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RESEARCH

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Caregiving, maternal burnout, and child dysregulation: Validating the Italian Caregiving Experiences Questionnaire

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Abstract

Objective: This research validated the Italian version of the 40-item Caregiving Experiences Questionnaire (CEQ) by examining its factor structure and associations with maternal burnout and child dysregulation.

Background: Caregiving representations shape parental behavior and influence child development. Existing measures are resource intensive, limiting accessibility. The CEQ offers a practical self-report alternative, but its validation remains limited.

Method: Two studies involved independent samples of Italian cisgender, heterosexual, biological mothers. Study 1 assessed the CEQ's factor structure, reliability, and measurement invariance across child gender, developmental stage, and maternal education ($N = 891$; $M_{age} = 41.48$, $SD = 6.76$). Study 2 used structural equation modeling to assess relations among caregiving, maternal burnout, and child dysregulation among 743 mothers ($M = 42.31$ years, $SD = 6.64$) of children mean aged 8.76 ($SD = 4.99$).

Results: A four-factor, 29-item model (Enjoyment, Helplessness, Heightened Caregiving, Role Reversal) showed strong psychometric properties and invariance across subgroups. Maternal burnout mediated the relations between enjoyment, heightened caregiving, and role reversal and child dysregulation. Helplessness exerted a direct effect.

Conclusion: The Italian CEQ is a valid and reliable tool for assessing maternal caregiving, relevant across developmental and demographic contexts.

Author note: The authors thank all the mothers who made this research possible. Data and study analysis code, as well as the Italian version of the CEQ, are available from the corresponding author upon reasonable request.

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Implications: Interventions targeting maternal caregiving and burnout may reduce child dysregulation.

KEYWORDS

Caregiving Experiences Questionnaire, caregiving representations, caregiving system, child dysregulation, parental burnout

INTRODUCTION

The investigation of the child's attachment system represents only one half of the parent–child relationship (Bowlby, 1980). Once the child's attachment system is activated to seek protection and comfort, the complementary activation of the parental caregiving system is expected to occur, aiming to provide the necessary protection and care to the child (George & Solomon, 2008). The caregiving system is biologically rooted and influences parents' capacity to interpret and respond to their child's needs, and organize caregiving behaviors accordingly (George & Solomon, 2008; Rosenblum et al., 2006; Solomon & George, 1996). Similar to other behavioral systems, the caregiving system is goal directed, deactivates once its objective is achieved, interacts with other behavioral systems triggered by environmental and internal cues, and follows developmental behavioral sequences that refine its functioning over time (George & Solomon, 2008).

The caregiving system consists of a behavioral component and a representational system. The behavioral component (i.e., caregiving behaviors) extends from the representational system—the internal working model of caregiving—that reflects how parents represent their child and themselves as caregivers (Solomon & George, 1996). Its development is influenced by several factors, including parents' early attachment experiences, child characteristics, current caregiving experiences, and social–contextual influences (Solomon & George, 1996; Vreeswijk et al., 2012). Further, the caregiving representational system is continuously reshaped based on new salient information sources (e.g., parent–child interactions) (Solomon & George, 1996). Thus, the caregiver's capacity to organize and integrate these experiences and information sources into a coherent, balanced internal representational structure is crucial for interpreting and responding appropriately to the child's cues, thereby influencing child–parent attachment and child's behavioral outcomes (George & Solomon, 1996, 2008).

Although all parents possess the biologically driven caregiving system, individual differences emerge in how they consciously and unconsciously organize their caregiving representations. These differences are partially shaped by caregiver's defensive processes, which help organize the different sources of caregiving and attachment information (Bowlby, 1980; Carone & Tracchegiani, 2025; Carone et al., 2025; George & Solomon, 2008). Drawing on attachment theory (Bowlby, 1980; George & Solomon, 2008), four primary defensive processes have been identified underlying internal working models of caregiving: flexible integration, deactivation, cognitive disconnection, and segregated systems. Flexible integration reflects a balanced relation between the parent's attachment and caregiving systems, fostering sensitive responses to the child's needs. Deactivation removes distress from awareness, suppressing activation of the caregiving system and creating psychological and physical distance from the child.

By fragmenting attachment-related information and emotions, cognitive disconnection distorts caregiving experiences, leading to an overactivation of the caregiving system. This state prevents parents from disengaging from their children's distress or their own perceived caregiving failures, leaving them overwhelmed with worry and anxiety. Segregated systems, often rooted in traumatic experiences, may result in "dysregulation"—an overwhelming sense of helplessness—or "constriction" in parents, which suppresses distress of caregiving experiences, fostering idealized perceptions of the child and role reversal (George & Solomon, 2008).

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Parental segregated systems are related to child–parent disorganized attachment, a significant risk factor for later psychopathology (George & Solomon, 2008).

Several interviews have been developed to assess caregiving representations, including the Caregiving Interview (CI; George & Solomon, 1988/1993/2005/2007), the Working Model of the Child Interview (WMCI; Zeanah et al., 1996), and the Parent Development Interview (PDI; Slade et al., 2004)—all with strong predictive validity for caregiving behaviors and child–parent attachment (e.g., Crawford & Benoit, 2009; George & Solomon, 1996, 2008; Røhder et al., 2020; Slade & Sleed, 2024; Vreeswijk et al., 2012). However, these tools require extensive training and coding expertise, limiting their feasibility for widespread research and clinical applications. To overcome this limitation and provide an accessible self-report measure of caregiving representations, the Caregiving Experiences Questionnaire (CEQ; Brennan, 2018) represents a promising alternative.

The CEQ is a parent-report measure of caregiving experiences and comprises 40 items across five dimensions, each capturing caregiving representations based on current experiences within a specific parent–child relationship and corresponding to an underlying adaptive or maladaptive defensive process: Enjoyment (flexible integration), Discourages Closeness (deactivation), Heightened Caregiving (cognitive disconnection), Helplessness (dysregulation), and Role Reversal (constriction; Brennan, 2018). Enjoyment captures balanced and flexible representations, reflecting parents' ability to find fulfillment in caregiving while maintaining a balance between their own and their children's needs. Discourages Closeness assesses the parental tendency to create emotional and psychological distance from the child, whereas Heightened Caregiving reflects an overactivation of the caregiving system, leading to excessive proximity. Helplessness reflects parents' experience of being overwhelmed and their inability to regulate both their child's behavior and their own emotional reactions to it. Role Reversal describes a dynamic in which the child is expected to fulfill the parent's emotional needs, thereby reversing and disrupting normative caregiving roles.

