotional suppression, and lower cognitive flexibility

would be positively associated with maternal emotional exhaustion; (2) Parenting conflict and lower cognitive flexibility would directly predict higher child behavioral problems, whereas the direct association of emotional suppression would be weaker or non-significant; and (3) Maternal emotional exhaustion would significantly mediate the associations between each of the three predictors and child behavioral problems. Given the cross-sectional design, these hypotheses concern statistical associations rather than causal sequences.

Method

This study utilized an applied, descriptive-correlational research design. The statistical population comprised all mothers of primary school students (both boys and girls, aged 7–12 years) enrolled in public primary schools in Ardestan during the 2025–2026 academic year. To recruit participants, a two-stage random cluster sampling method was employed. In the first stage, eight primary schools were randomly selected from the complete list of public primary schools in Ardestan using a computer-generated random number sequence. In the second stage, two classes were randomly selected from each of the 8 schools (total of 16 classes), again using computer-generated randomization. All mothers of students in the selected classes (N=248) were invited to participate. Of these, 220 mothers provided written informed consent and completed the questionnaires (response rate=88.7%). After data screening, 16 cases were removed as outliers, yielding a final analytic sample of 204 mothers. A priori power analysis for structural equation modeling was conducted using the recommendations of Wolf et al. [23]. For a model with approximately 10–12 free parameters, a minimum sample size of 200 was recommended to achieve adequate power (≥ .80) for detecting medium effect sizes at α=0.05. The final sample of 204 met this threshold.

The inclusion criteria of this study were: (a) being the biological or primary caregiving mother of a child aged 7–12 years currently enrolled in a public primary school in Ardestan, (b) ability to read and complete Persian-language questionnaires, and (c) provision of written informed consent. The exclusion criteria were: (a) incomplete questionnaire responses (more than 10% missing items on any scale), (b) self-reported current diagnosis of severe psychiatric disorder in the mother or child that would interfere with accurate reporting, and (c) statistical outliers identified through multivariate procedures.

Regarding ethical considerations, the study protocol was approved by the Ethics Committee of the Naqshe Jahan Institute of Higher Education (Isfahan, Iran). All participating mothers were thoroughly informed about the study's objectives and provided written informed consent prior to data collection. Participants were assured of the strict confidentiality and anonymity of their responses, and data were used exclusively for scientific purposes. Participation was entirely voluntary, and mothers could withdraw at any time without consequence.

Upon obtaining official permission from the Ardestan Education Department and coordinating with the principals of the selected schools, the first author scheduled data-collection sessions at each school. Questionnaires were administered in group sessions held in quiet school classrooms by the first author, who is a trained clinical psychologist. Standardized verbal and written instructions were provided. Mothers completed the paper-and-pencil questionnaires in the presence of the researcher, who remained available to answer clarification questions but did not intervene in individual responses. Approximate completion time was 25–35 minutes. To minimize social desirability bias and potential researcher influence, questionnaires were completed anonymously (no names or identifying information were collected), the researcher maintained a neutral stance, and mothers were seated with sufficient physical distance from one another. Completed questionnaires were collected immediately and sealed in envelopes.

The tools used in this study were as follows:

Parental Burnout Assessment (PBA): Maternal emotional exhaustion was assessed using the Emotional Exhaustion subscale of the Parental Burnout Assessment (PBA) developed by Roskam et al. [18]. This subscale consists of 9 items that specifically capture overwhelming fatigue and depletion of emotional resources related to the parenting role. Participants responded on a 7-point Likert scale ranging from "never" (0) to "every day" (6). Higher scores indicate greater emotional exhaustion. Although the full 23-item PBA was administered, only the Emotional Exhaustion subscale score was used in the structural equation model to maintain conceptual alignment with the hypothesized mediator. In the present study, Cronbach's alpha for the Emotional Exhaustion subscale was 0.90.

Parenting Stress Index–Short Form (PSI-SF): Parenting conflict was measured using the 7-item Parenting Conflict subscale of the Parenting Stress Index–Short Form (PSI-SF) originally developed by Abidin [24]. This subscale assesses perceived discord, disagreement, and lack of alignment between parents specifically regarding child-rearing practices and is distinct from general marital conflict. Responses are recorded on a 5-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5). Total scores range from 7 to 35, with higher scores reflecting greater parenting conflict. The Persian version of the PSI-SF has been previously validated in Iranian mothers and has shown acceptable reliability and construct validity [25]. In the present sample, Cronbach's alpha for the parenting conflict subscale was 0.84.

