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RESEARCH

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Distinct mechanisms linking romantic attachment dimensions to harsh discipline among Chinese parents of young children

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Abstract

Objective: This study aims to explore the mediating role of parental reflective functioning (PRF) and parental sense of competence (PSC) in the effect of romantic attachment on harsh discipline among Chinese parents of young children through both variable- and person-centered approaches.

Background: Harsh discipline is a negative parenting practice that has detrimental impacts on children. Evidence showed that parents' insecure romantic attachment may contribute to the use of harsh discipline, whereas the psychological mechanism underlying this association remains unclear.

Method: Participants were 489 Chinese parents of children aged 0 to 5 years. Validated scales were used to assess romantic attachment, PRF (assessed by the prementalizing modes dimension), PSC, and harsh discipline. Mediation analysis and latent profile analysis were conducted.

Results: PSC mediated the relationship between attachment avoidance and harsh discipline, whereas PRF and PSC played a chain-mediating role between attachment anxiety and harsh discipline. By using the person-centered approach, three profiles of attachment were identified: secure (46.8%), dismissive (23.9%), and fearful (29.2%). Compared to secure profile, PRF and PSC sequentially

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mediated the link between dismissive/fearful profile of attachment and harsh discipline.
Conclusions: The mediating roles of PRF and PSC elucidated psychological mechanisms for the impact of romantic attachment on harsh parenting, particularly among couples with dismissive and fearful attachment.
Implications: Improving PRF and PSC is crucial for preventing harsh parenting among insecurely attached couples.

KEYWORDS
attachment, harsh discipline latent profile analysis, parental reflective functioning, parental sense of competence, parenting

Harsh discipline refers to physical and verbal forms of aggressive discipline behavior by parents in response to and intended to correct perceived misbehavior by a child (Straus & Fauchier, 2007). The extent of harsh discipline ranges from less extreme and common forms (e.g., psychological aggression and mild corporal punishment) to maltreatment-like forms, such as severe physical abuse (Barkin et al., 2007). Growing evidence has shown that all forms of harsh discipline can predispose children at risk to emotional and behavioral problems (Berthelon et al., 2020; Choi & Becher, 2019; MacKenzie et al., 2014) and lifetime mental health issues (Tang et al., 2018). Importantly, harsh discipline is not only common across various cultures (Lansford, Deater-Deckard, et al., 2014; Lansford, Woodlief, et al., 2014) but also becomes more frequent as children develop from infancy through preschool years, with a higher prevalence during this period than other age groups. In the United States, 90% of 2-year-old children have experienced psychological aggression in the past year, and this figure has risen to 98% by age 5, with rates remaining within the 90% range into adolescence (Straus & Field, 2003). Similarly, the prevalence of corporal punishment reaches a peak of 94% at the age of 3 to 4 (Straus & Stewart, 1999). A more recent study in the United States showed the prevalence rate of spanking rose from 15% in children aged 12 months to more than 50% in children aged 20 months or older (MacKenzie et al., 2011). In China, the prevalence of psychological aggression rose slightly with children's age, peaking at 7 years old (91% for fathers and 86% for mothers), and prevalence of corporal punishment was also higher during this preschool period, affecting more than 60% of children (Wang & Liu, 2014).

Given the established harmful effects and high prevalence of harsh discipline, it is important to understand the risk factors of harsh discipline. Previous research has indicated that parental romantic attachment (i.e., the attachment between mother and father) is predictive of parenting quality, with individuals exhibiting secure attachment patterns being more likely to adopt authoritative parenting styles (Doinita & Maria, 2015). Adult romantic attachment has been conceptualized along the dimensions of anxiety and avoidance (Fraley & Shaver, 2000). The anxiety dimension is defined as a fear of a partner's absence in times of need due to a lack of confidence in their being worthy of love, whereas the avoidance dimension is defined as a distrust of the partner's goodwill, leading to a preference for behavioral independence and emotional distance. Based on Bartholomew's four-category attachment styles (Bartholomew & Horowitz, 1991), the cross of two dimensions results in secure (low in both avoidance and anxiety), preoccupied (low in avoidance and high in anxiety), dismissing (high in avoidance and low in anxiety), and fearful attachment styles (high in both dimensions). Substantial evidence has shown an intergenerational transmission of attachment, where the parents' attachment representation with their early caregiver will influence the way they treat their own children, leading to a correlated parent–child attachment (Verhage et al., 2016). Beyond these intergenerational

effects, parental romantic attachment can independently impact their feelings and cognitions in parent–child relationships and relate to parenting practices (Jones et al., 2015; Overall et al., 2022). From the perspective of family system theory (Cox & Paley, 1997), family comprises several interrelated subsystems (e.g., husband–wife subsystem, father–child subsystem, and mother–child subsystem). According to the spillover hypothesis, the affect and emotion in the interparental subsystem may spill over to the interactions within the parent–child subsystem (Easterbrooks & Emde, 1988). In other words, parents who are insecure in their romantic relationship may tend to bring negative emotions and insecurity into the parent–child relationship, resulting in a harsher approach to discipline and control their child. Studies on Chinese parents of adolescents have found that parents with insecure attachment were prone to adopting harsh parenting (Li & Gong, 2022).

The early childhood period (i.e., birth to 5 years) is notable not only for its high prevalence of harsh discipline but also because the interplay between parental romantic attachment and harsh discipline may be especially pronounced during this period. The responsibility of caring for a new child, especially for those first-time parents, can be a challenging and stressful event. According to the attachment diathesis-stress process model (Simpson & Rholes, 2019), parents who are themselves insecure or unresolved in relation to attachment are especially at risk of maladaptive parenting in face of such a stressful event. However, there have been relatively few attempts to investigate the relationship between parental romantic attachment and harsh discipline among the parents of young children, as well as to understand the mechanisms that may account for this relationship. Addressing this gap is essential for developing effective strategies to support parents and promote positive parenting practices.

THE POTENTIAL MEDIATING ROLE OF PARENTAL REFLECTIVE FUNCTIONING

Internal working models, rooted in attachment theory, explain how early attachment experiences shape an individual's mental representation of self and others, which, in turn, influences their relationships and behaviors throughout life (Bowlby, 1973). According to Bowlby, attachment is a lifespan construct that guides thoughts, feelings, and behaviors in relationships "from the cradle to the grave" (Bowlby & Bowlby, 2012). Therefore, the representation of self and others may also shape the parental belief and quality of parenting. Parental beliefs encompass a broad range of cognitions and attitudes about various aspects of parenting, child development, and their own roles as parents (Sigel & McGillicuddy-De Lisi, 2002). Previous research has substantiated the association between parental beliefs and parenting behaviors (Johnston et al., 2018).

In a narrower context, parental reflective functioning (PRF), also called mentalizing, refers to the capacity to understand and interpret their child's behavior in terms of their mental state (Fonagy & Target, 1998), which can be viewed as a parental belief about their child's mental experiences. Theoretically, PRF originates from early secure attachment relationships in which a child's experience can be held in mind (Fonagy et al., 2018). Individuals with positive internal working models of themselves and others are more capable of empathizing with others' suffering and being more responsive and compassionate (Mikulincer & Shaver, 2005). When the primary need for early secure attachment is not met, they may develop insecure attachment representations (Mikulincer & Shaver, 2010), which in turn results in impaired PRF later in life. Beyond the impact of early experience, recent research suggests that the romantic attachment in the interparental relationship can also directly predict their PRF (Nijssens et al., 2018). As a dimension of PRF, the so-called prementalizing modes particularly capture the inability to enter a child's mental world, characterized by the tendency to make distorted attributions about the child. In contrast to the responsiveness shown by securely attached parents, parents with insecure attachment may encounter more difficulty understanding the mental states of their children and more likely to use the prementalizing modes (Erkoreka & Urrutia, 2023).

Considerable studies have shown that PRF is a strong predictor of parenting quality (Rostad & Whitaker, 2016; Stuhrmann et al., 2022). As a parental belief about children, PRF may directly shape the way in which parents interact with their children. Prior studies have found that parents with low reflective functioning are more likely to engage in psychological control and hostile-intrusive parenting (Dieleman et al., 2020; Huth-Bocks et al., 2014). Moreover, parents who maltreat their children have severely impaired PRF and a tendency to use prementalizing modes (Rosso, 2022). However, whether PRF mediates the association between romantic attachment and harsh discipline remains unknown.