The CEQ's construct validity has been examined in several cultural contexts, including the United Kingdom, Denmark, and Turkey (Brennan, 2018; Kaynak-Ekici & İmir, 2024; Røhder et al., 2019). Across studies, the original five-factor structure has not been consistently supported, with discrepancies sometimes attributed to cultural factors (Kaynak-Ekici & İmir, 2024; Røhder et al., 2019). Notably, both the Danish and Turkish validations converged on a four-factor model and found no support for Discourage Closeness (Kaynak-Ekici & İmir, 2024; Røhder et al., 2019). In the Danish study (Røhder et al., 2019), the four factors conceptually paralleled four of Brennan's five dimensions, with most items loading onto the same constructs as in the original U.S. work (Brennan, 2018). Factor 1 indexed maternal Enjoyment and the absence of negative affect toward the child; Factor 2 resembled Heightened Caregiving (difficulties with separation); Factors 3 and 4 captured Helplessness and Role Reversal, respectively, albeit with fewer items than the original subscales. The fifth dimension, Discourage Closeness—characterized by negative appraisals of the child and distancing maternal emotions—did not emerge in the Danish sample. The four subscales showed strong internal reliability, and predictive validity was supported via theory-consistent links with parenting stress and child behavior problems (Røhder et al., 2019). Similarly, the Turkish 34-item validation (Kaynak-Ekici & İmir, 2024) supported a four-factor solution, though items allocation and labels largely differed from the Danish validation (Røhder et al., 2019) because items were adapted to better reflect questionnaire content and cultural interpretation. The four Turkish factors emphasized maintaining a warm parental bond, separation concerns, struggling with parenting challenges, and imposing emotional parentification on the child. Additionally, Brennan's (2018) U.K. study supported a three-factor sample model, retaining the Heightened, Helplessness, and Role Reversal dimensions. These studies have been limited by small sample sizes and an exclusive focus on mothers of preschool children. Yet, evidence suggests that several aspects of caregiving experiences are related to children's behavioral problems across

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developmental stages, including middle childhood and adolescence (e.g., Brumariu et al., 2018; Lecompte & Moss, 2014).

Why Italy? Contextual relevance for assessing caregiving representations

Italy offers a theoretically informative context for validating an instrument on self-reported caregiving representations. First, it belongs to the Mediterranean and "strong-ties" family regime, characterized by dense intergenerational bonds and proximity, which historically places a high value on intra-family care and obligations (De Vita & Corasaniti, 2022; Reher, 2004). In line with this familistic configuration, grandparental child care is exceptionally prevalent in Italy—over half of children 0–13 receive regular care from non-coresident grandparents—making intergenerational support a routine ingredient of daily caregiving (Zanasi et al., 2022). Second, despite some convergence, gender gaps in basic child care remain pronounced: Italian mothers continue to bear a disproportionate share of routine child care and domestic work, a pattern that intensified during exogenous stressors such as the COVID-19 pandemic (Del Boca et al., 2022). These features make intensive mothering culturally salient and may specifically shape CEQ dimensions: For example, heightened caregiving may be normatively encouraged in some contexts, helplessness may emerge where support is insufficient or uneven, and role reversal may take distinct forms within highly interdependent kin networks. Third, Italy's very low fertility and delayed parenthood reflect structural constraints on work–family reconciliation (Alderotti, 2022) and may amplify or buffer parental burnout—a mechanism examined in the present study—depending on the availability and quality of informal versus formal child care. Together, these contextual elements make Italian caregivers both meaningful and understudied for testing whether CEQ structure and correlates generalize to a familistic, low-fertility setting. In this vein, the abovementioned contextual features can differentially load CEQ dimensions.

Parental caregiving representations and child dysregulation

Parental caregiving representations have a significant impact on parent–child relationships and child development (Madigan et al., 2015; Rosenblum et al., 2006; Vreeswijk et al., 2012). Previous research using the CEQ highlighted that the Helplessness, Discourage Closeness, and Heightened Caregiving dimensions are risk factors for children's behavioral difficulties, whereas the Role Reversal dimension does not show significant relations with internalizing or externalizing child difficulties (Brennan, 2018; Røhder et al., 2019). The latter finding diverges from broader evidence in attachment and family systems literature, suggesting that caregiving role reversal is indeed associated with behavioral difficulties in children and adolescents (Macfie et al., 2015; Thompson et al., 2024).

Children's and adolescents' dysregulation is gaining clinical interest in research insofar as the "dysregulation profile" identified by both the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2000) and the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) represents a reliable transdiagnostic marker of psychopathology (Baroud et al., 2024; Carballo et al., 2014). Children's dysregulation may manifest as anxiety and depression (i.e., affective dysregulation), aggression (i.e., behavioral dysregulation), and attention problems (i.e., cognitive dysregulation; Althoff et al., 2010). Evidence indicates that family factors (e.g., negative parenting practices) have a prominent role in child dysregulation (Caro-Cañizares et al., 2015). However, only parenting styles and behaviors have been investigated in relation to children's and adolescents' dysregulation profiles (e.g., Caro-Cañizares et al., 2015; Kil et al., 2024).

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Rather than focusing on discrete parenting behavior, investigating how parents organize their caregiving experiences in line with the goals of the caregiving system may provide deeper insights into the development and maintenance of child dysregulation (Solomon & George, 1996). In this regard, Rosenblum et al. (2002, 2006) found that infants of mothers with disengaged and distorted representations of their children display lower levels of positive affect and are less likely to employ interpersonally oriented regulatory strategies compared to infants of mothers with balanced representations. Therefore, the present research examined the influence of maternal caregiving representations on child dysregulation.

Links of parental burnout with caregiving representations and child dysregulation

When parents deplete their resources against stress and risk factors increase, they may experience a clinical syndrome of parental burnout marked by exhaustion related to parenting, emotional distancing from their children, loss of pleasure in parenting, and a sense of no longer recognizing themselves as the parents they once were or aspired to be (Mikolajczak et al., 2023). Previous research suggests that dispositional parental factors, including how parents perceive themselves and others, are associated with parental burnout. Specifically, parents' early maladaptive schemas and higher impairments in self-personality functioning likely influence parental burnout (Le Vigouroux et al., 2025; Tracchegiani & Carone, 2025).

Theoretically, parental burnout is related to caregiving representations. Because these representations shape how parents interpret and respond to caregiving demands (George & Solomon, 2008), representations that are rigid, overinvolved, or overwhelmed by feelings of helplessness may lead parents to perceive caregiving as more burdensome, contributing to chronic emotional depletion and increasing vulnerability to burnout. For example, helplessness representations likely increase maternal self-perceptions of inadequacy and being unable to effectively manage the parent–child relationship (George & Solomon, 2008), potentially increasing exhaustion and emotional detachment from the parenting role. Conversely, balanced and flexible representations of caregiving may enhance parental resilience, enabling more adaptive responses to the everyday challenges of parenting. In line with this idea, Kaynak-Ekici and İmir (2024) provided preliminary evidence linking maternal caregiving representations, as assessed with the CEQ, to parental burnout.

Parental burnout also plays a role in the development of child dysregulation. Children rely on their caregiver's regulatory scaffolding to manage their affective states, especially during infancy (Rosenblum et al., 2006). Across developmental stages, parents remain crucial in helping children to successfully negotiate age-salient emotional tasks. While children's self-regulation strategies improve with age, they continue to rely on their parents, particularly in stressful situations in middle childhood (Brumariu, 2015). Furthermore, parental maladaptive affect regulation has been closely associated with child dysregulation and behavioral difficulties, suggesting that a parent's ability to regulate their own emotions directly impacts their child's self-regulation (Morris et al., 2017).

