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A Three-Wave Longitudinal Study of Preschool Children's Reactions to Interparental Conflict and Their Internalizing and Externalizing Problems in Japan

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Abstract

Background Positive marital relations are crucial for healthy family functioning, whereas conflict-ridden marital relations are linked to children's adjustment problems. According to the Emotional Security Theory, destructive interparental conflict leads to children's emotional insecurity, impacting their adjustment.

Objective This three-wave longitudinal study examined the temporal associations between preschool children's reactions to interparental conflict, interparental conflict and children's behavioral problems in Japan.

Methods We conducted a longitudinal three-wave study with Japanese parents of children at three time points: aged 3 (Time 1), 4 (Time 2), and 5 (Time 3). Children's reactions to interparental conflict at Time 2 were assessed using the Security in the Marital Subsystem-Parent Report, which includes subscales for overt emotional reactivity, behavioral dysregulation, overt avoidance, and overt involvement.

Results Our findings revealed a positive association between behavioral dysregulation at Time 2 and internalizing problems at Time 3. However, no significant association was found between behavioral dysregulation and externalizing problems. Emotional reactivity was not associated with behavioral problems or interparental conflict. Differences in age ranges across studies may account for the variance in findings.

Conclusions This longitudinal study highlights the importance of focusing on behavioral dysregulation in preschool children as a factor associated with the relationship between interparental conflict and internalizing problems over time. Emotional reactivity may not serve as a reliable indicator of behavioral problems or interparental conflict in Japanese contexts. These findings underscore the need for culturally sensitive approaches in assessing children's responses to interparental conflict and their potential associations with child development over time.

Keywords Interparental conflict · Emotional security theory · Internalizing · Externalizing · Psychopathology

Positive marital relations form a strong foundation for healthy family functioning, whereas conflict-ridden marital relations are consistently linked to children's adjustment problems (Cummings et al., 2000). The link between interparental conflict and child maladjustment has long been noted (Depner et al., 1992; Emery, 1982); thus, subsequent research continues to focus on this link. According to the Emotional Security Theory (EST; Davies & Cummings, 1994), destructive interparental conflict leads to children's emotional insecurity, compelling them to seek ways to restore their sense of security (Cummings & Davies, 2010; Cummings et al., 2000; Davies et al., 2016a). Children's emotional insecurity in interparental relationships is characterized by emotional reactivity (e.g., frightened, sad, upset), behavioral dysregulation (e.g., angry, causing trouble), avoidance (e.g., turning away from conflict), or involvement (e.g., mediating the conflict) in interparental discord (Cummings & Davies, 2010). Initially, these reactions to interparental conflict may help children address immediate threats; however, over time, these reactions can evolve into externalizing or internalizing problems through various pathways and processes. A significant amount of literature based on EST has shown that children's emotional insecurity mediates the relationship between interparental conflict and children's internalizing and externalizing problems (Davies et al., 2016a; Jouriles et al., 2016; van Eldik et al., 2020).

However, EST could not explain why children with similar levels of insecurity show different outcomes. Recent studies indicate that signs of emotional insecurity overlap by just 17% (Davies & Martin, 2013). In addition, merging different forms of insecurity into one composite contradicts the concept of emotional security as a dynamic, nonlinear control system (Cummings & Davies, 1996). To bridge this gap, the revised Emotional Security Theory (EST-R; Davies & Martin, 2013) suggests that children's outcomes differ depending on the strategies they use to cope with interparental conflict.

Few studies have examined how each component of children's reactions to interparental conflict affects children's internalizing or externalizing problems in contrast to combined latent variables research. For instance, behavioral dysregulation mediates the association between interparental conflict and school-age children's internalizing and externalizing problems (Schermerhorn et al., 2007; Warmuth et al., 2018). Additionally, the "dominant pattern" (e.g., yelling, hitting, hostility) indicates subsequent increases in preschool children's externalizing problems (Davies et al., 2016b). In contrast to research centered on children's behavioral dysregulation, the impact of overt involvement, avoidance, and emotional reactivity on children's internalizing and externalizing problems remains ambiguous (Davies & Cummings, 1998; Davies et al., 2016b; Schermerhorn et al., 2007; Shelton & Harold, 2008). Thus, we examine how children's reactions to interparental conflict affects their internalizing and externalizing problems.