THE POTENTIAL MEDIATING ROLE OF PARENTAL SENSE OF COMPETENCE

Parents with secure attachment generally have higher self-esteem and confidence in their parenting abilities (Bylsma et al., 1997). Parental sense of competence (PSC), the belief in their ability to manage parenting tasks, has been identified as a key feature of positive parenting (Coleman & Karraker, 1998). However, parents with insecure attachment, especially those with high levels of attachment avoidance, may tend to keep emotional independence and have less engagement in the parent–child relationship. This can results in a reduced PSC. Prior studies have reported that parents with insecure attachment had a lower PSC (Bernadat & Wendland, 2021; Handelzalts et al., 2021).

As a crucial parental belief, PSC can motivate and shape parenting behaviors (Goodnow & Collins, 1990). Furthermore, parents who doubt their parenting capacity may not exert the necessary effort to learn and apply more supportive and effective parenting strategies, instead resorting to harsh discipline that may be a more straightforward way to correct the child's misbehavior (Bandura, 1997). Existing work also suggests that parents low in PSC are more likely to experience higher parental stress, aggressively respond to child's negative emotions (Ziv et al., 2020), and use intrusive parenting (Eom et al., 2014). Overall, parents with insecure attachment may have maladaptive parental beliefs about themselves and others, which may further impact their parenting behaviors. In other words, we speculated that PSC would mediate the relationship between romantic attachment and harsh discipline.

THE POTENTIAL CHAIN MEDIATING ROLE OF PRF AND PSC

Given that parents' PSC can originate from successful experience of understanding their children's feelings and giving the appropriate care they need, there may be an interplay between PRF and PSC. Parents with high PRF may possess the belief that children have their own feelings, thoughts, and emotions. This belief may enhance the ability to understand and interpret children's behavior accurately in terms of mental states, which further improves their sense of competence in appropriately dealing with their child's misbehaviors (Rostad & Whitaker, 2016). However, low PRF, reflected by high prementalizing modes (PM), can undermine parental sense of competence (Nijssens et al., 2018). Similarly, Gordo et al. (2020) reported that PSC mediated the effect of PRF on infants' socioemotional adjustment. Based on the link between PRF and PSC, we intended to examine whether a chain mediating effect exists through which romantic attachment is linked to harsh discipline via PRF and PSC sequentially.

VARIABLE- AND PERSON-CENTERED APPROACHES

Most previous studies on attachment have used a variable-centered approach (e.g., using attachment dimensions), which is helpful in revealing the distinct contributions of different

attachment dimensions on the outcome variables. However, this common approach typically assumes the independence of variables and tends to focus on the whole-sample level effects (Flykt et al., 2021), which might conceal some naunces implications (Stern & Hertel, 2020). In comparison, the person-centered approach offers an insightful way to capture the heterogeneity of attachment by using latent profile analysis (LPA). This approach allows the possibility of investigating how the combination of variables functions together and identifying naturally occurring profiles. Some studies have investigated the adult romantic attachment profile in Western cultures. Vaillancourt-Morel et al. (2022) identified four theoretically consistent profiles within a community sample of French Canadians: secure, preoccupied, dismissive, and fearful. In a Danish sample of trauma victims, only secure, preoccupied, and fearful profiles were identified (Armour et al., 2011). These differences indicated that attachment profiles can vary based on factors such as clinical settings and culture.

Although numerous studies have investigated the risk factors of harsh discipline in Western countries, less is known about this issue in the Chinese context. In a particular region where harsh discipline is culturally acceptable and common, parents may be more willing to use it to deal with a child's behavioral problems (Pinquart, 2021). In the Chinese context, harsh discipline has been traditionally viewed as a sign of love and responsibility; as a Chinese proverb says, "Beating and scolding is the emblem of love" (Chao, 1994). Moreover, the profound influence of Confucian principles in China emphasizes the importance of hierarchy and respect for authority within the family structure; children in many Chinese families are expected to obey their parents (Luo et al., 2013). In such cases, Chinese parents are more likely to exert greater control over their children and display lower levels of warmth than parents from Western countries (Ng et al., 2014). Parents who heavily invest in traditional parenting practices may exhibit reduced reflective functioning because they usually prioritize behavioral correction over reflecting on children's mental experience. Despite the cultural acceptance of harsh discipline, empirical study on Chinese families indicates its adverse effect on children's externalizing behaviors (Chang et al., 2004). Thus, it is important to investigate the interplay among parental romantic attachment, PRF, PSC, and harsh discipline in the Chinese context.

THE CURRENT STUDY

Through both variable- and person-centered approaches, we aimed to explore the mediating effects of PRF and PSC in the association between romantic attachment and harsh discipline. Supplemental Figure 1 depicts the hypothesized theoretical model. We identified PRF (parental belief about their child) and PSC (parental belief about themselves) as two potential mediators. On this basis, we hypothesized that parental romantic attachment dimensions and latent profiles are associated with harsh discipline through the following three paths: (A) romantic attachment→PRF → harsh discipline, (B) romantic attachment→PSC → harsh discipline, and (C) romantic attachment→PRF → PSC → harsh discipline. In addition, considering different features among attachment dimensions or categories, we further hypothesized that (C) the associations between different attachment dimensions or latent profiles and harsh discipline may be mediated by distinct mechanisms.

METHODS

All methods were performed in accordance with the relevant guidelines and regulations and adhere to the Declaration of Helsinki. This study was approved by the Ethics Committee of the Affiliated Kangning Hospital of Wenzhou Medical University (approval number: KNLL-2021111505). Informed consent was obtained from all included participants.

Participants

A sample of 489 Chinese parents ($M = 33.9$ years, $SD = 4.7$) rearing at least one child under 5 years ($M = 3.5$ years, $SD = 1.2$) participated in the survey. Sixty-five of the participants were fathers (13.3%), and 424 were mothers (86.7%). Among the participants, 70.8% had achieved a college degree or higher. Nearly half (47.3%) of participants reported an annual household income ranging from 150,001 to 500,000 CNY, which is generally considered to be the middle-income level. Participants primarily had only one child aged 0 to 5 (79.3%). Further demographic characteristics of the sample are shown in Supplemental Table 1.

Procedure

The cross-sectional survey was conducted in Wenzhou, Zhejiang Province, southern China between January 13 to March 24, 2022. Participants were recruited via convenience sampling in three local kindergartens with the following inclusion criteria: (a) Chinese-speaking, (b) heterosexual parents who had (c) at least one child aged 0 to 5 years. Eligible participants were given a brief description of the study in the cover letter and informed that the data were for research purposes only. Participation was voluntary, and full anonymity was guaranteed. Then, participants were asked to complete a comprehensive questionnaire to collect demographic information and other constructs, including romantic attachment, parental sense of competence, parental reflective functioning, and comprehensive early childhood parenting styles. All questionnaires were completed online via Wenjuanxing, a popular survey platform in China. Participants provided informed consent online, and the study was approved by the Ethics Committee.

A Monte Carlo simulated power analysis for a serial mediation model with 5,000 replications and 20,000 Monte Carlo draws was performed at confidence level of 95% to determine sample size. The simulation based on the results of our preliminary experiment determined a minimum sample size of 338 to detect the indirect and direct effects of our mediation analysis.

Measurements

Harsh discipline

Harsh discipline was evaluated by using the harsh discipline subscale of the Comprehensive Early Childhood Parenting Assessment Questionnaire (CECPAQ). It is rated on a 6-point Likert scale ranging from 0 (*never*) to 6 (*always*). The harsh discipline subscale included 12 items (e.g., "I make my child feel guilty when s/he doesn't meet my expectations"). The Chinese version of CECPAQ showed good psychometric properties (Dong et al., 2023). In the current study, Cronbach's alpha was 0.88. The sum score of the items was calculated to represent the variable of harsh discipline.

Romantic attachment

Romantic attachment was measured using the Chinese version of Experienced Close Relationship-Short Form (ECR-CS) developed by Brennan et al. (1998) and revised by Wei et al. (2007) and Zhao and Hao (2019). It comprises two dimensions: avoidance (six items) and anxiety (five items). The parents rated items on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Higher scores indicated higher attachment avoidance or

attachment anxiety. The psychometric properties of the 11-item ECR-CS were well established (Zhao & Hao, 2019). In the current study, Cronbach's alpha for avoidance and anxiety subscales was 0.70 and 0.74, respectively. The sum scores of the subscales were calculated to represent attachment avoidance and attachment anxiety.