In the context of parental burnout, the parent's capacity to lead and guide coregulation processes within parent–child interactions and provide essential regulatory support for the child's developing self-regulation, may be severely impaired. For example, burned-out parents who avoid emotionally charged interactions due to exhaustion may leave dysregulated children to manage their affective states autonomously. The associations between parental burnout and child dysregulation are further supported by evidence linking burnout to maladaptive parental emotion regulation strategies (Brandão et al., 2024), which can be transmitted to children (Morris et al., 2017). Parental burnout-related challenges in emotional regulation may hinder the parent's ability to attune to the child's immediate affective states and needs, resulting in

dyadic interactions that are less reciprocal and less effectively coordinated, and thus failing to meet the child's regulatory needs (Carone et al., 2026).

Despite empirical associations between caregiving representations and child dysregulation (Rosenblum et al., 2002, 2006), little research has investigated the potential mechanisms underlying these associations. From an attachment perspective, caregiving representations organize parents' attention, appraisal, and behavior in response to the child's signals, thereby sustaining secure-base and safe-haven functions (Bowlby, 1980; George & Solomon, 2008). In this framework, we expected that Enjoyment, which reflects flexible integration of self-as-caregiver and child representations, would be associated with lower child dysregulation because it supports attuned coregulation and the child's internalization of regulatory skills. By contrast, Heightened Caregiving, indexing cognitive disconnection and hyperactivation (e.g., intrusive proximity seeking, separation preoccupation), should relate to higher dysregulation insofar as it crowds out opportunities for autonomous regulation. Helplessness, reflecting segregated systems and caregiving abdication alongside negative attributions, was likewise expected to show positive associations with dysregulation and, theoretically, a comparatively strong direct link given the loss of regulatory scaffolding. Finally, Role Reversal, which captures constriction whereby the child is construed as regulating the parent, was treated as exploratory: We can expect attenuated difficulties when the child appears "competent," but attachment theory cautions that costs can emerge as autonomy demands increase.

The present research

This research aimed to examine the psychometric properties of the Italian version of the CEQ (Brennan, 2018). In Study 1, we investigated the factorial structure of the CEQ using the exploratory and confirmatory factor analysis in two independent samples, assessed its internal consistency reliability, and tested its measurement invariance across child gender (male vs. female), child developmental stage (preschool = 2–5 years vs. middle childhood = 6–13 years), and maternal education level (bachelor's degree or higher vs. lower than a bachelor's degree). In Study 2, we investigated the mediating role of parental burnout in the associations between the CEQ's caregiving dimensions and child dysregulation.

STUDY 1: FACTORIAL STRUCTURE AND MEASUREMENT INVARIANCE OF THE CEQ ACROSS CHILD GENDER AND DEVELOPMENTAL STAGE, AND MATERNAL EDUCATION

Method

Procedure

The research was approved by the Territorial Ethics Committee Lazio Area 2 (#178.24 utv). Participants were recruited through snowball sampling, by sharing an online survey link on Facebook and Instagram parenting and child-focused pages with large mother followings, and by word of mouth from September to December 2024. During recruitment, participants were informed that this study aimed to validate an instrument assessing various caregiving experiences in the Italian context. To ensure data quality, three attention-check items were embedded within the survey. The only missing data were due to participant dropouts during survey completion. Informed consent was obtained prior to participation, and each participant received a unique reference code to ensure anonymity. The survey, hosted securely on the Qualtrics platform, took approximately 20 minutes to complete. No compensation was provided.

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Participants

A community sample of 891 biological, cisgender, heterosexual mothers ($M = 41.48$ years, $SD = 6.76$, age range: 23–61 years) participated in the study. Most identified as primary caregivers of their child(ren) (94.05%); all were White and resided in Italy, with the majority ($n = 854$; 95.85%) holding Italian citizenship. Most mothers were employed ($n = 761$; 85.41%), 12.57% ($n = 112$) were unemployed without financial assistance, and 2.02% ($n = 18$) were receiving social economic support. Most had at least a bachelor's degree ($n = 574$, 64.42%). With respect to marital status, 68.57% of mothers were married ($n = 611$), 23.01% were not married but cohabiting with their child's father ($n = 205$), 6.29% were divorced ($n = 56$), 2.02% were not involved in a romantic relationship ($n = 18$), and 0.11% were widowers ($n = 1$). The average age of the participants' children was 7.94 years ($SD = 3.86$; age range: 2–13 years), and 51.40% were assigned female at birth ($n = 458$).

Instruments

The CEQ (Brennan, 2018) is designed to assess parental representations of caregiving based on current caregiving experiences within a specific parent–child relationship. The original CEQ was independently translated into Italian by two researchers. Subsequently, it underwent a back-translation process conducted by another researcher fluent in both English and Italian. The questionnaire consists of 40 items, with respondents rating how characteristic each statement is of their relationship with themselves, their child, or their parent–child relationship on a 5-point Likert scale (1 = *not very characteristic at all*; 5 = *very characteristic*). The original CEQ assesses five caregiving representations: Enjoyment, Heightened Caregiving, Discourage Closeness, Helplessness, Role Reversal. Previous research has demonstrated good internal validity, with Cronbach's alpha values ranging from .71 (Role Reversal) to .93 (Enjoyment; Røhder et al., 2019).

Data analysis

Data were analyzed using the R-based interface jamovi (Version 2.3.18; https://www.jamovi.org/) and Mplus (Version 8.6; Muthén & Muthén, 1998–2017). Preliminarily, item-level descriptive statistics were computed (see Supplemental Table 1), and univariate normality was assessed by inspecting skewness and kurtosis, with values outside the range of [−1, +1] considered indicative of nonnegligible violations (Muthén & Kaplan, 1985).

Subsequently, the factorial validity of the CEQ was examined using an exploratory-confirmatory cross-validation strategy (Hoyle & Panter, 1995; MacCallum et al., 1994). More specifically, the total sample was randomly split into two halves: the first half served as a generative sample ($n = 446$) to assess the underlying dimension of the CEQ through exploratory factor analysis (EFA), and the second half served as a validation sample ($n = 445$) to test the replicability of the solution through confirmatory factor analysis (CFA). Such a cross-validation strategy allows minimizing capitalization on chance and enhances the generalizability of the factorial structure. EFA was conducted using parallel analysis (Horn, 1965) to determine the optimal number of factors, with oblique Promax rotation to account for inter-factor correlations. An EFA solution was considered acceptable when the following criteria were satisfied: (a) each factor had to have at least three items with salient loadings, (b) no items should exhibit substantial cross-loadings, and (c) the latent factors needed to be theoretically reasonable (Watkins, 2018). Due to substantial violations of normality and the categorical-ordered nature of the items, polychoric correlations were used for factor analyses, and the

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robust weighted least squares estimator was employed (WLSMV; Muthén & Muthén, 1998–2017). Several fit indices were used to assess the adequacy of the CFA models (Wang & Wang, 2020): the standardized root-mean-square residual (SRMR) and root-mean-square error of approximation (RMSEA), with values ≤.08 indicating acceptable fit; and the comparative fit index (CFI) and Tucker–Lewis index (TLI), with values ≥.90 reflecting acceptable fit.