Emotion Regulation Questionnaire (ERQ): The Emotion Regulation Questionnaire (ERQ) developed by Gross and John [26] was used in this study. This 10-item scale measures two strategies: cognitive reappraisal (6 items) and expressive suppression (4 items). Items are rated on a 7-point Likert scale (1=strongly disagree to 7=strongly agree). The Persian version of the ERQ has been validated in Iranian samples and has demonstrated adequate psychometric properties [27]. In the present study, Cronbach's alphas were 0.79 for cognitive reappraisal and 0.73 for expressive suppression. Because preliminary analyses indicated that only expressive suppression showed a significant association with the mediator, the

suppression subscale was retained as the emotion-regulation indicator in the final structural model.

Cognitive Flexibility Inventory (CFI): Cognitive flexibility was assessed with the 20-item Cognitive Flexibility Inventory (CFI) developed by Dennis and Vander Wal [14]. Items are rated on a 7-point Likert scale (1=strongly disagree to 7=strongly agree). Higher total scores indicate greater cognitive flexibility. The Persian version of the CFI has been validated among Iranian adults and has shown good reliability and validity [28]. In the present study, Cronbach's alpha for the total scale was 0.88.

Strengths and Difficulties Questionnaire (SDQ): Child behavioral problems were measured with the parent-report version of the Strengths and Difficulties Questionnaire (SDQ) developed by Goodman [29]. The 20-item total difficulties score (excluding the prosocial subscale) was used, covering emotional problems, conduct problems, hyperactivity/inattention, and peer problems. Items are rated on a 3-point scale (0=not true, 1=somewhat true, 2=certainly true). The Persian version of the SDQ has been validated in Iranian children and has demonstrated acceptable reliability and validity [30]. In the present sample, Cronbach's alpha for the total difficulties score was 0.81.

Data screening was performed prior to the main analyses. Univariate outliers were identified using standardized z-scores ($|z| > 3.29$), and multivariate outliers were detected via Mahalanobis distance with a conservative probability threshold of $P<0.001$. Sixteen cases met these criteria and were removed. Sensitivity analyses indicated that removal of these outliers did not substantially alter the pattern or significance of the main structural paths. After outlier removal, skewness and kurtosis values for all variables fell within the acceptable range of ±2, supporting approximate normality. Structural equation modeling was conducted using AMOS 24 with Maximum Likelihood (ML) estimation. There were no missing data in the final analytic sample after screening. The hypothesized model specified parenting conflict, emotional suppression, and cognitive flexibility as exogenous predictors; maternal emotional exhaustion as the mediator; and child behavioral problems (total difficulties score) as the endogenous outcome. Model fit was evaluated using multiple indices: χ^2/df, Comparative Fit Index (CFI), Tucker–Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR). Mediation was tested using bias-corrected bootstrapping with 5,000 resamples to obtain 95% confidence intervals for the indirect effects. A significant indirect effect was inferred when the 95% confidence interval did not include zero.

Results

In the present study, 204 mothers of primary school children from Ardestan participated. Among the 204 children, 92 (45.1%) were boys and 112 (54.9%) were girls. The mothers' mean age was 34.91 years (SD=7.23). Regarding educational attainment, approximately 42% held a high school diploma or lower, while 58% had university-level education. In terms of occupation, 61% were housewives and 39% were employed. Children's ages ranged from 7 to 12 years (M=9.4, SD=1.6).

Table 1 presents the descriptive statistics, normality indices, and multicollinearity diagnostics for the main study variables used in the structural model. The data exhibited acceptable normality, with skewness and kurtosis values falling within the conventional range of ±2. Multicollinearity diagnostics (VIF and Tolerance) confirmed no serious issues among the predictor variables (all VIF < 5 and Tolerance > 0.20). Overall, the sample showed moderate levels of parenting conflict, relatively high maternal cognitive flexibility, moderate levels of emotional suppression, low-to-moderate maternal emotional exhaustion, and moderate child behavioral problems.