PRF

PRF was measured by using the Prementalizing modes (PM) subscale of the Chinese version of Parental Reflective Functioning Questionnaire (PRFQ) developed by Luyten et al. (2017) and revised by Ye et al. (2022). PM refers to a tendency to make distorted and even malevolent attributions to a child's behaviors, as well as an inability to enter a child's mental world. This subscale was selected mainly because of its association with negative features of parenting (Nijssens et al., 2018) and parental attachment (Luyten et al., 2017). All five items of the PM subscale are rated on a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The psychometric properties of the Chinese version of PRFQ are strong (Ye et al., 2022). In this study, the Cronbach's alpha of PM subscale was 0.83. After reverse scoring, the sum score was calculated to represent the PRF.

PSC

PSC was measured using the Parenting Sense of Competence scale (PSOC), a 17-item scale developed by Gibaud-Wallston and Wandersmann (1978). This scale assesses the feeling of parental competence and comprises two subscales: Efficacy (eight items) and Satisfaction (nine items). Two examples are "If anyone can find the answer to what is troubling my child, I am the one" from efficacy and "Even though being a parent could be rewarding, I am frustrated now while my child is at his/her present age" from satisfaction. The items must be answered on a Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). The higher the score on this scale, the more positively parents perceived their parental competence to be. The psychometric properties of the Chinese version of PSOC are also strong (Yang et al., 2014). In the present study, Cronbach's alpha was 0.82. The sum score of the overall scale was calculated to represent the variable of parental sense of competence.

Control variables

Mediation analyses were adjusted for demographic and family characteristics. Demographic factors included age, sex (male, female), annual household income (below 50,000 CNY, 50,001 to 150,000 CNY, 150,001 to 500,000 CNY, 500,001 to 1,000,000 CNY, more than1,000,000 CNY), education (junior high school or under, high school/2-year associate college/vocational school, 3-year college, bachelor's degree, postgraduate degree). Family factors included marital status (married/partnered, divorced/not partnered), number of children aged 0 to 5, and age of the smallest child.

Statistical analysis

Missing values only existed in the demographic factors. Most variables have <1.5% missing values except for annual household income (5.7%) and education (2.7%). Due to relatively small proportion and not being key variables, the missing values were filled in with the mode or

mean before subsequent analyses. First, the common method bias test was carried out using Harman's single-factor test method (Podsakoff et al., 2003). Pearson's correlations were calculated to highlight the bivariate relationships between key variables, which are the basis for testing the mediation.

LPA, a person-centered approach, was conducted to identify heterogeneous profiles of attachment based on the 11 items in ECR-S. Various class models were performed, and the best fitting model was determined according to their information criteria-based fit indices, including Akaike's information criterion (AIC), Bayesian information criterion (BIC), and sample-size adjusted BIC (SABIC; Dziak et al., 2020). Lower values of these indices indicate better model fit. Entropy values higher than 0.80 indicate adequate classification accuracy (Lubke & Muthén, 2007). Moreover, the bootstrapped likelihood ratio test (BLRT) was used to compare the improvement in model fit between the k class and k-1 class models (Nylund et al., 2007). A significant p value suggests a better fit for k classes than k-1 classes.

For mediation analyses, the bias-corrected percentile bootstrap was used. The chain mediating model (Model 6, the Process Macro; Hayes, 2017) was implemented with 5,000 bootstrap samples, and 95% corrected confidence intervals (CIs) were obtained. The significance of the mediation effect was determined when the 95% CIs did not contain 0. Mediation analysis was first conducted using attachment dimensions as independent variables. When one of the attachment dimensions was entered, the other was also included as a control variable. Then, relative mediation analysis was performed using the dummy variables of attachment latent profiles created by indicator coding.

LPA was performed using R statistical software version 4.3.1 (R Core Team, 2023) including the use of tidyLPA package (Rosenberg et al., 2019). All other statistical analyses were conducted using SPSS version 26.0 and the Process macro (Hayes, 2017).

RESULTS

Common method bias

The test results for common method bias indicated that 10 factors had an eigenvalue higher than 1.0. The first factor explained only 24.8% of the total variance, which was lower than 40%. This indicated that common method bias was not large enough to distort the results.

Means, standard deviations, and correlations

Descriptive statistics and Pearson correlation analysis results of attachment anxiety, attachment avoidance, PRF, PSC, and harsh discipline were presented in Supplementary Table 2. All key variables were significantly correlated with each other ($p < .001$). Harsh discipline was positively correlated with attachment avoidance ($r = .35$, $p < .001$) and attachment anxiety ($r = .41$, $p < .001$). In contrast, PRF ($r = -.54$, $p < .001$) and PSC ($r = -.48$, $p < .001$) were negatively correlated with harsh discipline.

Chain-mediating effects test under attachment dimensions

Considering the correlation between attachment avoidance and attachment anxiety, we controlled for attachment avoidance when examining the effects of attachment anxiety and vice versa. The bias-corrected percentile bootstrap approach was used to resample 5,000 times and test the chain mediation effect, adjusting for the sex, age, income, education, children number,

and age of the smallest child. The 95% CIs of all paths were calculated. Results of the mediation analysis are shown in Figure 1 and Table 1.

For attachment avoidance, only the 95% bootstrap CI of the indirect path attachment avoidance→PSC → harsh discipline did not include 0, indicating the significance of the mediating effect of PSC. This simple mediating effect was 0.09, which accounted for 36.29% of the total effect. The direct effect of attachment avoidance on harsh discipline was not significant.

For attachment anxiety, the 95% CI of all three indirect paths (attachment anxiety→PRF → harsh discipline, attachment anxiety→PSC → harsh discipline, and attachment anxiety→PRF → PSC → harsh discipline) did not include 0. The simple mediating effect of PRF and PSC was 0.31 and 0.05, accounting for 55.9% and 8.35% of the total effect, respectively.

Relative chain-mediating effects test under attachment profiles

Building on the variable-centered findings, we proceeded to explore whether the mediating effects would also manifest in the relationship between attachment profiles and harsh discipline by employing a person-centered approach. We conducted LPA using the standardized scores of items in the ECR-CS. The results of fit indices for one to six profile solutions are presented in Table 2. The three-profile solution showed lower LL, AIC, BIC, and SABIC values, as well as a significant BLRT p value compared with one- and two-profile solutions. Although four-, five-, and six-profile solutions had lower values in these fit indices, these solutions contained a profile (4.1%) that was too small to represent a meaningful subtype (below 5%). The theoretical significance of the three-profile solution could be well interpreted (including secure profile, dismissive profile, and fearful profile) and aligned with the theoretical framework of attachment style. Thus, the three-profile solution was selected as the best-fitting model. The entropy value of the three-profile solution was 0.86, indicating good classification accuracy (above 0.80).

The proportion of each profile and the standardized means of each item are presented in Supplemental Figure 2 and Supplemental Table 3. The naming of each attachment profile was generally aligned with Bartholomew's four-category model of attachment (Bartholomew & Horowitz, 1991). The first profile included 23.9% of the sample and was characterized by high attachment avoidance and average level of attachment anxiety. Therefore, this profile was named "Dismissive." The second profile, characterized by high levels of attachment avoidance and anxiety and therefore named "Fearful," comprised 29.2% of the sample. The last profile, characterized by low levels of attachment avoidance and anxiety and therefore named "Secure," accounted for 46.8% of the sample.

Using the secure profile as the reference profile, two dummy variables (dismissive and fearful profiles) were created as independent variables for relative mediation analysis (Supplemental Figure 3). In both dismissive and fearful subgroups, the 95% bootstrap CI of all relative indirect effects did not include 0, indicating that the relative mediation effects were significant (Table 3). In dismissive and fearful subgroups, the simple mediating effect of PRF accounts for 41.07% and 46.68% of the relative total effect, respectively, whereas the simple mediating effect of PSC accounts for 25.95% and 12.42%. Furthermore, the relative chain-mediating effect accounts for 8.78% and 9.98% of the relative total effects in dismissive and fearful subgroups, respectively. Compared with the secure subgroup, the dismissive subgroup had as 0.33 units lower PRF ($\beta = -0.33$), whereas the fearful subgroup had as 1.18 units lower PRF ($\beta = -1.18$). Likewise, the dismissive subgroup had as 0.34 units lower PSC ($\beta = -0.34$), whereas the fearful subgroup had as 0.51 units lower PSC ($\beta = -0.51$). Furthermore, holding the condition constant, those with lower PRF also had lower levels of PSC and more use of harsh discipline.