Studies show that children's reactions to interparental conflict may not only affect children's adjustment but also interparental communication (Schermerhorn et al., 2007; Warmuth et al., 2018). These family relationships are reciprocal, consisting of interconnected parts that continuously influence each other, as posited by Family Systems Theory (Cox & Paley, 2003). The central tenets of this theory posit the family as an organized entity, with each member being interdependent, and the family structure incorporating various subsystems (Minuchin, 1974). These subsystems operate in a continuous loop of actions and reactions, with family systems exhibiting self-regulation, maintaining stable interactions, and undergoing self-reorganization in response to environmental shifts. Children play an active role in family dynamics; they are not merely passive recipients of parenting (White et al., 2019). However, few studies have explored how children's reactions to interparental conflict affect subsequent interparental conflict. Warmuth et al. (2018) examined whether behavioral dysregulation mediates the association between prior and future interparental

conflict. Schermerhorn et al. (2007) indicated that children's involvement was negatively correlated with future interparental disputes. While it has been suggested that children's reactions alert parents to their distress, potentially reducing conflict (Schermerhorn et al., 2007), such agentic behaviors in children might be minimally effective or could exacerbate marital conflict (Emery, 1989). Thus, we examine how children's reactions to interparental conflict affect future interparental conflict.

Furthermore, although research on children's reactions to interparental conflict has contributed significantly to child and family studies, it has been predominantly based on European American samples. In East Asia (China, Korea), some studies are based on EST (Cheung, 2021; Ching & Wu, 2018; Li et al., 2016), but few have explored each child's response to interparental conflict and its impact on children's adjustment and interparental conflict (an exception is Lee & Seo, 2021). Therefore, it remains unclear whether previous findings can be generalized to ethnic minority groups. In Japan, since witnessing marital violence was declared child abuse in 2004, the number of recognized cases has increased rapidly (Children & Families Agency, 2024). Although several studies have examined the association between adolescents' reactions to parental conflict and their adjustment based on EST in Japan (Hirose & Hamaguchi, 2021; Tsuritani & Jikihara, 2024), there are no studies on preschool children's reactions to interparental conflict. Compared to older children, preschool children are more likely to feel threatened by conflict, have low confidence in their coping abilities, and have limited skills in using coping strategies to manage their emotions. Additionally, preschool children's regulatory mechanisms for security could be more easily overwhelmed by exposure to parental conflict. Therefore, we examine how Japanese preschool children react to interparental conflict.

The Present Study

We examined the temporal associations between preschool children's reactions to interparental conflict and pre- and post-interparental conflict and behavioral problems in Japan. We analyzed data from a three-wave longitudinal study, collecting responses from Japanese parents of children aged 3 (Time 1), 4 (Time 2), and 5 (Time 3). Children's reactions to interparental conflict at Time 2 were assessed using the Security in the Marital Subsystem-Parent Report (SIMS-PR; Cummings & Davies, 2010; Davies et al., 2002), which comprises four subscales: overt emotional reactivity, behavioral dysregulation, overt avoidance, and overt involvement.