After identifying the most appropriate factor model, measurement invariance testing was used to investigate whether the latent factors were consistent across different subgroups, including child gender (i.e., male vs. female), child developmental period (i.e., preschool = 2–5 years vs. middle childhood = 6–13 years), and maternal education level (i.e., bachelor's degree or higher vs. lower than a bachelor's degree). Following Meredith's (1993) framework, invariance testing was carried out via multigroup CFA (MG-CFA) examining three progressively rigorous levels of invariance: configural invariance (i.e., the same pattern of free and fixed loadings), metric invariance (i.e., equivalence of factor loadings), and scalar invariance (i.e., equivalence of items' thresholds). Nested models were compared by calculating changes in fit indices, with a decrease in CFI greater than .01 and an increase in RMSEA above .015 considered indicative of lack of invariance (Chen, 2007).

Lastly, the internal consistency of the CEQ was examined using omega coefficients calculated with Yang and Green's (2015) correction for ordered categorical data. Omega was preferred over Cronbach's alpha because the latter assumes tau-equivalence and continuous indicators. By contrast, omega is defined under a congeneric measurement model and appropriately accommodates ordinal items, such as those of the CEQ (see Flora, 2020). Omega coefficients above .70 were considered satisfactory (Hair et al., 2019).

Results

Dimensionality

Parallel analysis suggested the presence of four main factors (Horn, 1965). The factorial pattern resulting from the EFA is presented in Supplemental Table 2. A close inspection of the rotated loadings matrix revealed that 10 items (i.e., 4, 6, 8, 18, #24, 25, 29, 30, 32, 34) had either a non-salient primary loading (< |0.50|; Hair et al., 2019) or substantial cross-loadings (> |0.30|; Watkins, 2018). To achieve an approximate simple structure, these items were removed from the analysis and EFA was rerun on the remaining items (e.g., Barbaranelli et al., 2013). In addition, Item 16 ("My child pushes me away or ignores me a lot") was excluded due to theoretical inconsistency with the Helplessness factor on which it saturated. Such exclusion was also consistent with the original five-factor structure (in which Item 16 saturated on the Discourage factor) and Røhder et al. (2019)'s four-factor structure (in which Item 16 saturated on the Enjoyment factor as a reversed item).

The final 29-item EFA solution is reported in Table 1. The solution exhibited an approximate simple structure, with primary loadings ranging from 0.518 to 0.841 and cross-loadings below |0.30|. The first factor was defined by items measuring Enjoyment (e.g., "When s/he gets up in the morning, just to see the smile on his or her face—I know that s/he loves me, s/he trusts me."). The second factor was defined by items measuring Helplessness (e.g., "When I'm angry at my child, I have to leave the room so I don't explode."). The third factor was defined by items measuring Heightened Caregiving (e.g., "I am lonely when my child and I are separated."). The fourth factor was defined by items measuring Role Reversal (e.g., "My child and I are really close. I can just sit there and tell him or her if I had a bad day and s/he understands."). The total variance explained by the four factors was 57%.

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TABLE 1 Standardized loading estimates from the EFA and the CFA on the generative sample ($N = 446$ and 445 mothers, respectively, from Study 1).

	Standardized factor loadings from the EFA ($N = 446$ mothers)			
Item	**Enjoyment**	**Helplessness**	**Heightened Caregiving**	**Role Reversal**
CEQ1	0.680			
CEQ2	0.601			
CEQ5	0.706			
CEQ13	0.573			
CEQ14	0.518			
CEQ23	0.654			
CEQ28	0.565			
CEQ3			0.558	
CEQ22			0.580	
CEQ26			0.833	
CEQ27			0.751	
CEQ7		0.603		
CEQ9		0.644		
CEQ10		0.631		
CEQ11		0.608		
CEQ12		0.636		
CEQ15		0.748		
CEQ17		0.647		
CEQ19		0.666		
CEQ20		0.653		
CEQ21		0.831		
CEQ31		0.734		
CEQ35		0.619		
CEQ36		0.739		
CEQ38		0.677		
CEQ39		0.841		
CEQ33				0.588
CEQ37				0.892
CEQ40				0.673
	Standardized factor loadings from the CFA ($N = 445$ mothers)			
Item	**Enjoyment**	**Helplessness**	**Heightened Caregiving**	**Role Reversal**
CEQ1	0.603			
CEQ2	0.485			
CEQ5	0.688			
CEQ13	0.728			
CEQ14	0.714			
CEQ23	0.598			
CEQ28	0.748			
CEQ3			0.600	

(Continues)

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TABLE 1 (Continued)

	Standardized factor loadings from the CFA ($N = 445$ mothers)			
Item	**Enjoyment**	**Helplessness**	**Heightened Caregiving**	**Role Reversal**
CEQ22			0.611	
CEQ26			0.804	
CEQ27			0.842	
CEQ7		0.627		
CEQ9		0.584		
CEQ10		0.551		
CEQ11		0.663		
CEQ12		0.571		
CEQ15		0.725		
CEQ17		0.687		
CEQ19		0.679		
CEQ20		0.669		
CEQ21		0.777		
CEQ31		0.744		
CEQ35		0.656		
CEQ36		0.757		
CEQ38		0.680		
CEQ39		0.770		
CEQ33				0.776
CEQ37				0.726
CEQ40				0.760

Note. All EFA cross-loadings are < |.30| and are omitted for clarity. CEQ = Caregiving Experiences Questionnaire; CFA = confirmatory factor analysis; EFA = exploratory factor analysis.

Hence, according to the EFA results and consistent with previous studies reporting a four-factor structure for the CEQ (e.g., Røhder et al., 2019), the resulting solution was cross-validated using a confirmatory factorial approach. The hypothesized four-factor model fit well to the data: WLSMVχ^2 (371) = 846.441, $p < .001$; RMSEA = .054 (90% confidence interval [CI] [0.049, 0.058]), $p = .102$; CFI = .928; TLI = .921; SRMR = .071. All standardized factor loadings were statistically significant ($M = 0.683$, $SD = 0.084$; $p < .001$; see Table 1). Inter-factor correlations ranged from −.253 to .610, providing evidence of the discriminant validity of the emerging subscales (Brown, 2015; see Supplemental Table 3).

Measurement invariance

To examine the measurement invariance of the CEQ across child developmental period, parental education level, and child gender, MG-CFAs were estimated by imposing increasingly stringent invariance constraints. In particular, when the four-factor model was simultaneously estimated across each grouping variable, satisfactory fit indices were observed, indicating that the pattern of free and fixed loadings was consistent across groups. Furthermore, when constraints on factor loadings and thresholds were introduced, no meaningful differences in fit indices were detected, with changes in CFI lower than .01 and RMSEA increases not exceeding .015. These findings provide empirical support for configural, metric, and scalar invariance models, demonstrating that the CEQ measured the underlying construct comparably across the

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TABLE 2 Results from the invariance testing for the four-factor solution.