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Family Relations

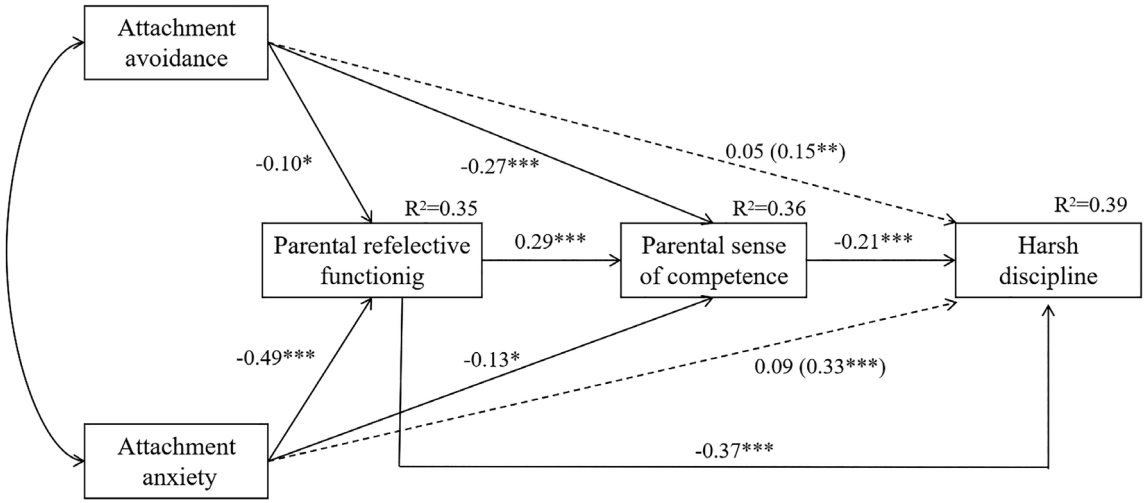

FIGURE 1 Chain mediation model under two attachment dimensions. Numbers on the line are standardized regression coefficients. The coefficients in parentheses represent total effect from attachment dimensions to harsh discipline when the mediators were removed. Nonsignificant paths are shown as dashed lines. *$p < .05$. **$p < .01$. ***$p < .001$.

TABLE 1 Chain mediation test under two attachment dimensions.

Path		Effect value	Boot SE	95% CI Lower	95% CI Upper	Effect size
Attachment avoidance as independent variable						
Total effect		0.26	0.08	**0.09**	**0.42**	
Direct effect	Avoidance→harsh discipline	0.09	0.08	−0.06	0.24	NA
Total indirect effect		0.17	0.05	**0.08**	**0.26**	65.25%
Indirect effect	Avoidance→PRF → harsh discipline	0.06	0.04	−0.00	0.14	NA
	Avoidance→PSC → harsh discipline	0.09	0.03	**0.04**	**0.16**	36.29%
	Avoidance→PRF → PSC → harsh discipline	0.01	0.01	0.00	0.03	NA
Attachment anxiety as independent variable						
Total effect		0.55	0.09	**0.38**	**0.72**	
Direct effect	Anxiety→harsh discipline	0.15	0.09	−0.02	0.31	NA
Total indirect effect		0.40	0.07	**0.28**	**0.55**	73.32%
Indirect effect	Anxiety→PRF → harsh discipline	0.31	0.06	**0.20**	**0.44**	55.90%
	Anxiety→PSC → harsh discipline	0.05	0.03	**0.00**	**0.10**	8.35%
	Anxiety→PRF → PSC → harsh discipline	0.05	0.02	**0.02**	**0.09**	9.07%

Note: CIs not containing zero are shown in bold. CI = confidence interval; NA = not applicable; PRF = parental reflective functioning; PSC = parental sense of competence.

TABLE 2 Fit statistics for the latent profile analysis of attachment ($N = 489$).

No. of classes	LL	AIC	BIC	SABIC	Entropy	BLRT	Proportion of sample size in profile
1	−7,627	15,298	15,390	15,320	1	NA	1
2	−6,910	13,888	14,031	13,923	0.92	0.0099	0.41/0.6
3	**−6,751**	**13,594**	**13,787**	**13,641**	**0.86**	**0.0099**	**0.24/0.29/0.47**
4	−6,423	12,962	13,206	13,022	0.95	0.0099	0.07/0.41/0.48/0.04
5	−6,333	12,807	13,100	12,878	0.91	0.0099	0.07/0.22/0.46/0.21/0.04
6	−6,237	12,637	12,981	12,721	0.91	0.0099	0.22/0.07/0.06/0.36/0.25/0.04

Note: AIC = Akaike information criteria; BIC = Bayesian information criteria; BLRT = bootstrapped likelihood ratio test; LL = loglikelihood; SABIC = sample-size adjusted BIC. Lower AIC, BIC, and SABIC indicated better model fit. BLRT p value ≤ .05 indicate a superior fit of k-class solution compared with a k-1 class solution. Higher entropy indicates better classification accuracy.

DISCUSSION

This study was the first to adopt both variable- and person-centered approaches to explore the mediating roles of PRF and PSC in the association between romantic attachment and harsh discipline among Chinese parents of children aged 0 to 5. The results of the variable-centered approach indicated that attachment avoidance was linked to harsh discipline via PSC, which supported Hypothesis B. For attachment anxiety, PRF and PSC played a chain-mediating role in the relationship between attachment anxiety and harsh discipline, where Hypotheses A, B, and C were supported. The differences in the mediating pathways between attachment avoidance and anxiety supported Hypothesis D. Through the person-centered approach, we found that the dismissive and the fearful profiles were similarly linked to harsh discipline via the chain-mediating role of PRF and PSC, mainly supporting Hypotheses A, B, and C.

TABLE 3 Relative chain mediation test under three attachment profiles.

Path		Effect value	Boot SE	95% CI Lower	95% CI Upper	Effect size
Dismissive profile						
Relative total effect		3.18	1.15	**0.93**	**5.43**	
Relative direct effect	Dismissive→harsh discipline	0.77	1.04	−1.26	2.80	NA
Relative indirect effect	Dismissive→PRF → harsh discipline	1.31	0.47	**0.50**	**2.36**	41.07%
	Dismissive→PSC → harsh discipline	0.83	0.30	**0.31**	**1.45**	25.95%
	Dismissive→PRF → PSC → harsh discipline	0.280	0.11	**0.10**	**0.52**	8.78%
Fearful profile						
Relative total effect		10.15	1.07	**8.05**	**12.26**	
Relative direct effect	Fearful→harsh discipline	3.14	1.12	**0.94**	**5.34**	30.92%
Relative indirect effect	Fearful→PRF → harsh discipline	4.74	0.86	**3.13**	**6.57**	46.68%
	Fearful→PSC → harsh discipline	1.26	0.40	**0.58**	**2.13**	12.42%
	Fearful→PRF → PSC → harsh discipline	1.01	0.25	**0.56**	**1.57**	9.98%

Note: The "secure" profile is treated as reference. CIs not containing zero are shown in bold. CI = confidence interval; PRF = parental reflective functioning; PSC = parental sense of competence.

Attachment and harsh discipline

The present study found that both attachment avoidance and attachment anxiety were positively associated with harsh discipline, which supports family systems theory (Cox & Paley, 1997) and spillover hypothesis (Easterbrooks & Emde, 1988). Within the family, the avoidance and anxiety patterns in the interparental relationship may affect their interaction with the child, leading to more nonoptimal parenting. Although previous studies have examined the predictive effect of parental romantic attachment on harsh discipline among Chinese parents of adolescents (Li & Gong, 2022), our study extends past research by finding that these links also hold among Chinese parents of young children. Notably, our findings indicated that attachment anxiety had a greater effect on harsh discipline than attachment avoidance, which is also consistent with the previous study on adolescents (Li et al., 2021). A possible explanation is that parents with high attachment anxiety are often characterized by a strong desire for closeness, which may drive them to seek excessive intimacy or control with their children to mitigate their own feelings of insecurity. This drive for control can result in harsh discipline to ensure that the child's behavior aligns with the parent's needs. In contrast, although parents with high attachment avoidance may also struggle with adaptive parenting, they are more likely to resort to the coping strategy of maintaining emotional distance than control. In line with such different strategies, a previous study found that maternal attachment anxiety, rather than avoidance, was associated with conflict in mother–child interactions (Selcuk et al., 2010).