Consistent with previous research findings (Schermerhorn et al., 2007; Warmuth et al., 2018), we postulated that heightened interparental conflict at Time 1 would be associated with increased behavioral dysregulation of children in interparental conflict at Time 2, which in turn would be related to escalations in children's internalizing and externalizing problems and interparental conflict at Time 3. Additionally, we hypothesized that elevated interparental conflict at Time 1 would be associated with higher overt involvement of children in interparental conflict at Time 2, which would be related to augmented internalizing and externalizing problems and interparental conflict at Time 3. The reasons for this hypothesis are twofold. First, children's involvement not only fails to necessarily resolve parental conflicts but might also exacerbate them (Emery, 1989). Second, there is a positive correlation between overt involvement of children in interparental conflict and their own internalizing and externalizing problems (Shelton & Harold, 2008). By contrast, overt avoidance and emotional reactivity of children in interparental conflict were examined in

an exploratory manner without specific hypotheses. Furthermore, consistent with prior findings (Warmuth et al., 2018), we posited that elevated internalizing and externalizing problems at Time 1 would correlate with more pronounced responses to interparental conflict at Time 2 and higher levels of interparental conflict at Time 3.

Method

Participants and Procedure

Participants were recruited from a perinatal center in the Kanto region of Japan, which has approximately 1000 deliveries per year. Pregnant women and their partners who were more than 24 weeks pregnant were asked to participate in the survey during antenatal check-ups. A total of 789 mothers and 543 fathers completed the survey between August 2009 and December 2010. Subsequently, questionnaires were sent to these parents by mail at 5 weeks, 3 months, 6 months, and 1 year postpartum. Questionnaires were mailed to them annually, in the month following the child's birth, until the child reached 10 years of age, except for parents who refused to continue the survey at 1 year. This study was reviewed and approved by the Ethics Committee of Saitama Medical Center (approval number 258; 426). Written informed consent was obtained from all participants involved in this study. This dataset has been utilized in previous studies, including Jikihara et al. (2023) and Kubo et al. (2024), which examined different aspects of child development and parental depression. The current study focuses specifically on the relationship between interparental conflict, children's reactions to interparental conflict, and children's behavioral problems, utilizing data from when the children were 3, 4, and 5 years old.

We analyzed data from 191 children (86 males, 83 females, 22 unidentified) whose mothers or fathers responded at least once during a 3-year period, spanning children at ages 3 (Time 1), 4 (Time 2), and 5 (Time 3). It should be noted that the gender of 22 children remained unidentified. This is due to missing responses to the gender question in the survey conducted at 5 weeks postpartum. As subsequent surveys did not inquire about the child's gender, these cases remained unidentified.

The most common age range among the participants was 35–39 years at the time of the mother's pregnancy (mother, 43.4%; fathers, 35.5%). Additionally, most participants held a bachelor's degree or higher (mother: 32.8%, fathers: 60.6%). More than half of the participants (66.0%) provided complete data for a minimum of two time points. The percentages of missing data at each time point were as follows: Time 1, 16.8%; Time 2, 34.0%; and Time 3, 33.5%. Table 1 provides a detailed breakdown of respondents at

Table 1 Number and percentage of respondents at each wave

Respondent (s)	Time1 (Age 3)		Time 2 (Age 4)		Time 3 (Age 5)	
	<i>n</i>	(%)	<i>n</i>	(%)	<i>n</i>	(%)
Both parents	107	(56.0%)	77	(40.3%)	71	(37.2%)
Mother only	49	(25.7%)	42	(22.0%)	49	(25.7%)
Father only	3	(1.6%)	7	(3.7%)	7	(3.7%)
Neither parent	32	(16.8%)	65	(34.0%)	64	(33.5%)
Total	191	(100.0%)	191	(100.0%)	191	(100.0%)

each wave. When both parents responded, the parent's scores were averaged. In cases where only one parent responded that parent's responses were used.

Measures

Interparental Conflict (Time 1 and Time 3)

To assess interparental conflict, parents completed a single item: "Do you ignore, argue, or conflict with your partner?" Ratings were on a 4-point Likert-type scale, with 1 indicating (none), 2 indicating (seldom), 3 indicating (sometimes: more than once a month), and 4 indicating (quite often: more than once a week).