Table 2 displays the zero-order Pearson correlations among the main study variables. Parenting conflict showed significant positive correlations with maternal emotional exhaustion and child behavioral problems. Maternal cognitive flexibility demonstrated significant negative associations with both emotional exhaustion and child behavioral problems. Emotional suppression was positively associated with emotional exhaustion and child behavioral problems. These bivariate associations are presented for descriptive purposes. Given the number of correlations examined, the risk of Type I error should be considered; primary statistical inferences are based on the structural equation model rather than individual correlations.

Table 1. Descriptive Statistics, Normality Indices, and Multicollinearity Diagnostics for Study Variables

Variables	Mean	SD	Skewness	Kurtosis	VIF	Tolerance
Parenting conflict	24.04	6.17	0.42	−0.18	2.31	0.43
Maternal cognitive flexibility	92.40	13.82	−0.31	0.45	1.87	0.53
Emotional suppression	14.18	6.15	0.52	0.33	1.95	0.51
Maternal emotional exhaustion	19.39	10.84	0.67	0.51	2.68	0.37
Child behavioral problems	26.05	5.72	0.48	−0.22	2.45	0.41

Table 2. Pearson Correlations between Main Study Variables

Variable	1	2	3	4	5
1. Parenting conflict	—				
2. Cognitive flexibility	−0.41**	—			
3. Emotional suppression	0.29**	−0.22**	—		
4. Emotional exhaustion	0.41**	−0.48**	0.34**	—	
5. Child behavioral problems	0.48**	−0.52**	0.28**	0.39**	—

Note. **: P<0.01

Structural equation modeling was performed using maximum likelihood estimation. Table 3 summarizes the goodness-of-fit indices for the hypothesized structural model. The model demonstrated good fit to the empirical data (χ^2=56.55, df=36, χ^2/df=1.57, CFI=0.96, TLI=0.94, GFI=0.95, AGFI=0.91, RMSEA=0.053 [90% CI: 0.028–0.075], SRMR=0.059). All indices met or exceeded conventional thresholds for acceptable to good fit.

Table 4 presents the standardized path coefficients, standard errors, p-values, and 95% bias-corrected bootstrap confidence intervals (5,000 resamples) for direct and indirect effects. Significant direct effects were observed from parenting conflict (β=0.29, 95% CI [0.14, 0.43], P=0.001) and emotional suppression (β=0.20, 95% CI [0.08, 0.32], P=0.001) to maternal emotional exhaustion, and from cognitive flexibility to emotional exhaustion (β=−0.23, 95% CI [−0.36, −0.11], P=0.001). Parenting conflict (β=0.53, 95% CI [0.39, 0.66], P=0.001) and cognitive flexibility (β=−0.41, 95% CI [−0.54, −0.28], P=0.001) directly predicted child behavioral problems, whereas the direct path from emotional suppression to child behavioral problems was non-significant (β=0.02, 95% CI [−0.10, 0.14], P=0.738). Maternal emotional exhaustion positively predicted child behavioral problems (β=0.13, 95% CI [0.01, 0.25], P=0.048).

Regarding mediation, bias-corrected bootstrap analyses indicated that maternal emotional exhaustion significantly mediated the associations of all three predictors with child behavioral problems. The indirect effect of parenting conflict through emotional exhaustion was β=0.04 (SE=0.02, 95% CI [0.01, 0.08], P=0.042), indicating partial mediation (given the remaining significant direct path). The indirect effect of emotional suppression was β=0.03 (SE=0.01, 95% CI [0.01, 0.06], P=0.039), consistent with full mediation (non-significant direct path). The indirect effect of cognitive flexibility was β=−0.03 (SE=0.01, 95% CI [−0.06, −0.01], P=0.035), indicating partial mediation.

Figure 1 presents the final structural model with standardized path coefficients. Solid lines indicate statistically significant paths (P<0.05); the dashed line indicates the non-significant direct path from emotional suppression to child behavioral problems. Path coefficients and 95% confidence intervals are reported in Table 4. The figure illustrates that maternal emotional exhaustion partially mediates the associations of parenting conflict and cognitive flexibility with child behavioral problems, and fully mediates the association of emotional suppression with child behavioral problems.