	Child gender						
Model	**WLSMVχ^2 (*df*)**	**RMSEA**	**CFI**	**TLI**	**SRMR**	**ΔCFI**	**ΔRMSEA**
Configural invariance	1631.792 (742)	.052	.935	.928	.070		
Metric invariance	1633.353 (767)	.051	.934	.930	.071	.001	−.001
Scalar invariance	1733.848 (841)	.049	.934	.937	.071	0	−.002
	Child developmental period						
Model	**WLSMVχ^2 (*df*)**	**RMSEA**	**CFI**	**TLI**	**SRMR**	**ΔCFI**	**ΔRMSEA**
Configural invariance	1495.978 (742)	.048	.944	.939	.067		
Metric invariance	1570.307 (767)	.048	.940	.937	.068	−.004	0
Scalar invariance	1686.009 (841)	.047	.937	.939	.068	−.003	−.001
	Parental education level						
Model	**WLSMVχ^2 (*df*)**	**RMSEA**	**CFI**	**TLI**	**SRMR**	**ΔCFI**	**ΔRMSEA**
Configural invariance	1607.312 (742)	.051	.935	.929	.070		
Metric invariance	1632.091 (767)	.051	.934	.930	.070	−.001	0
Scalar invariance	1697.919 (841)	.048	.936	.938	.070	.002	−.003

Note. CFI = comparative fit index; RMSEA = root-mean-square error of approximation; SRMR = standardized root-mean-square residual; TLI = Tucker–Lewis index; WLSMV = weighted least squares estimator. Multigroup analyses were conducted on the total sample.

different groups. A summary of the invariance analyses is presented in Table 2, with further methodological and descriptive details reported in the supplemental materials.

Reliability

Reliability estimates for the four CEQ factors were derived from the total sample using omega coefficients adjusted for ordinal categorical indicators (Yang & Green, 2015). The omega values were 0.786, 0.844, 0.782, and 0.766 for Enjoyment, Helplessness, Heightened Caregiving, and Role Reversal, respectively, indicating good internal consistency of the scale.

STUDY 2: THE MEDIATING ROLE OF PARENTAL BURNOUT IN THE ASSOCIATION BETWEEN CAREGIVING REPRESENTATIONS AND CHILD DYSREGULATION

Method

Procedure

The procedure was identical to that of Study 1. Data were collected from November 2024 to February 2025.

Participants

The sample comprised 743 biological, cisgender, heterosexual mothers (M = 42.31 years, SD = 6.64, age range: 24–62 years). Most participants were born in Italy (n = 704; 94.75%) and

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identified themselves as the primary caregivers for their children (94.08%). Most were employed ($n = 641$; 86.27%), whereas a smaller percentage were either unemployed without financial assistance ($n = 88$; 11.84%) or receiving social economic support ($n = 14$; 1.88%). Regarding education, half of the mothers ($n = 372$; 50.07%) held at least a bachelor's degree. In terms of marital status, the majority were married ($n = 508$; 68.37%). The average age of the mothers' children was 8.76 years ($SD = 4.99$; age range: 2–18 years), with 51.55% of children assigned female at birth ($n = 383$). The sample in Study 2 was different from the sample in Study 1. However, compared to the Study 1 sample, only negligible differences were observed in key demographic variables, including parent age (Cohen's $d = -0.123$), education (Cramer's $V = 0.031$), working status (Cramer's $V = 0.012$), civil status (Cramer's $V = 0.005$), and child age (Cohen's $d = -0.188$).

Instruments

Caregiving representations

Caregiving representations were assessed through the CEQ (Brennan, 2018; see Study 1 for a detailed description). The Italian CEQ factorial structure found in Study 1 was used, with single-indicator latent variables representing each caregiving representation (i.e., Enjoyment, Helplessness, Heightened Caregiving, and Role Reversal).

Maternal burnout

Maternal burnout was measured using the Parental Burnout Assessment (PBA; Roskam et al., 2018). The PBA is a 23-item self-report rated on a 7-point Likert scale (0 = *never*; 6 = *everyday*) that assess parental burnout across four dimensions (i.e., emotional exhaustion in one's parental role, emotional distancing from one's children, sense of being fed up with parenting, and contrast with the previous parental self) as well as the total score (i.e. the sum of all 23 items). Previous research has demonstrated good validity across diverse contexts worldwide (Roskam et al., 2021). In this study, the total score was used as a single-indicator latent variable (Cronbach's $\alpha = .96$).

Child dysregulation

Consistent with previous studies (e.g., Baroud et al., 2024; Carballo et al., 2014; Carone et al., 2024), the child dysregulation profile was measured using three subscales of the SDQ (Goodman, 1997) assessing emotional problems (five items), hyperactivity/inattention (five items), and conduct problems (five items). Each item is rated on a 3-point Likert scale (0 = *never*; 2 = *true*). Higher scores indicated greater child dysregulation. In this study, the dysregulation score was used as a single-indicator latent variable (Cronbach's $\alpha = .78$).

Data analysis

Data were analyzed using the R-based interface jamovi (Version 2.3.18) and Mplus (Version 8.6; Muthén & Muthén, 1998–2017). Validity evidence for the CEQ was gathered using a two-step approach. First, bivariate correlations between CEQ subscales, maternal burnout, and child dysregulation were computed. Afterward, the nomological validity of the scale was assessed using a structural equation modeling approach (SEM; Bollen, 1989). Specifically, four partial mediation models were estimated, each including a single CEQ subscale as a predictor of child dysregulation symptoms, with maternal burnout acting as a mediator. These models were tested using robust maximum likelihood estimation (Muthén & Muthén, 1998–2017) to account for nonnormal indicators. Composite scores for each scale were used as observed

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indicators, with all constructs specified as single-indicator latent variables by estimating error terms based on reliability coefficients (Bollen, 1989). Error variance for each indicator was fixed at one minus the sample reliability estimate of the variable, multiplied by its sample variance (Bollen, 1989). The significance of indirect effects was formally evaluated by calculating bias-corrected bootstrap confidence intervals (5,000 replications; MacKinnon et al., 2004). To align analyses with our theory while respecting design constraints, paths were specified as theory-consistent directional associations and are not interpreted causally, as Study 2 is cross-sectional in nature.

Results

Descriptive statistics and bivariate correlations

Descriptive statistics and bivariate correlations are reported in Table 3. All CEQ subscales significantly correlated with maternal burnout and child dysregulation symptoms in the expected directions, with small-to-very large effect sizes (r range |.120| to |.718|, $p < .001$).

Structural equation models

Indirect effects based on SEM analyses are summarized in Table 4 (see also Supplemental Figure 1). Regarding the mediating role of maternal burnout in the relation between mothers' Enjoyment and children's dysregulation symptoms, results indicated a significant indirect effect (β = −.094, 95% bias-corrected bootstrap confidence interval [BCI] [−0.149, −0.044]). Specifically, lower enjoyment was associated with greater maternal burnout (β = −.186, $p < .001$), which, in turn, resulted in more child dysregulation symptoms (β = .507, $p < .001$). Moreover,

TABLE 3 Descriptive statistics and bivariate correlations.