Children's Overt Reactions to Interparental Conflict (Time 2)

To assess children's overt reactions to interparental conflict, parents completed the SIMS-PR scale (Cummings & Davies, 2010; Davies et al., 2002). The SIMS-PR includes the 10-item overt emotional reactivity (e.g., "Appears upset," "Keeps very still (almost as if he or she is frozen)"), the 5-item behavioral dysregulation (e.g., "Yells at family members," "Starts hitting, kicking, slapping, or throwing things at family members"), the 4-item overt avoidance (e.g., "Tries to stay away from us," "Becomes very quiet and withdrawn"), and the 9-item overt involvement (e.g., "Tells us to stop arguing," "Tries to comfort one or both of us"). The original SIMS-PR was translated into Japanese, back-translated into English, and validated by the original author. Parents provided insights into their children's responses to observed interparental disputes over the previous year. Reliability analyses were conducted for both mothers' and fathers' responses. Cronbach's alpha values were as follows: overt emotional reactivity (0.86 for mothers, 0.91 for fathers), behavioral dysregulation (0.81 for mothers, 0.75 for fathers), overt avoidance (0.74 for mothers, 0.63 for fathers), and overt involvement (0.86 for mothers, 0.86 for fathers).

Internalizing and Externalizing Problems (Time 1 and Time 3)

To assess children's internalizing and externalizing behaviors, parents completed the Japanese version of the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). Theoretical and initial empirical evidence supports the integration of the SDQ's proposed emotional symptoms (e.g., "Many worries or often seems worried") and peer relationship problems (e.g., "Picked on or bullied by other children") subscales into an "internalizing" category, and its conduct problems (e.g., "Often fights with other children or bullies them") and hyperactivity/inattention (e.g., "Restless, overactive, cannot stay still for long") subscales into an "externalizing" category (Goodman et al., 2010). The SDQ has been validated and is reliable for community samples, as discussed by Stone et al. (2010). Cronbach's alpha coefficients for externalizing problems were (0.73 for mothers, 0.69 for fathers) at Time 1, and (0.72 for mothers, 0.76 for fathers) at Time 3. For internalizing problems, Cronbach's alpha coefficients were (0.61 for mothers, 0.65 for fathers) at Time 1, and (0.70 for mothers, 0.61 for fathers) at Time 3.

Data Analysis

Descriptive statistical methods were applied to ascertain the means and standard deviations, followed by a zero-order correlation analysis using IBM SPSS Statistics 28 to explore the relationships among the variables. We employed path analysis with Mplus 8.4 (Muthén & Muthén, 2017). Our dataset contained missing data across the three time points (Time 1: 16.8%; Time 2: 34.0%; Time 3: 33.5%). T-tests comparing participants with complete data ($n=75$) to those with incomplete data ($n=116$) revealed no significant differences in key variables (all $p>0.05$). To avoid potential biases from excluding missing data, we employed full information maximum likelihood (FIML) to address missingness (Enders, 2001). Children's gender was factored in as a covariate for each measurement. Model adequacy was assessed using the comparative fit index (CFI), Tucker-Lewis Index (TLI), and Standardized Root Mean Square Residual (SRMR) and root-mean-square error of approximation (RMSEA). The CFI and TLI above 0.95, and SRMR below 0.08, as suggested by Hu and Bentler (1999), were considered indicative of a reasonable fit. Additionally, RMSEA values below 0.05 were viewed as good, those between 0.05 and 0.08 as acceptable, those between 0.08 and 0.1 as marginal, and above 0.1 as poor following the criteria proposed by Browne and Cudeck (1993).

A bias-corrected bootstrapping approach (20,000 draws) was used to evaluate the indirect effect of children's overt reactions to interparental conflict. This method mitigates type 1 errors, generates more precise confidence intervals for indirect effects, and enhances statistical power compared to other methods. The significance of the mediating effect was inferred when confidence intervals excluded zero (MacKinnon et al., 2004).

Results

Initially, we examined the descriptive statistics and correlations among the variables, as presented in Table 2. Overt avoidance was not significantly correlated with externalizing or internalizing problems. Moreover, overt avoidance was highly correlated with overt emotional reactivity ($r=0.67$, $p<0.001$). Therefore, overt avoidance was not included in the subsequent analyses.