The mediating role of PRF and PSC

For attachment avoidance, only PSC mediated the association between attachment and harsh discipline, supporting Hypothesis B but not Hypotheses A and C. Specifically, parents' attachment avoidance may reduce their PSC, which further increases the use of harsh discipline. According to attachment theory, attachment avoidance reflects a negative view of others. Parents with high attachment avoidance may keep an emotional distance from their child and engage less in parenting tasks, which may impair their subjective belief about their parenting

capacity. This is consistent with a previous finding that attachment avoidance was negatively associated with more general social competencies (Corcoran & Mallinckrodt, 2000). According to self-efficacy theory (Bandura, 1977), reduced PSC may prevent the investment of effort in parenting tasks they perceive as challenging, thereby shaping parenting behaviors. When parents with low PSC are faced with children's misbehavior or emotional distress, they may be less inclined to provide warmth, relying instead on harsh disciplinary approaches, which they perceive as a more direct way to manage problems (Eom et al., 2014). In the Chinese context, because parents with low PSC may have no idea how to parent children properly, they may defer to traditional views on parenting, perceiving harsh discipline as a necessary and effective method to assert authority and manage children's behavior.

For attachment anxiety, a distinct mediating mechanism was found in its relationship with harsh discipline. First, PRF appeared to be a mediator in the effect of attachment anxiety on harsh discipline, and this simple mediating path accounts for the majority of the total indirect effect. Parents with higher levels of attachment anxiety had lower PRF, as indicated by higher PM, which in turn predicted harsh discipline. This result aligns with prior literature showing that insecure individuals tend to have lower PRF (Nijssens et al., 2018; San Cristobal et al., 2017). Individuals with high attachment anxiety are preoccupied with their own need for reassurance, which can hinder their ability to effectively understand children's mental states. In this case, they tend to "respond to other's behavior rather than to their minds," sometimes manifesting in a harsh style. This is in line with a previous study showing the association between reflective functioning and hostile-intrusive parenting (Huth-Bocks et al., 2014). In addition, this association may be enhanced in the Chinese culture, which values on the importance of conforming to social norms and showing respect to elders. In this context, parents may prioritize aligning their children's behavior with these expectations. However, this focus, without considering their children's inner feelings and thoughts, could lead to harsh disciplinary methods to enforce compliance.

Second, PSC was another mediator in the relationship between attachment anxiety and harsh discipline despite the relatively small effect size. Individuals with high attachment anxiety often doubt their worthiness of love and are prone to psychological distress in a self-focused way. These ruminative processes may impair their self-efficacy as parent. Furthermore, we found a chain-mediating effect of PRF and PSC in the association between attachment anxiety and harsh discipline. Consistent with previous research results, low levels of PRF may also impair parents' PSC (Nijssens et al., 2018). When parents are unable to recognize their children's thoughts and cognitions, they may also have difficulties establishing beliefs in their role as parents.

As hypothesized, attachment avoidance and attachment anxiety exhibited distinct paths to impact harsh discipline. As avoidance and anxiety constitute different dimensions of the internal working model of self and others, they may also distinctly shape parental beliefs about themselves and their children. Interestingly, the negative model of others (avoidance) contributes to impaired parental belief about their own parenting competence, whereas the negative model of self (anxiety) mainly contributes to impaired parental belief about a child's mental state. These results indicate that interventions aimed at reducing harsh discipline should consider the unique contributions of attachment avoidance and anxiety. For parents with high attachment avoidance, interventions should focus on building self-efficacy and confidence in the parental role, possibly through positive feedback and skill-building exercises. For those with high attachment anxiety, interventions could further focus on enhancing the capacity to understand children's feelings and thoughts.

Despite the current focus on parental attachment and beliefs, it should be noted that the parent–child relationship is a bidirectional, dynamic interaction (Pettit & Arsiwalla, 2008). That is, children's behavioral problems or development can also influence and shape parental beliefs and practices (Merz et al., 2017). As children increasingly express their thoughts and develop autonomy with age, it is possible that such development improves their parents' PRF and PSC,

which alter the trajectory of maladaptive parenting. Considering the declining prevalence of harsh discipline after preschool age (Wang & Liu, 2014), future studies can focus on the interplay between child characteristics and parental beliefs during key switch points (e.g., transition to school age). Investigating these interactions could yield a deeper understanding of how the parent–child interaction shapes the trajectory of parenting practices over time.

Person-centered approach

Through a person-centered approach, we identified three latent profiles of attachment by LPA. Based on Bartholomew's four-category model of attachment (Bartholomew & Horowitz, 1991), three of four attachment styles (secure, dismissive, and fearful) emerged in the current study, whereas preoccupied attachment was not found. This classification was in contrast to prior studies, where preoccupied, fearful, secure profiles were identified in a Danish population (Armour et al., 2011) and the four profiles were identified in a French Canadian community sample (Vaillancourt-Morel et al., 2022). Notably, the proportion of secure individuals in the present study (46.8%) closely matches that in the Danish population (46.9%), both of which comprised the largest proportion in their respective populations. The differences between studies may be explained by sample characteristics, measurements, and subtle cultural influences on the structure and function of attachment (Joo et al., 2023). In contrast to the individualism in Western cultures, Chinese culture emphasizes a collectivistic orientation, which emphasizes interdependence and connectedness among individuals (Wang & Song, 2010). In this context, the self is embedded in the relationship, and the manifestation of attachment can be context specific (Choi & Becher, 2019). Once individuals become parents, the responsibilities associated with parenthood may encourage a shift toward a more self-reliant stance, thereby reducing the likelihood of exhibiting preoccupied attachment. However, some previous studies also suggested that collectivistic orientation appears to be associated with higher levels of preoccupied attachment (Schmitt et al., 2004), which is inconsistent with the current results. Various factors can contribute to these differences, therefore more research is needed to clarify the potential impact of culture and parenthood on attachment style.

Consistent with the results of the variable-centered approach, we found that both dismissive and fearful attachment profiles were associated with higher levels of harsh discipline, which was consistent with previous research (Doinita & Maria, 2015; Zvara et al., 2020). In addition, fearful attachment (high in both avoidance and anxiety) had a stronger total effect on harsh discipline than dismissive attachment (low in anxiety and high in avoidance). The fearful attachment involves negative views of self and of others, characterized by beliefs that the self is unlovable and others are untrustworthy (Bartholomew & Horowitz, 1991). Previous studies have indicated that fearful parents experienced the highest level of parental stress, whereas the functioning of dismissive and preoccupied parents fell between that of secure parents and fearful parents (Vasquez et al., 2002). Our results also consistently indicated that fearful parents are at the highest risk of harsh discipline.

The relative mediating effects of PRF and PSC shared a similar pattern for dismissive and fearful attachment. A chain-mediating role of PRF and PSC in the association between attachment profile and harsh discipline was found, and the effect proportion of each indirect path is similar for dismissive and fearful attachment. Although we have found the distinct contributions of attachment dimensions through a variable-centered approach, the results of the person-centered approach did not show apparently different mediating mechanisms in the two insecure profiles. This suggests that the identified attachment profiles in the sampled parents may not simply represent a straightforward combination of the two dimensions as theoretically predicted. Instead, it may involve a more intricate interplay of items of attachment dimensions as well as the potential influence of cultural context. For instance, despite the dismissive profile being identified by low anxiety and high avoidance, its scores of anxiety items were still higher

than those in secure parents. Therefore, the associations between attachment profiles and harsh discipline may involve mixed mechanisms of both PRF and PSC.