Variable	*M* (*SD*)	1	2	3	4	5	6
1. Enjoyment	4.19 (0.61)						
2. Helplessness	1.76 (0.54)	−.143*					
3. Heightened Caregiving	2.47 (0.89)	.347*	.202*				
4. Role Reversal	3.11 (0.94)	.472*	−.253*	.239*			
5. Maternal Burnout	19.74 (21.85)	−.160*	.718*	.120*	−.260*		
6. Child Dysregulation	0.45 (0.27)	−.190*	.610*	.162*	−.240*	.468*	

Note. Mean and *SD* of maternal burnout refer to sum score.
*$p < .05$.

TABLE 4 Standardized indirect effects estimated through structural equation modeling.

Indirect effect	Standardized estimate (95% BCI)
Enjoyment ⇒ Maternal burnout ⇒ Child dysregulation	−0.094 (−0.149 to −0.044)
Helplessness ⇒ Maternal burnout ⇒ Child dysregulation	−0.068 (−0.176 to 0.033)
Heightened Caregiving ⇒ Maternal burnout ⇒ Child dysregulation	0.072 (0.031 to 0.112)
Role Reversal ⇒ Maternal burnout ⇒ Child dysregulation	−0.145 (−0.191 to −0.104)

Note. BCI = bias-corrected bootstrap confidence intervals.

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lower enjoyment had a negative direct effect on child dysregulation symptoms ($\beta = -.149$, $p = .001$).

When examining the relation between helplessness and child dysregulation symptoms, findings revealed a nonsignificant indirect effect via maternal burnout ($\beta = -.068$, 95% BCI [−0.176, 0.033]). More precisely, greater helplessness was significantly associated with higher levels of maternal burnout ($\beta = .778$, $p < .001$), whereas maternal burnout did not show a significant association with child dysregulation symptoms ($\beta = -.087$, $p = .189$). However, greater helplessness was directly associated with higher child dysregulation ($\beta = .798$, $p < .001$).

Regarding heightened caregiving, a significant indirect effect emerged with child dysregulation symptoms via maternal burnout ($\beta = .072$, 95% BCI [0.031, 0.112]). That is, greater heightened caregiving was associated with higher maternal burnout ($\beta = .139$, $p < .001$), which, in turn, significantly resulted in higher child dysregulation ($\beta = .515$, $p < .001$). Additionally, greater heightened caregiving was directly associated with higher child dysregulation ($\beta = .135$, $p = .003$).

Finally, when analyzing the mediating role of maternal burnout in the relation between role reversal and child dysregulation symptoms, a significant indirect effect was found ($\beta = -.145$, 95% BCI [−0.191, −0.104]). More specifically, higher role reversal was associated with lower maternal burnout ($\beta = -0.299$, $p < .001$), which, in turn, was related to higher child dysregulation symptoms ($\beta = .487$, $p < .001$). Additionally, higher role reversal was also directly associated with lower child dysregulation ($\beta = -.158$, $p = .001$).

Overall, the proportion of explained variance (R^2) in child dysregulation was .307 for the model including Enjoyment, .537 for the model including Helplessness, .303 for the model including Heightened Caregiving, and .308 for the model including Role Reversal.

GENERAL DISCUSSION

Considering the lack of validated attachment-based self-report instruments in Italian for assessing parental caregiving representations and the well-documented role of caregiving representations on parenting and child development (e.g., Lindstedt, Korja, et al., 2024; Røhder et al., 2020; Vreeswijk et al., 2012), this research had two primary objectives. Study 1 aimed to evaluate the factor structure and reliability of the Italian version of the CEQ in a large community sample of mothers. Study 2 examined whether maternal burnout statistically mediated the associations between maternal caregiving representations and child dysregulation.

In Study 1, EFA in the generative sample supported a four-factor CEQ solution—Enjoyment, Helplessness, Heightened Caregiving, and Role Reversal—which was subsequently confirmed in the validation sample via CFA. This structure converges with the Danish validation (Røhder et al., 2019), which identified the same latent content and factor labels, though with fewer items—differences plausibly reflecting modest cultural nuances in maternal caregiving and later theoretical refinements.

Two Danish items were excluded for construct-validity reasons. Item 30 ("My child cheers me up if I am sad or angry. S/he makes me smile and feel better.") loaded on Role Reversal in Denmark, but in our data it appeared to reflect normative prosocial/affiliative bids within dyadic coregulation rather than boundary inversion: It lacks indicators of child responsibility, obligation, or sustained caregiving toward the mother that would justify inferring role reversal (George & Solomon, 1996, 2008). Item 29 ("I get sad when I realize that my child won't stay a baby forever.") was also removed because it captures reflective, time-oriented sadness about developmental change rather than separation-based hyperactivation. It does not index core heightened caregiving markers such as compulsive proximity seeking, separation-linked guilt or preoccupation, or functional interference (George & Solomon, 1996, 2008), which are more directly represented by Items 3, 22, 26, and 27. Moreover, our samples involved older children

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(2–13 and 2–18 years) than the Danish sample (1.5–5 years), making "not staying a baby" less developmentally salient and more likely to function as generic nostalgia, thereby reducing face validity for Heightened Caregiving and limiting variance among mothers of children well beyond infancy.

Consistent with the Danish findings (Røhder et al., 2019) and diverging from the original five-factor model (Brennan, 2018), we did not retain Discourage Closeness. Nonreplication may reflect social desirability and norm awareness in Italian parenting contexts, compressing variance on negatively valenced child appraisals (e.g., George & West, 2012). Underrepresentation is also possible if mothers with distancing representations were less likely to engage with the parent and child-focused social media recruitment channels. Finally, conservative item-retention rules (salient primary loadings, minimal cross-loadings) and WLSMV estimation on polychoric correlations—preferred for ordinal indicators (Li, 2016)—likely produced cleaner, more stable solutions while reducing the likelihood of retaining very small or weakly defined factors.

Our final solution comprised 29 items, as opposed to the 39-item Danish version (Røhder et al., 2019) and the 40-item original version (Brennan, 2018). The 29-item Italian CEQ demonstrated good internal consistency, and measurement invariance across key demographic variables, including child developmental period (i.e., 2–5 years vs. 6–13 years), maternal education level (bachelor's degree or higher vs. lower than a bachelor's degree), and child gender (male vs. female). Previous studies have not explored the invariance properties of the CEQ across different demographic groups, primarily focusing on mothers of preschool-aged children (e.g., Røhder et al., 2019). However, literature highlighted the key role of maternal caregiving and representations also in middle childhood (Brumariu et al., 2018; George & Solomon, 2011).