The analysis progressed with a structural model employing autoregressive controls to examine the temporal associations between interparental conflict, children's reactions to interparental conflict, and their externalizing and internalizing problems over time, including prospective interparental conflict (Fig. 1). The goodness-of-fit indexes were $\chi^2(45)=280.08$, $p<0.001$; CFI=0.953, TLI=0.645, SRMR=0.051, and RMSEA=0.099 [CI 0.045 – 0.155]. The CFI value exceeded the recommended threshold of 0.95, and the SRMR value was below the recommended threshold of 0.08, suggesting an acceptable model fit. While TLI and RMSEA values were less than optimal, it is important to note that these indices can be sensitive to sample size, particularly in smaller samples (Kenny et al., 2015; Marsh et al., 2004). Considering these indices, we judged the overall model fit to be acceptable for our sample size and proceeded with the interpretation of the results. Examination of covariate effects revealed that children's gender (0: male, 1: female) was only associated negatively with behavioral dysregulation ($\beta=-0.22$, $p<0.05$), indicating that girls were more likely to have less behavioral dysregulation. All the autoregressive controls were statistically significant. The direct pathways from interparental conflict at

Table 2 Correlations, means, and standard deviations of study variables ($N = 191$)

	1	2	3	4	5	6	7	8	9	10	11
1	Children's Gender (0: male, 1: female)										
<i>Interparental Conflict</i>											
2	Time 1 Interparental Conflict	.03									
3	Time 3 Interparental Conflict	-.02	.65 ***								
<i>Children's Reactions to Interparental Conflict (Time 2)</i>											
4	Overt Emotionally Reactivity	.04	.32 **	.39 ***							
5	Overt Involvement	.06	.34 ***	.34 **	.41 ***						
6	Behavioral Dysregulation	-.21 *	.37 ***	.27 **	.22 *	.41 ***					
7	Overt Avoidance	.01	.22 *	.21 *	.67 ***	.07 ***	-.05				
<i>Externalizing Problems</i>											

Table 2 (continued)

	1	2	3	4	5	6	7	8	9	10	11	
8	Time 1 Externalizing Problems	-.09	.24 *	.07	.03	.08	.13	-.04				
9	Time 3 Externalizing Problems	-.10	.13	.14	-.10	.03	.02	-.10	.50 ***			
<i>Internalizing Problems</i>												
10	Time 1 Internalizing Problems	.05	.15	.10	.03	-.02	.11	.10	.32 ***	.26 **		
11	Time 3 Internalizing Problems	-.09	.02	.07	.23 *	.22 *	.35 ***	.04	.24 *	.35 ***	.47 ***	
	<i>M</i>	2.52 (0.70)	2.49 (0.71)	2.49 (0.71)	1.64 (0.58)	1.95 (0.69)	1.31 (0.52)	1.49 (0.52)	7.20 (2.99)	5.76 (3.07)	3.87 (2.55)	3.46 (2.64)
	<i>SD</i>	1.59	1.25	1.25	1.26	1.26	1.26	1.26	1.57	1.25	1.57	1.57

Correlations with children's gender are point-biserial correlations, and correlations with interparental conflict are Spearman's rank correlations. All other correlations are Pearson's product-moment correlations