Implications

The present findings have theoretical and practical implications for the intervention of harsh discipline. First, this is the first study to explore the mediating role of parental belief about the child (PRF) and themselves (PSC) in the relationship between parental romantic attachment and harsh discipline through a variable- and person-centered approach, which generally supports family systems theory. Second, we found attachment avoidance and attachment anxiety were associated with harsh discipline through distinct, indirect paths, which extends previous theoretical research on the contribution of the attachment dimension on parental beliefs and behaviors. Providing targeted intervention, such as structured parenting programs (Sanders, 2008), may provide essential support to parents with insecure attachment. Given the mediating role of PRF and PSC, as well as the potential cultural impact on these links, focusing on improving both PRF and PSC might be a particularly critical in preventing harsh discipline among Chinese parents. Improving PRF can be achieved through techniques such as role-playing exercises that encourage understanding of children's feelings and emotional needs, as indicated by a previous intervention study (Sadler et al., 2006). Group-based intervention that reinforces parents' confidence in their caregiving skills through positive feedback and skill-building exercises would help enhance PSC (Wittkowski et al., 2016). These targeted interventions have the potential to reduce harsh discipline practices among Chinese parents, promoting healthier parent–child relationships and better developmental outcomes for children.

Limitations

The present study has several limitations that must be considered when interpreting the results. First, this was a cross-sectional study, and no causal conclusion could be made. Future longitudinal studies are warranted to confirm relationship and mediation effects. Second, the data were collected using participants' subjective recall and reporting, and thus information bias may exist. Third, the number of fathers and mothers in the sample was not evenly distributed, and the number of mothers included in the sample in this study was far greater than that of fathers. Fourth, caution is required in that the PM subscale was used as an indicator of PRF in this study. Although high PM can reflect an impaired PRF and may be particularly associated with negative features of parenting, the concept of PRF is dimensional and cannot be fully represented by PM. Finally, the sample for this study is predominantly from Wenzhou, China, which has a homogeneous culture characterized by a majority of middle-class and highly educated individuals; this may limit the generalizability of our findings. Future research is needed to replicate these results within a more diverse sample.

Conclusion

In this study, we provide evidence to support the hypothesis that parental attachment avoidance and attachment anxiety are positively associated with the use of harsh discipline among Chinese parents of young children. In addition, the study found that only PSC mediated the relationship between attachment avoidance and harsh discipline, whereas PRF and PSC played a chain-mediating role in the relationship between attachment anxiety and harsh discipline. This result highlights the potential of PRF and PSC as intervention targets for reducing parents' use of harsh discipline. Through a person-centered approach, we identified secure, dismissive, and

fearful attachment profiles and found that the chain-mediating effect of PRF and PSC was more evident among dismissive and fearful individuals compared with secure individuals. This result implies that interventions should be particularly focused on parents with dismissive and fearful attachment, where the need for addressing PRF and PSC may be more pronounced.

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REFERENCES

Armour, C., Elklit, A., & Shevlin, M. (2011). Attachment typologies and posttraumatic stress disorder (PTSD), depression and anxiety: A latent profile analysis approach. *European Journal of Psychotraumatology*, *2*(1), Article 6018. https://doi.org/10.3402/ejpt.v2i0.6018

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, *84*(2), 191–215. https://doi.org/10.1037/0033-295X.84.2.191

Bandura, A. (1997). *Self-efficacy: The exercise of control*. MacMillan.

Barkin, S., Scheindlin, B., Ip, E. H., Richardson, I., & Finch, S. (2007). Determinants of parental discipline practices: A national sample from primary care practices. *Clinical Pediatrics*, *46*(1), 64–69. https://doi.org/10.1177/0009922806292644

Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, *61*(2), 226–244. https://doi.org/10.1037/0022-3514.61.2.226

Bernadat, F.-A., & Wendland, J. (2021). Parenting sense of competence: Attachment style and sociodemographic characteristics. *La Psychiatrie de l'Enfant*, *64*(2), 59–78. https://doi.org/10.3917/psye.642.0059

Berthelon, M., Contreras, D., Kruger, D., & Palma, M. I. (2020). Harsh parenting during early childhood and child development. *Economics & Human Biology*, *36*, Article 100831. https://doi.org/10.1016/j.ehb.2019.100831

Bowlby, J. (1973). *Attachment and loss: Volume II: Separation, anxiety and anger*. The Hogarth Press and the Institute of Psycho-Analysis.

Bowlby, J., & Bowlby, R. (2012). *The making and breaking of affectional bonds*. Routledge.

Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46–76). The Guilford Press.

Bylsma, W. H., Cozzarelli, C., & Sumer, N. (1997). Relation between adult attachment styles and global self-esteem. *Basic and Applied Social Psychology*, *19*(1), 1–16. https://doi.org/10.1207/s15324834basp1901_1

Chang, L., Lansford, J. E., Schwartz, D., & Farver, J. M. (2004). Marital quality, maternal depressed affect, harsh parenting, and child externalising in Hong Kong Chinese families. *International Journal of Behavioral Development*, *28*(4), 311–318. https://doi.org/10.1080/01650250344000523

Chao, R. K. (1994). Beyond parental control and authoritarian parenting style: Understanding Chinese parenting through the cultural notion of training. *Child Development*, *65*(4), 1111–1119. https://doi.org/10.1111/j.1467-8624.1994.tb00806.x

Choi, J.-K., & Becher, E. H. (2019). Supportive coparenting, parenting stress, harsh parenting, and child behavior problems in nonmarital families. *Family Process*, *58*(2), 404–417. https://doi.org/10.1111/famp.12373

Coleman, P. K., & Karraker, K. H. (1998). Self-efficacy and parenting quality: Findings and future applications. *Developmental Review*, *18*(1), 47–85. https://doi.org/10.1006/drev.1997.0448

Corcoran, K. O. C., & Mallinckrodt, B. (2000). Adult attachment, self-efficacy, perspective taking, and conflict resolution. *Journal of Counseling & Development*, *78*(4), 473–483. https://doi.org/10.1002/j.1556-6676.2000.tb01931.x

Cox, M. J., & Paley, B. (1997). Families as Systems. *Annual Review of Psychology*, *48*(1), 243–267. https://doi.org/10.1146/annurev.psych.48.1.243

Dieleman, L. M., Soenens, B., De Pauw, S. S. W., Prinzie, P., Vansteenkiste, M., & Luyten, P. (2020). The role of parental reflective functioning in the relation between parents' self-critical perfectionism and psychologically controlling parenting towards adolescents. *Parenting*, *20*(1), 1–27. https://doi.org/10.1080/15295192.2019.1642087

Doinita, N. E., & Maria, N. D. (2015). Attachment and parenting styles. *Procedia—Social and Behavioral Sciences*, *203*, 199–204. https://doi.org/10.1016/j.sbspro.2015.08.282

Dong, S., Dubas, J. S., Deković, M., & Wang, Z. (2023). Chinese version of comprehensive early childhood parenting questionnaire (CECPAQ-CV): Factor structure, reliability, and validity. *Current Psychology*, *42*(19), 16082–16097. https://doi.org/10.1007/s12144-020-01268-0

Dziak, J. J., Coffman, D. L., Lanza, S. T., Li, R., & Jermiin, L. S. (2020). Sensitivity and specificity of information criteria. *Brief Bioinform*, *21*(2), 553–565. https://doi.org/10.1093/bib/bbz016

Easterbrooks, M., & Emde, R. N. (1988). Marital and parent–child relationships: The role of affect in the family system. In R. Hinde & J. Stevenson-Hinde (Eds.), *Relationships within families: Mutual influences* (pp. 83–103). Clarendon.

Eom, E.-J., Park, B.-K., Doh, H.-S., & Nishiwaki, R. (2014). The relationships between parenting stress, parenting sense of competence, and parenting behavior in Korean and Japanese mothers of early school-aged children. *Korean Journal of Child Studies*, *35*(3), 93–118. https://doi.org/10.5723/KJCS.2014.35.3.93

Erkoreka, L., & Urrutia, G. (2023). Insecure adult attachment styles are associated with parental reflective functioning pre-mentalizing modes. *Journal of European Psychiatry*, *66*(Suppl. 1), S203–S203. https://doi.org/10.1192/j.eurpsy.2023.477

Flykt, M., Vänskä, M., Punamäki, R. L., Heikkilä, L., Tiitinen, A., Poikkeus, P., & Lindblom, J. (2021). Adolescent attachment profiles are associated with mental health and risk-taking behavior. *Frontiers in Psychology*, *12*, Article 761864. https://doi.org/10.3389/fpsyg.2021.761864

Fonagy, P., Gergely, G., & Jurist, E. L. (2018). *Affect regulation, mentalization and the development of the self*. Routledge.