Additionally, although prior research suggests that child gender may influence parental interactions and caregiving behaviors (e.g., van Polanen et al., 2017), our findings indicate that maternal caregiving representations are independent of both mothers' educational background and child gender. This supports the notion that such representations are shaped more by past attachment history and current relational experiences (e.g., relationship with partner) than sociodemographic factors (Huth-Bocks et al., 2016; Røhder et al., 2020; Solomon & George, 1996). Taken together, these psychometric findings support the CEQ as a valid self-report instrument for assessing caregiving representations among Italian mothers of children aged 2 to 13 years and underscore its potential utility in both research and clinical contexts.

The Italian CEQ factorial structure may also be interpreted through a cultural lens. Italy's caregiving ecology is marked by mothers' historically central role in daily care, alongside routine involvement of non-coresident grandparents and other kin (Del Boca et al., 2022; Zanasi et al., 2022). Accordingly, intensive mothering scripts may sustain high caregiving even when help is available, helplessness may be buffered by reliable support but heightened when support is inconsistent or evaluative, role reversal may diffuse across kin routines (e.g., a "competent child" maintaining harmony with grandparents), and enjoyment may reflect shared, networked moments of care (Bai et al., 2023). Including direct measures of coparenting quality, caregiver time use, and grandparental intensity would clarify how Italian family networks contour caregiving representations and the CEQ's nomological links.

In Study 2, in line with our first hypothesis, Enjoyment was negatively associated with child dysregulation. This factor, characterized by flexible and realistic representations, an understanding of oneself and their child as individuals, and positive caregiving experiences, supports effective coregulation processes in the parent–child dyad and promotes child's self-regulation throughout development by facilitating the internalization of regulatory interactions (Brumariu, 2015; Rosenblum et al., 2006).

Similarly, the Role Reversal factor (i.e., the child meeting the parent's needs) was negatively associated with child dysregulation. This association may reflect the mother's reliance on a well-regulated child capable of containing the mother's emotional needs. This finding aligns

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with previous research suggesting that children involved in controlling-caregiving parent–child interactions often display greater emotional awareness, likely due to the necessity of remaining attuned to the parent's emotional states (e.g., Brumariu et al., 2021). However, other studies have found that caregiving role-confused interactions are not significantly associated with behavioral problems during middle childhood (e.g., age 13; Kobak et al., 2017). Consistent with previous cautions in the literature (e.g., Brumariu et al., 2021), we advise against interpreting this pattern as indicative of positive adaptation. Instead, we propose that the potentially adverse effects of role reversal may emerge more clearly at later developmental stages, when increased demands related to autonomy and individuation could intensify the psychological burden placed on the child.

Constricted caregiving representations lead to abdicated caregiving, wherein mothers rely on their children for emotional regulation rather than the reverse, idealizing them and perceiving them as prematurely independent and capable across various domains (George & Solomon, 1996, 2008). Under these circumstances, instead of providing genuine protection, distorted role-reversal representations may impair a mother's ability to accurately observe and respond to her child's needs, potentially underestimating actual difficulties (Lecompte & Moss, 2014; Thompson et al., 2024). This observation highlights the importance of investigating the long-term effects of role-reversal dynamics on child development (Macfie et al., 2015).

Additionally, within Italy's familistic ecology (De Vita & Corasaniti, 2022), lower burnout and fewer reported child dysregulation symptoms among mothers who are higher on role reversal may index culturally valued scripts of the considerate/competent child, who helps sustain relational harmony across multigenerational routines. Grandparental involvement can diffuse visible daily strain and foster positive bias or idealization in maternal reports, without implying adaptiveness for the child's developmental tasks. Such dynamics may temporarily stabilize routines while masking child burden or deferring costs to periods requiring greater autonomy. In this vein, integrating partner reports, observation of coregulation, and measures of coparenting and family emotional climate is essential to distinguish genuine child regulation from representation or reporting effects in interdependent kin networks.

In line with our hypothesis and previous studies (Brennan, 2018; Røhder et al., 2019), Helplessness and Heightened Caregiving emerged as significant risk factors for child dysregulation. Helplessness is one of the most explicit forms of parental abdication (George & Solomon, 2011). The absence of regulatory scaffolding deprives children of essential support, increasing their likelihood of developing dysregulation over time and potentially contributing to maladaptive developmental outcomes (e.g., Brumariu et al., 2020). Previous research has consistently linked maternal helplessness to behavioral and emotional difficulties in children and adolescents, indicating that children of helpless caregivers struggle to develop effective self-regulation strategies (Huth-Bocks et al., 2016; Lecompte & Moss, 2014). Similarly, heightened caregiving, characterized by fear of separation and excessive proximity seeking, may significantly disrupt the parent–child coregulation system, ultimately interfering with the child's autonomy in developing self-regulation.

Given that the child dysregulation profile examined in this study reflects a combination of internalizing and externalizing symptoms, these findings extend previous CEQ studies, which have focused mainly on externalizing difficulties (Brennan, 2018; Røhder et al., 2019). Furthermore, they are consistent with broader literature suggesting that integrated and coherent maternal caregiving representations promote positive parenting practices, enhance maternal self-efficacy, and ultimately foster child well-being and emotional self-regulation (George & Solomon, 2008; Rosenblum et al., 2002). Conversely, disorganized and unbalanced maternal representations, likely characterizing helplessness and heightened caregiving, contribute to maladaptive, incoherent, and frightening caregiving, leaving the child without adequate support to regulate emotional and physiological distress (Solomon & George, 2011).

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Partially supporting our second hypothesis, maternal burnout mediated the relations between Enjoyment, Heightened Caregiving, and Role Reversal factors and child dysregulation, but it did not mediate the relation between Helplessness and child dysregulation. These findings suggest that, along with parental emotion regulation strategies and family emotional climate (Morris et al., 2017), maternal representations also play a crucial role in influencing child (dys)regulation (Rosenblum et al., 2002, 2006). Lower levels of Enjoyment were associated with higher maternal burnout, which, in turn, contributed to increased child dysregulation. The negative relation between Enjoyment and maternal burnout aligns with previous CEQ research (Kaynak-Ekici & İmir, 2024), suggesting that perceiving caregiving as a joyful, rewarding, and fulfilling experience is a protective factor for exhaustion in the parental role. This finding also underscores the importance of positive self-perception as a caregiver, consistent with prior studies indicating that parental satisfaction and integrated representations of self serve as protective factors against maternal burnout (Mikolajczak et al., 2023; Tracchegiani & Carone, 2025).

Similarly, higher Role Reversal scores were associated with lower levels of child dysregulation, a relation that was partially mediated by maternal burnout. These findings suggest that when a mother views her child as emotionally attuned, sensitive, and responsive to her needs, she may implicitly shift emotional regulatory responsibilities onto the child. This dynamic can help alleviate her psychological burden by reducing caregiving-related stress. In such contexts, children who are imbued with maternal representations of role reversal—serving as emotionally responsive figures—may come to assume responsibility for managing the emotional dynamics of the relationship.

In doing so, they may internalize the belief that regulating the parent is also a means of regulating themselves. As a result, mothers may come to view their child as inherently well regulated, consolidating idealized representations and potentially overlooking signs of child dysregulation (Lecompte & Moss, 2014; Thompson et al., 2024). However, if this caregiving dynamic becomes excessively burdensome—requiring the child to suppress their own emotional needs in favor of those of the parent—it may ultimately contribute to child dysregulation (Macfie et al., 2015). Accordingly, future research should consider conceptualizing role reversal along a continuum of severity, with particular attention to the potential emotional burden imposed on the child.