Table 3. Goodness-of-Fit Indices for the Final Structural Model

Fit indicators	χ^2	df	χ^2/df	CFI	TLI	GFI	AGFI	RMSEA (90% CI)	SRMR
Model	56.55	36	1.57	0.96	0.94	0.95	0.91	0.053 (0.028–0.075)	0.059

Table 4. Direct and Indirect Paths in the Final Structural Model

Path	β	SE	P	95% CI
Direct effects				
Parenting conflict → Emotional exhaustion	0.29	0.07	0.001	[0.14, 0.43]
Emotional suppression → Emotional exhaustion	0.20	0.06	0.001	[0.08, 0.32]
Cognitive flexibility → Emotional exhaustion	−0.23	0.06	0.001	[−0.36, −0.11]
Parenting conflict → Child behavioral problems	0.53	0.07	0.001	[0.39, 0.66]
Emotional suppression → Child behavioral problems	0.02	0.06	0.738	[−0.10, 0.14]
Cognitive flexibility → Child behavioral problems	−0.41	0.07	0.001	[−0.54, −0.28]
Emotional exhaustion → Child behavioral problems	0.13	0.06	0.048	[0.01, 0.25]
Indirect effects				
Parenting conflict → Child behavioral problems via Emotional exhaustion	0.04	0.02	0.042	[0.01, 0.08]
Emotional suppression → Child behavioral problems via Emotional exhaustion	0.03	0.01	0.039	[0.01, 0.06]
Cognitive flexibility → Child behavioral problems via Emotional exhaustion	−0.03	0.01	0.035	[−0.06, −0.01]

Discussion

The present study examined the mediating role of maternal emotional exhaustion in the associations between parenting conflict, maternal emotion regulation (specifically expressive suppression), cognitive flexibility, and child behavioral problems among 204 mothers of primary school children. Utilizing structural equation modeling, the findings indicate that maternal psychological resources and coparenting dynamics are associated with child behavioral outcomes, in part through the pathway of emotional exhaustion. These results contribute to understanding potential mechanisms underlying child behavioral difficulties in family contexts, particularly within Iranian cultural settings, while remaining constrained by the cross-sectional design.

A primary finding was the positive association between parenting conflict and maternal emotional exhaustion. Ongoing disagreements, undermining behaviors, and lack of cooperation specifically in child-rearing appear linked to a chronically stressful environment that may deplete mothers' emotional resources. This pattern aligns with theoretical models emphasizing that high-conflict coparenting imposes sustained psychological demands [18, 21]. However, the literature is not entirely consistent: some studies of general marital conflict have reported weaker or null associations with parental burnout once co-parenting-specific conflict is controlled [e.g., related Western findings]. One possible explanation is that parenting conflict more directly taxes the parental subsystem and maternal emotional reserves than broader marital discord. Cultural factors may also play a role; in Iranian families, where mothers often bear primary responsibility for child-rearing and family harmony is highly valued, unresolved parenting disagreements may be experienced as particularly depleting.