Fonagy, P., & Target, M. (1998). Mentalization and the changing aims of child psychoanalysis. *Psychoanalytic Dialogues*, *8*(1), 87–114. https://doi.org/10.1080/10481889809539235

Fraley, R. C., & Shaver, P. R. (2000). Adult romantic attachment: Theoretical developments, emerging controversies, and unanswered questions. *Review of General Psychology*, *4*(2), 132–154. https://doi.org/10.1037/1089-2680.4.2.132

Gibaud-Wallston, J., & Wandersmann, L. P. (1978). *Development and utility of the Parenting Sense of Competence Scale*. John F. Kennedy Center for Research on Education and Human Development.

Goodnow, J. J., & Collins, W. A. (1990). *Development according to parents: The nature, sources, and consequences of parents' ideas*. Psychology Press.

Gordo, L., Martínez-Pampliega, A., Iriarte Elejalde, L., & Luyten, P. (2020). Do parental reflective functioning and parental competence affect the socioemotional adjustment of children? *Journal of Child and Family Studies*, *29*(12), 3621–3631. https://doi.org/10.1007/s10826-020-01840-z

Handelzalts, J. E., Levy, S., Molmen-Lichter, M., Hairston, I. S., Krissi, H., Wiznitzer, A., & Peled, Y. (2021). Attachment styles and maternal sense of competence: The moderated-mediation effects of rooming-in and maternal psychopathology. *Journal of Child and Family Studies*, *30*(10), 2341–2352. https://doi.org/10.1007/s10826-021-02009-y

Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. The Guilford Press.

Huth-Bocks, A. C., Muzik, M., Beeghly, M., Earls, L., & Stacks, A. M. (2014). Secure base scripts are associated with maternal parenting behavior across contexts and reflective functioning among trauma-exposed mothers. *Attachment & Human Development*, *16*(6), 535–556. https://doi.org/10.1080/14616734.2014.967787

Johnston, C., Park, J. L., & Miller, N. V. (2018). Parental cognitions: Relations to parenting and child behavior. In M. R. Sanders & A. Morawska (Eds.), *Handbook of parenting and child development across the lifespan* (pp. 395–414). Springer. https://doi.org/10.1007/978-3-319-94598-9_17

Jones, J. D., Cassidy, J., & Shaver, P. R. (2015). Parents' self-reported attachment styles: A review of links with parenting behaviors, emotions, and cognitions. *Personality and Social Psychology Review*, *19*(1), 44–76. https://doi.org/10.1177/1088868314541858

Joo, M., Cross, S. E., & Park, S. W. (2023). Who do we turn to and what do we get? Cultural differences in attachment structure and function among East Asian and Western individuals. *Personality Social Psychology Bulletin*. Advance online publication. https://doi.org/10.1177/01461672231195781

Lansford, J. E., Deater-Deckard, K., Bornstein, M. H., Putnick, D. L., & Bradley, R. H. (2014). Attitudes justifying domestic violence predict endorsement of corporal punishment and physical and psychological aggression towards children: A study in 25 low- and middle-income countries. *The Journal of Pediatrics*, *164*(5), 1208–1213. https://doi.org/10.1016/j.jpeds.2013.11.060

Lansford, J. E., Woodlief, D., Malone, P. S., Oburu, P., Pastorelli, C., Skinner, A. T., Sorbring, E., Tapanya, S., Uribe Tirado, L. M., Zelli, A., Al-Hassan, S. M., Peña Alampay, L., Bacchini, D., Bombi, A. S., Bornstein, M. H., Chang, L., Deater-Deckard, K., Di Giunta, L., & Dodge, K. A. (2014). A longitudinal examination of mothers' and fathers' social information processing biases and harsh discipline in nine countries. *Development and Psychopathology*, *26*(3), 561–573. https://doi.org/10.1017/S0954579414000236

Li, M., Chen, X., Gong, H., Ji, W., Wang, W., Liang, S., & Kong, A. (2021). The predictive effect of parental adult attachment on parent–adolescent attachment: The mediating role of harsh parenting. *Frontiers in Psychology*, *12*, Article 710167. https://doi.org/10.3389/fpsyg.2021.710167

Li, M., & Gong, H. (2022). Spare the rod, spoil the child?—Predictive effects of parental adult attachment on adolescent anxiety: The mediating role of harsh parenting. *Journal of Affective Disorders*, *312*, 107–112. https://doi.org/10.1016/j.jad.2022.06.027

Lubke, G., & Muthén, B. O. (2007). Performance of factor mixture models as a function of model size, covariate effects, and class-specific parameters. *Structural Equation Modeling: A Multidisciplinary Journal*, *14*(1), 26–47. https://doi.org/10.1080/10705510709336735

Luo, R., Tamis-LeMonda, C. S., & Song, L. (2013). Chinese parents' goals and practices in early childhood. *Early Childhood Research Quarterly*, *28*(4), 843–857. https://doi.org/10.1016/j.ecresq.2013.08.001

Luyten, P., Mayes, L. C., Nijssens, L., & Fonagy, P. (2017). The parental reflective functioning questionnaire: Development and preliminary validation. *PLoS One*, *12*(5), Article e0176218. https://doi.org/10.1371/journal.pone.0176218

MacKenzie, M. J., Nicklas, E., Brooks-Gunn, J., & Waldfogel, J. (2011). Who spanks infants and toddlers? Evidence from the fragile families and child well-being study. *Children and Youth Services Review*, *33*(8), 1364–1373. https://doi.org/10.1016/j.childyouth.2011.04.007

MacKenzie, M. J., Nicklas, E., Brooks-Gunn, J., & Waldfogel, J. (2014). Repeated exposure to high-frequency spanking and child externalizing behavior across the first decade: A moderating role for cumulative risk. *Child Abuse & Neglect*, *38*(12), 1895–1901. https://doi.org/10.1016/j.chiabu.2014.11.004

Merz, E. C., Landry, S. H., Montroy, J. J., & Williams, J. M. (2017). Bidirectional associations between parental responsiveness and executive function during early childhood. *Social Development*, *26*(3), 591–609. https://doi.org/10.1111/sode.12204

Mikulincer, M., & Shaver, P. R. (2005). Attachment security, compassion, and altruism. *Current Directions in Psychological Science*, *14*(1), 34–38. https://doi.org/10.1111/j.0963-7214.2005.00330.x

Mikulincer, M., & Shaver, P. R. (2010). *Attachment in adulthood: Structure, dynamics, and change*. The Guilford Press.

Ng, F. F.-Y., Pomerantz, E. M., & Deng, C. (2014). Why are Chinese mothers more controlling than American mothers? "My child is my report card." *Child Development*, *85*(1), 355–369. https://doi.org/10.1111/cdev.12102

Nijssens, L., Bleys, D., Casalin, S., Vliegen, N., & Luyten, P. (2018). Parental attachment dimensions and parenting stress: The mediating role of parental reflective functioning. *Journal of Child and Family Studies*, *27*(6), 2025–2036. https://doi.org/10.1007/s10826-018-1029-0

Nylund, K. L., Asparouhov, T., & Muthén, B. O. (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study. *Structural Equation Modeling: A Multidisciplinary Journal*, *14*(4), 535–569. https://doi.org/10.1080/10705510701575396

Overall, N. C., Pietromonaco, P. R., & Simpson, J. A. (2022). Buffering and spillover of adult attachment insecurity in couple and family relationships. *Nature Reviews Psychology*, *1*(2), 101–111. https://doi.org/10.1038/s44159-021-00011-1

Pettit, G. S., & Arsiwalla, D. D. (2008). Commentary on special section on "Bidirectional Parent–Child Relationships": The Continuing Evolution of Dynamic, Transactional Models of Parenting and Youth Behavior Problems. *Journal of Abnormal Child Psychology*, *36*(5), 711–718. https://doi.org/10.1007/s10802-008-9242-8

Pinquart, M. (2021). Cultural differences in the association of harsh parenting with internalizing and externalizing symptoms: A meta-analysis. *Journal of Child and Family Studies*, *30*(12), 2938–2951. https://doi.org/10.1007/s10826-021-02113-z