*** $p < .001$; ** $p < .01$; * $p < .05$

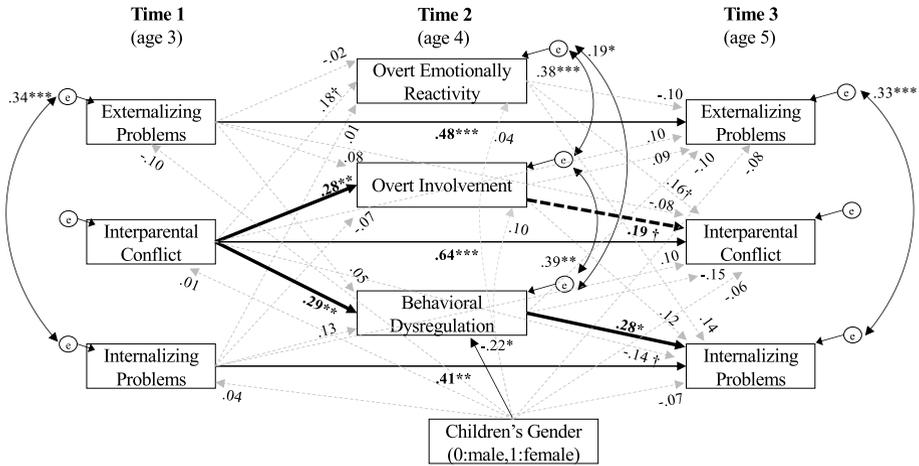


Fig. 1 Standardized model estimates. *Note:* Coefficients are standardized linear regression coefficients; dashed lines represent non-significant paths; solid lines represent significant paths; and bold lines and coefficients represent indirect paths. *** $p < .001$; ** $p < .01$; * $p < .05$; † $p < .10$

Time 1 to children’s externalizing and internalizing problems at Time 3 were not significant. This was also true for the direct pathway from children’s externalizing and internalizing problems at Time 1 to interparental conflict at Time 3. In contrast, significant pathways were identified from interparental conflict at Time 1 to behavioral dysregulation ($\beta = 0.29$, $p < 0.01$) and overt involvement ($\beta = 0.28$, $p < 0.01$) at Time 2. Notably, the pathway from behavioral dysregulation at Time 2 to internalizing problems in children at Time 3 was significant ($\beta = 0.28$, $p < 0.05$).

We also examined the indirect effects of interparental conflict and children’s externalizing and internalizing problems at Time 1 on interparental conflict and children’s externalizing and internalizing problems at Time 3, with children’s overt reactions to interparental conflict at Time 2 as an intervening variable. The findings indicated a significant indirect effect from interparental conflict at Time 1 to children’s internalizing problems at Time 3 through behavioral dysregulation at Time 2 ($B = 0.302$, $S.E. = 0.183$, $\beta = 0.053$ [$CI = 0.005 - 0.186$], $p < 0.05$). Similarly, there was a significant indirect effect from interparental conflict at Time 1 to Time 3 through children’s overt involvement at Time 2 ($B = 0.054$, $S.E. = 0.037$, $\beta = 0.0072$ [$CI = 0.002 - 0.141$], $p < 0.05$). Other indirect effects did not show significant results.

Discussion

The aim of this study was to examine the associations among preschool children’s reactions to interparental conflict, interparental conflict, and children’s behavioral problems in Japan across three time points. There has been limited research exploring each child’s response to interparental conflict and its impact on children’s adjustment and interparental conflict, particularly outside Westernized cultures. The results of the present study suggest that children’s behavioral dysregulation is positively associated with escalating internalizing

problems and shows an indirect effect in the link between interparental conflict and children's internalizing problems.

Consistent with EST, we suggest that children's adjustment problems may be associated with recurrent exposure to destructive conflicts, which may be related to chronic arousal and dysregulation (Davies & Cummings, 1994; Davies et al., 2002). Specifically, even considering children's reactions to interparental conflict, only behavioral dysregulation showed a significant negative association with children's psychosocial development in our findings. This result underscores the importance of focusing on children's behavioral dysregulation in response to interparental conflict.