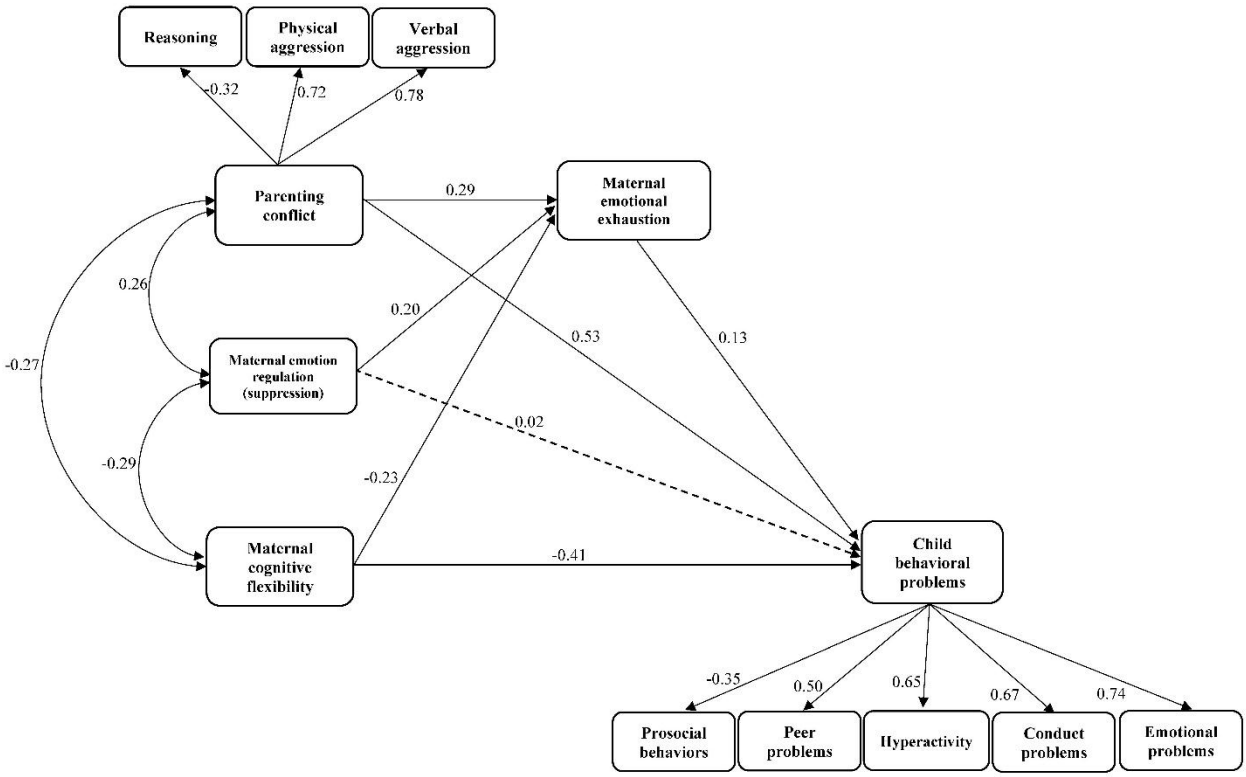


Figure 1. Final structural model of the relationships among parenting conflict, maternal psychological resources, emotional exhaustion, and child behavioral problems.

The study further showed that greater reliance on expressive suppression was associated with higher emotional exhaustion. Suppressing negative emotions during demanding parenting situations requires substantial cognitive effort and may intensify internal distress. Although cognitive reappraisal is frequently described in the broader literature as a protective strategy [26, 31], it was not retained in the final structural model because preliminary analyses indicated non-significant associations with the mediator and outcome in this sample. This discrepancy with prior research may reflect sample-specific characteristics, measurement differences, or cultural variations in the preferred use and effectiveness of reappraisal versus suppression among Iranian mothers. Adaptive regulation strategies appear relevant for sustaining emotional availability amid parenting stressors, yet the present data specifically highlight the association of suppression with exhaustion.

Additionally, higher maternal cognitive flexibility was negatively associated with emotional exhaustion. Mothers reporting greater ability to generate alternative solutions, perceive multiple perspectives, and adapt to changing circumstances tended to report lower exhaustion. This capacity may buffer against rigid responses to child misbehavior and help preserve psychological resources, consistent with prior work identifying cognitive flexibility as a resilience factor against parenting stress [32]. Nevertheless, some studies have found only modest or context-dependent associations, suggesting that cognitive flexibility may interact with other resources (e.g., social support) that were not measured here.

Regarding direct associations with child outcomes, both higher parenting conflict and lower maternal cognitive flexibility were linked to greater child behavioral problems. Exposure to coparenting conflict may undermine children's sense of emotional security [22], while maternal cognitive rigidity may manifest in less adaptive parenting practices. These direct pathways are consistent with ecological models of child development [33], although the relative strength of direct versus mediated effects varies across studies, possibly due to differences in cultural context, child age, or measurement of conflict.

Maternal emotional exhaustion was positively associated with child behavioral problems. Emotionally depleted mothers may display reduced sensitivity, emotional warmth, and consistent involvement. This association is well-documented in the parental burnout literature [20, 34]; however, effect sizes have been modest in several studies, and the present standardized coefficient is similarly small, underscoring that emotional exhaustion is one of multiple contributing factors.