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879

R Core Team. (2023). *R: a language and environment for statistical computing*. R Foundation for Statistical Computing. https://www.R-project.org

Rosenberg, J. M., Beymer, P. N., Anderson, D. J., Van Lissa, C., & Schmidt, J. A. (2019). tidyLPA: An R package to easily carry out latent profile analysis (LPA) using open-source or commercial software. *Journal of Open Source Software*, *3*(30), 978. https://doi.org/10.21105/joss.00978

Rosso, A. M. (2022). When parents fail to mind the child: Lower mentalizing in parents who maltreat their children. *Frontiers in Psychology*, *13*, Article 853343. https://doi.org/10.3389/fpsyg.2022.853343

Rostad, W. L., & Whitaker, D. J. (2016). The association between reflective functioning and parent–child relationship quality. *Journal of Child and Family Studies*, *25*(7), 2164–2177. https://doi.org/10.1007/s10826-016-0388-7

Sadler, L. S., Slade, A., & Mayes, L. C. (2006). Minding the baby: A mentalization-based parenting program. In J. G. Allen & P. Fonagy (Eds.), *Handbook of mentalization-based treatment* (pp. 269–288). https://doi.org/10.1002/9780470712986.ch14

San Cristobal, P., Santelices, M. P., & Miranda Fuenzalida, D. A. (2017). Manifestation of trauma: The effect of early traumatic experiences and adult attachment on parental reflective functioning. *Frontiers in Psychology*, *8*, Article 449. https://doi.org/10.3389/fpsyg.2017.00449

Sanders, M. R. (2008). Triple P-Positive Parenting Program as a public health approach to strengthening parenting. *Journal of Family Psychology*, *22*(4), 506–517. https://doi.org/10.1037/0893-3200.22.3.506

Schmitt, D. P., Alcalay, L., Allensworth, M., Allik, J., Ault, L., Austers, I., Bennett, K. L., Bianchi, G., Boholst, F., Cunen, M. A. B., Braeckman, J., Brainerd, E. G., Jr., Caral, L. G. A., Caron, G., Casullo, M. M., Cunningham, M., Daibo, I., De Backer, C., De Souza, E., ZupanÈiÈ, A. (2004). Patterns and universals of adult romantic attachment across 62 cultural regions: Are models of self and of other pancultural constructs? *Journal of Cross-Cultural Psychology*, *35*(4), 367–402. https://doi.org/10.1177/0022022104266105

Selcuk, E., Zayas, V., & Hazan, C. (2010). Beyond satisfaction: The role of attachment in marital functioning. *Journal of Family Theory & Review*, *2*(4), 258–279. https://doi.org/10.1111/j.1756-2589.2010.00061.x

Sigel, I. E., & McGillicuddy-De Lisi, A. V. (2002). Parent beliefs are cognitions: The dynamic belief systems model. In M. H. Bornstein (Ed.), *Handbook of parenting: Being and becoming a parent* (Vol. 3, 2nd ed., pp. 485–508). Lawrence Erlbaum Associates, Inc.

Simpson, J. A., & Rholes, W. S. (2019). Adult attachment orientations and well-being during the transition to parenthood. *Current Opinions in Psychology*, *25*, 47–52. https://doi.org/10.1016/j.copsyc.2018.02.019

Stern, M., & Hertel, S. (2020). Profiles of parents' beliefs about their child's intelligence and self-regulation: A latent profile analysis. *Frontiers in Psychology*, *11*, Article 610262. https://doi.org/10.3389/fpsyg.2020.610262

Straus, M. A., & Fauchier, A. (2007). *Manual for the dimensions of discipline inventory (DDI)*. Family Research Laboratory, University of New Hampshire.

Straus, M. A., & Field, C. J. (2003). Psychological aggression by American parents: National data on prevalence, chronicity, and severity. *Journal of Marriage and Family*, *65*(4), 795–808. https://doi.org/10.1111/j.1741-3737.2003.00795.x

Straus, M. A., & Stewart, J. H. (1999). Corporal punishment by American parents: National data on prevalence, chronicity, severity, and duration, in relation to child and family characteristics. *Clinical Child and Family Psychology Review*, *2*(2), 55–70. https://doi.org/10.1023/A:1021891529770

Stuhrmann, L., Göbel, A., Bindt, C., & Mudra, S. (2022). Parental reflective functioning and its association with parenting behaviors in infancy and early childhood: A systematic review. *Frontiers in Psychology*, *13*, Article 765312. https://doi.org/10.3389/fpsyg.2022.765312

Tang, A.-M., Deng, X.-L., Du, X.-X., & Wang, M.-Z. (2018). Harsh parenting and adolescent depression: Mediation by negative self-cognition and moderation by peer acceptance. *School Psychology International*, *39*(1), 22–37. https://doi.org/10.1177/0143034317709066

Vaillancourt-Morel, M.-P., Labadie, C., Charbonneau-Lefebvre, V. PhD candidate, Sabourin, S., & Godbout, N. (2022). A latent profile analysis of romantic attachment anxiety and avoidance. *Journal of Marital and Family Therapy*, *48*(2), 391–410. https://doi.org/10.1111/jmft.12503

Vasquez, K., Durik, A. M., & Hyde, J. S. (2002). Family and work: Implications of adult attachment styles. *Personality and Social Psychology Bulletin*, *28*(7), 874–886. https://doi.org/10.1177/014616720202800702

Verhage, M. L., Schuengel, C., Madigan, S., Fearon, R. M. P., Oosterman, M., Cassibba, R., Bakermans-Kranenburg, M. J., & van Ijzendoorn, M. H. (2016). Narrowing the transmission gap: A synthesis of three decades of research on intergenerational transmission of attachment. *Psychological Bulletin*, *142*(4), 337–366. https://doi.org/10.1037/bul0000038

Wang, C.-C. D. C., & Song, Y. S. (2010). Adult attachment reconceptualized: A Chinese perspective. In P. Erdman & K.-M. Ng (Eds.), *Attachment: Expanding the cultural connections* (pp. 15–33). Routledge/Taylor & Francis Group.

Wang, M., & Liu, L. (2014). Parental harsh discipline in mainland China: Prevalence, frequency, and coexistence. *Child Abuse & Neglect*, *38*(6), 1128–1137. https://doi.org/10.1016/j.chiabu.2014.02.016

Wei, M., Russell, D. W., Mallinckrodt, B., & Vogel, D. L. (2007). The Experiences in Close Relationship Scale (ECR)—Short Form: Reliability, validity, and factor structure. *Journal of Personality Assessment*, *88*(2), 187–204. https://doi.org/10.1080/00223890701268041

Wittkowski, A., Dowling, H., & Smith, D. M. (2016). Does engaging in a group-based intervention increase parental self-efficacy in parents of preschool children? A systematic review of the current literature. *Journal of Child and Family Studies*, *25*(11), 3173–3191. https://doi.org/10.1007/s10826-016-0464-z

Yang, X., Gao, L., Zhang, Z., Wu, D., & Zhang, Y. (2014). The reliability and validity of the Chinese version of parenting sense of competence scale. *Chinese Journal of Nursing*, *49*(07), 881–885.

Ye, P., Ju, J., Zheng, K., Dang, J., & Bian, Y. (2022). Psychometric evaluation of the Parental Reflective Functioning Questionnaire in Chinese parents. *Frontiers in Psychology*, *13*, Article 745184. https://doi.org/10.3389/fpsyg.2022.745184

Zhao, L., & Hao, Z. (2019). Reliability and validity of the Experiences in Close Relationships Scale—the Chinese short version in Chinese adults. *Chinese Journal of Behavioral Medicine & Brain Science*, *28*(8), 755–759.

Ziv, I., Golbez, N., & Shapira, N. (2020). Parental sense of competence, resilience, and empathy in relation fathers' responses to children's negative emotions in the context of everyday paternal childrearing decisions. *Cogent Psychology*, *7*(1), Article 1794681. https://doi.org/10.1080/23311908.2020.1794681

Zvara, B. J., Lathren, C., Mills-Koonce, R., & Family Life Project Key Contributors. (2020). Maternal and paternal attachment style and chaos as risk factors for parenting behavior. *Family Relations*, *69*(2), 233–246. https://doi.org/10.1111/fare.12423

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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