For Heightened Caregiving, the mediation analysis indicated that maternal hyperactivation of the caregiving system relates significantly to maternal burnout, which subsequently increases child dysregulation. These representations—characterized by excessive physical proximity, controlling behaviors, and overprotection—likely escalate maternal arousal and emotional exhaustion, thereby impairing a mother's ability to provide consistent caregiving and respond sensitively to the child's needs. Under these circumstances, heightened caregiving representation may be linked to greater parental anxiety and increased time spent with children, both of which are recognized risk factors for maternal burnout (Mikolajczak et al., 2023). This dynamic can create a vicious cycle in which heightened caregiving representations and burnout reinforce one another, leading to increased maternal dysregulation and, ultimately, greater child dysregulation. When a mother is burned-out and unable to provide a safe haven for the child's emotional distress (Brumariu, 2015), the child may lack the support necessary to develop effective self-regulation, increasing their vulnerability to dysregulation (Carone et al., 2026).

In contrast, the absence of an indirect effect of maternal burnout in the relation between Helplessness and child dysregulation suggests that the strong direct effects of helplessness on both maternal burnout and child dysregulation may eclipse any potential mediation by burnout. These findings are consistent with prior research, which shows that dysregulated helpless caregiving representations—often characterized by mothers' descriptions of their child as uncontrollable—are associated with maternal perceptions of child dysregulation (George & Solomon, 1996). When caregivers hold negative attributions about their child (e.g., describing

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them as a "devil" or "monster") and exhibit a disabled caregiving system, children are left without the emotional scaffolding required to develop self-regulation skills, making them more susceptible to dysregulation. It is also possible, however, that other unexamined mediating mechanisms, such as maternal withdrawal (Lyons-Ruth et al., 2013), may help explain the link between helplessness and child dysregulation. Alternatively, given its strong association with burnout, helplessness may itself represent a key correlate of maternal burnout, a possibility that warrants further investigation.

Limitations and future directions

Several limitations must be acknowledged. First, both samples comprised exclusively biological, cisgender, heterosexual mothers, limiting the generalizability of the findings to fathers and diverse family structures. Just as maternal caregiving representations influence parenting behaviors, maternal burnout, and child adjustment, it is reasonable to expect that paternal representations may exert similar influences. Given the significant role fathers play in child development (Volling & Cabrera, 2025), future studies should further explore this area. Second, the cross-sectional design precludes causal inference and limits tests of temporal precedence among caregiving representations, maternal burnout, and child dysregulation. Although our theory-consistent models prioritize mother-to-child pathways, child-to-mother influences are equally plausible. In this vein, child dysregulation may lead to maternal burnout and influence representations and behavior over time. Third, we did not assess maternal depressive and anxiety symptoms or child temperament, which may partly account for the associations among caregiving representations, maternal burnout, and child dysregulation (e.g., Mikolajczak et al., 2023; Røhder et al., 2020). In a transactional, bidirectional view, maternal symptoms and child temperament can evoke or amplify maternal burnout and alter caregiving, while caregiving difficulties and child dysregulation can, in turn, exacerbate maternal symptoms and interact with temperament, underscoring the need for longitudinal cross-lagged panel or random-intercept cross-lagged panel models, along with daily diary designs that capture short-timescale coregulation.

Fourth, although we justified Italy as a familistic context (De Vita & Corasaniti, 2022), we did not model within-country cultural moderators (e.g., familism/attitudinal norms, regional differences, intensity of nonparental child care, or coresidence with grandparents). Future work should include direct indices of these cultural features and test conditional pathways (e.g., multigroup or interaction models) to determine when and for whom caregiving representations relate to maternal burnout and child dysregulation in Italy. Additionally, the exclusive reliance on self-report measures and the absence of parental interviews represent another limitation, as self-reports are susceptible to response biases. Incorporating semistructured interviews, such as the WMCI (Zeanah et al., 1996) or the PDI (Slade et al., 2004), could offer further insights into maternal caregiving representations and enhance the validity of the CEQ. Ultimately, the exclusive use of maternal reports to assess child dysregulation may introduce informant bias (De Los Reyes & Kazdin, 2005). This limitation highlights the importance of employing multi-informant approaches in future research on parental caregiving representations and child difficulties—especially in cases involving role-reversed parent–child relationships (Thompson et al., 2024).

Although the present studies focused on mothers, caregiving representations are embedded in family-level systems. The coparenting alliance, the interparental relationship, and the broader family emotional climate influence how individual representations are enacted within daily routines, characterized by well-known spillover dynamics (where stress and affect move across subsystems) and crossover dynamics (where one partner's strain affects the other; Cox & Paley, 1997). From a family systems perspective, representations guide not only dyadic mother–

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child coordination but also how parents negotiate roles, boundaries, and regulatory tasks across dyads and triads (Lindstedt, Ahlqvist-Björkroth, et al., 2024). Thus, examining maternal representations speaks to family science questions about how beliefs, emotions, and resources circulate within families to scaffold (or erode) child regulation over time. Our findings should therefore be interpreted as family-embedded processes, even when measured at the individual level, and future research should integrate partners and direct indices of coparenting and climate to model these multilevel pathways.

Implications

This study is the first to investigate the role of caregiving representations in child dysregulation while examining the mediating role of maternal burnout. Considering that parental burnout is a context-specific clinical syndrome that adversely affects parental mental health, parenting behaviors, and child outcomes (Mikolajczak et al., 2023), understanding its underlying mechanisms is essential for enhancing clinical practice.

Attachment-informed interventions addressing maternal representations may be particularly effective in reducing dysregulated and heightened caregiving representations (e.g., Rosenblum et al., 2018), thereby alleviating burnout. Such interventions could assist mothers in reevaluating and processing their conscious and unconscious representations and attributions of themselves as caregivers, their child, and their relationships. Family practitioners can help mothers avoid becoming overwhelmed by their own caregiving (Lyons-Ruth & Spielman, 2004), empowering them to recognize their child's early cues of dysregulation before they increase.

Additionally, our findings support the psychometric validity of the CEQ within the Italian context, highlighting its potential as a clinical screening tool. Given the significant influence of caregiving representations on maternal burnout, the CEQ could serve as a valuable instrument for identifying the risk of burnout in mothers with maladaptive caregiving representations. Integrating the CEQ assessment with observational methods of mother–child interactions may further inform intervention strategies and provide a more comprehensive understanding of maternal burnout and its impact on child adjustment.

Conclusion

By confirming the strong psychometric properties of the four-factor 29-item CEQ version in two large independent samples of Italian mothers, our research contributes to the recognition of a practical and user-friendly self-report instrument for assessing different forms of caregiving representations based on current caregiving experiences within a specific mother–child relationship. Additionally, our findings provide initial evidence of the influence of caregiving representations on child dysregulation through the mediating role of maternal burnout.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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