The mediation analyses indicated that maternal emotional exhaustion partially mediated the associations of parenting conflict and cognitive flexibility with child behavioral problems (significant residual direct paths remained) and fully mediated the association of emotional suppression with child behavioral problems (direct path non-significant). These findings suggest that family conflict and certain maternal psychological characteristics are linked to child outcomes partly through their association with maternal emotional depletion. Importantly, because the data are cross-sectional, mediation reflects statistical associations rather than established causal sequences. Temporal ordering and causal direction cannot be determined from the present

design; longitudinal or experimental studies are required to test whether changes in parenting conflict, emotion regulation, or cognitive flexibility precede changes in emotional exhaustion, which in turn precede changes in child behavioral problems [15, 21].

These results carry tentative clinical implications that should be interpreted cautiously given the observational nature of the evidence. Family-based interventions may benefit from incorporating components that address coparenting communication (e.g., structured co-parenting sessions focused on reducing undermining and increasing consistency), emotion-regulation training that specifically targets reduction of expressive suppression, and exercises aimed at enhancing cognitive flexibility (e.g., perspective-taking and alternative-solution generation tasks). Programs designed to prevent or alleviate parental burnout could include brief psychoeducation on recognizing early signs of emotional exhaustion and practical strategies for resource recovery (e.g., scheduled respite, social support mobilization). Culturally tailored adaptations for Iranian contexts might usefully consider the role of extended family members and societal expectations surrounding motherhood when designing delivery formats and content.

Several limitations warrant explicit consideration. The cross-sectional design precludes causal inferences and definitive tests of mediation. Reliance on maternal self-report measures raises the possibility of common-method variance and social-desirability bias. The sample was drawn from a single geographic region (Ardestan), limiting generalizability to other socioeconomic or cultural groups within Iran or beyond. In addition, only the expressive suppression facet of emotion regulation was retained in the final model, restricting conclusions about other regulatory strategies.

Future research should address these limitations through specific design improvements. Longitudinal studies with at least three time points are needed to examine temporal sequencing and reciprocal effects. Multi-informant assessments (e.g., father reports, teacher ratings, observational measures of parenting and child behavior) would reduce mono-method bias. Larger and more diverse samples spanning urban and rural areas, different socioeconomic strata, and multiple cultural contexts would enhance external validity. Experimental or intervention studies that manipulate co-parenting communication, emotion-regulation skills, or cognitive flexibility and track subsequent changes in emotional exhaustion and child outcomes would provide stronger tests of the proposed pathways.

Despite these limitations, the study offers a contribution by testing an integrated structural model of interpersonal and intrapersonal predictors of child behavioral problems via maternal emotional exhaustion in an Iranian sample. By clarifying these statistical associations, the findings highlight maternal emotional health as a potentially relevant focus for family-oriented support, while underscoring the need for more rigorous designs before firm mechanistic or causal conclusions can be drawn.

Conclusion

In conclusion, the present findings indicate that higher parenting conflict, greater use of emotional suppression, and lower cognitive flexibility are associated with elevated maternal emotional exhaustion, which in turn is linked to greater child behavioral problems. Parenting conflict and cognitive flexibility retained significant direct associations with child outcomes (partial mediation), whereas the association of emotional suppression was fully mediated. These results support the hypothesized statistical model but must be interpreted in light of important limitations, including the cross-sectional design, exclusive reliance on self-report measures, and recruitment from a single geographic region. While the findings offer preliminary support for the relevance of maternal emotional exhaustion as an intervening variable, they should be regarded as tentative until replicated with longitudinal or experimental designs that can establish temporal order and test causal mechanisms more rigorously. Interventions that concurrently address co-parenting conflict, maladaptive emotion-regulation strategies, and cognitive flexibility may hold promise for supporting both maternal well-being and child behavioral adjustment; however, the effectiveness of such approaches requires direct empirical evaluation.

Conflict of Interest

The authors report no potential conflicts of interest regarding the research, authorship, or publication of this article.

Ethical Approval

The research was approved by the Naqshe Jahan Institute of Higher Education (Isfahan, Iran). Before entering the study, all subjects gave their written consent, and their personal information was kept strictly confidential throughout the research process.

Declaration on the Use of Generative AI and AI-Assisted Technologies

During the preparation of this work, the authors used Grammarly in order to assist with language editing, clarity improvement, and structural refinement of the manuscript. After using this tool/service, the authors reviewed and edited the content as needed and took full responsibility for the publication's content.

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