Contrary to previous studies, we did not find an association between behavioral dysregulation and externalizing problems. In contrast to Warmuth et al. (2018), we observed that externalizing problems at Time 1 was not associated with behavioral dysregulation at Time 2. This variance could be due to the different age ranges of the children in the respective studies. Earlier studies by Schermerhorn et al. (2007) and Warmuth et al. (2018) focused on early school-age children, a period noted for relatively stable antisocial behavior (Patterson et al., 1989). By contrast, our study targeted preschool children, a developmental stage potentially marked by more fluid and changeable behavioral patterns. Additionally, emotional reactivity was not associated with children's behavioral problems or interparental conflict. Japanese infants exhibit fewer emotions than their US counterparts (Ip et al., 2021; Lewis et al., 2010; Nakazawa, 2010). Hence, the association between interparental conflict intensity and emotional reactivity might be weak. Parent-rated scales may not fully capture children's responses due to their less expressive emotions.

Moreover, our findings aligned with our initial predictions about the associations between children's reactions to interparental conflict and future conflicts. The indirect effects highlighted overt involvement as showing an indirect effect between interparental conflict at Times 1 and 3, consistent with prior research (Emery, 1989). Notably, preschool-age children, who are typically more self-centered, might perceive interparental conflict as their responsibility (Rohrbaugh, 2008). Although these children may try to resolve the conflict, their involvement is often ineffective. Consequently, interparental conflicts may remain unresolved or increase in intensity.

Limitations and Future Directions

This study has several limitations. First, a significant limitation is the combination of high missing data rates and a relatively small sample size ($N=191$). Although regression estimates are generally less prone to bias compared to estimates of means in such situations (Gustavson et al., 2012), the generalizability of our findings should be interpreted with caution. Additionally, these issues likely contributed to the mixed results in our model fit indices, with CFI and SRMR suggesting acceptable fit, but TLI and RMSEA indicating less than optimal fit. Future research should aim for larger samples and implement strategies to minimize attrition. Second, our measurement of interparental conflict relied exclusively on a single-item frequency scale that captured only one narrow facet of conflict. Future research should explore broader dimensions of interparental conflict, considering aspects such as its persistence, nature, and resolution. Additionally, reliability coefficients were below 0.70 for the SDQ internalizing problems ($\alpha=0.61-0.70$) and fathers' SIMS-PR overt avoidance ($\alpha=0.63$), suggesting caution in interpreting these results. Third, the SIMS-PR used in this study is not based on the EST-R. For instance, in the EST-R, involvement,

avoidance, and arousing distress (e.g., crying) in response to interparental conflict are integrated as a “mobilizing pattern,” while arousing fearful distress (e.g., freezing) is categorized as a “demobilizing pattern” (Davies et al., 2016b). In the future, it will be necessary to measure children’s reactions based on the EST-R. Fourth, we gauged children’s reactions to interparental conflict when they were four years old. Assessing whether such reactions vary with age and whether the mediation effects are age-dependent is crucial. Additionally, cross-cultural evaluations, especially between Western and Eastern Asian contexts, are warranted.

Regarding the application of research findings to clinical practice, it is imperative for healthcare practitioners to highlight the detrimental effects of parental conflicts on children. This focus assists in comprehending the consequences and concurrently encourages parents to enhance their methods of resolving conflicts. Additionally, healthcare practitioners must consider that ongoing and intense behavioral responses in children to interparental conflicts may suggest a greater risk of emotional adjustment difficulties.

Conclusion

Our results highlight an association between children’s behavioral dysregulation in the context of interparental conflict and their internalizing problems. Echoing prior research, our findings suggest that the associations of destructive conflicts extend beyond marital relationships. When children are exposed to such disputes, particularly when they respond maladaptively, there may be implications for their development. Our findings indicated an association between behavioral dysregulation in preschoolers and internalizing problems, rather than externalizing problems. Given these insights, interparental conflict studies need to consider children’s direct reactions to these disagreements, as their unique reactions may be associated with distinct implications for developmental outcomes.

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Declarations

Conflict of interest The authors declare no conflict of interest.

Data Availability We employed ChatGPT (GPT- 4o, June 18, 2024) to enhance the language and ensure that the paper conforms to the standards of scholarly journals. Please note that ChatGPT was not used to generate individual sentences or ideas in this study. The data that support the findings of this study are available from the corresponding author upon reasonable request.

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