Dynamic Relationship Between Parental Parenting Behaviors and 5-6-Year-Old Children' s Behavioral Responses in Parent-Child Conversations

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Abstract

Parenting and child behavior are inextricably linked through bidirectional effects, yet few studies have examined child-driven and parent-driven effects at the micro-level within parent-child interaction processes. This study investigated the behavioral performance of 113 parent-child dyads with preschool children aged 5–6 years during conflict conversations. Using Bayesian statistics, we constructed a dynamic structural equation model to capture changes in parenting behaviors and child behavioral responses triggered by real-time interactions, and employed regression analysis to examine the influence of parent and child behaviors on conversation outcomes. The results revealed: (1) Children' s negative behavioral responses within a 15-second interval positively predicted parents' non-supportive parenting behaviors in the subsequent 15-second interval; (2) Children' s positive behavioral responses served as the primary predictor of conversation outcomes, with higher levels of positive behavioral responses facilitating constructive conflict resolution. These findings validate child-driven effects at the micro-level and underscore the critical role of children' s responses in parent-child interactions.

Full Text

Dynamics of Parenting Behaviors and 5-6-Year-Old Children' s Behavioral Responses During Conflict Discussions

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Abstract

Parenting and child behavior are inextricably linked through bidirectional influences, yet few studies have examined child-driven versus parent-driven effects at the micro-level of ongoing parent-child interactions. This study investigated the behavioral patterns of 113 parent-child dyads involving 5-6-year-old preschoolers during conflict discussions. Using Bayesian statistics, we constructed dynamic structural equation models to capture real-time interaction-induced changes in parenting behaviors and child behavioral responses, and employed regression analysis to examine how parent and child behaviors influenced discussion outcomes. Results revealed: (1) children' s negative behavioral responses within a 15-second interval positively predicted parental non-supportive parenting behaviors in the subsequent 15-second interval; (2) children' s positive behavioral responses served as the primary predictor of discussion outcomes, with higher levels of positive child behavior facilitating constructive conflict resolution. These findings validate child-driven effects at the micro-level and underscore the critical role of child responses in parent-child interactions.

Keywords: parent-child communication, child/parent driven, parenting, children' s behavior, dynamic structural equation model

1. Introduction

Parent-child dialogue serves as a vital mechanism for strengthening emotional bonds, resolving daily problems and conflicts, and promoting family functioning (Chi & Yu, 2010; Barnes & Olson, 1985). Such dialogues emerge early in childhood, and by ages 5-6, children' s rapidly developing cognitive, linguistic, and social capacities enable them to communicate effectively and express themselves (Reese et al., 2007), while becoming increasingly active participants in conversations (Kuebli et al., 1995; Nelson et al., 2014). Concurrently, parents' socialization goals shift from providing comfort and care to fostering socialization (Hastings & Grusec, 1998), making parent-child dialogue a crucial vehicle for parental guidance and education. During these dialogues, parent and child behaviors may mutually influence one another (Sameroff & Mackenzie, 2003). For instance, children' s defiance may trigger more intense parental control and escalate parent-child conflict (Nelson et al., 2017; Patterson, 1995), whereas parents' patient soothing of children' s negative emotions may guide children toward collaborative problem-solving (Nelson et al., 2014). Daily parent-child interactions represent a microcosm of family education, exerting profound influences on children' s behavioral development and social adaptation (Bronfenbrenner & Ceci, 1994; Sanders & Turner, 2018). This study focuses on real-time interaction patterns in early childhood parent-child dialogues, investigating the dynamic relationships between parent and child behaviors during conflict discussions to inform the development of positive parent-child relationships and promote healthy child development.

In recent years, bidirectional socialization mechanisms theory has gained

widespread recognition in research on parent-child interactions, emphasizing that both parties jointly influence parenting, child development, and the parent-child relationship (Bell, 1968; Paschall & Mastergeorge, 2016; Sameroff, 1975; Sameroff & Mackenzie, 2003). Nevertheless, an implicit assumption persists that children are passive recipients of parental behavior, with most empirical research focusing exclusively on parental effects—how parenting influences child outcomes (e.g., Hao et al., 2019; Barger et al., 2019). Supportive parenting behaviors (e.g., positive emotional expression, problem-solving) facilitate preschoolers' emotional regulation and self-control development (Morris et al., 2007; Zeytinoglu et al., 2017; Zinsser et al., 2021), whereas non-supportive behaviors (e.g., punishment, neglect) predict increased problem behaviors and anxiety risk (Heilmann et al., 2021; Lewis-Morrarty et al., 2012; Serbin et al., 2015). From early childhood through adolescence, non-supportive parenting correlates concurrently with children' s externalizing and internalizing problems and predicts subsequent increases in problem behaviors (Berg-Nielsen et al., 2002).

Another body of research emphasizes child effects—how children' s behavior influences parents (e.g., Zhang et al., 2013; Belsky et al., 2000; Davidov et al., 2015; Yan et al., 2021). A meta-analysis revealed that, after controlling for baseline parenting, children' s externalizing behaviors remained positively associated with subsequent inappropriate parenting (Yan et al., 2021). Furthermore, children' s problem behaviors increase parental control and emotional rejection (Gershoff et al., 2012) while decreasing parental warmth and sensitivity (Serbin et al., 2015). However, these findings primarily involve high-risk samples with internalizing and externalizing problems, leaving unclear whether child effects exist in typical or low-risk samples.

Current research on parental and child effects predominantly examines between-person changes, whereas theoretical models of bidirectional interaction emphasize dynamic, within-person changes in real-time processes. During daily interactions, parents and children bring stable characteristics that influence each other' s behavior while also responding to one another' s actions and verbalizations. This dynamic transactional process drives dyadic relationship changes and individual-level development (Sameroff, 1975), shaping future interaction patterns and child socialization (Granic & Patterson, 2006; Groh et al., 2017). If we observe negative child behavior at time *t*, this may represent continuity from time *t-1* or a response to parental non-supportive behavior. Isolating real-time behavioral fluctuations (i.e., within-person level) and examining directional effects between parenting and child behavior across time points, while controlling for stable characteristics, reveals whether the interaction process is parent-driven or child-driven. This approach illuminates mechanisms of emotional conflict formation and predictors of discussion outcomes, informing parent-child communication education and interventions.

Currently, empirical evidence for real-time bidirectional effects primarily focuses on mother-infant interactions (Beebe et al., 2016; Markova et al., 2019). One

study of 2-4-year-old dyads found child-driven effects between child negative responses and parental lax discipline (increased child negativity predicted subsequent increases in lax parenting) and parent-driven effects between harsh discipline and child negativity (increased harsh parenting predicted subsequent increases in child negative responses; Del Vecchio & Rhoades, 2010). Ravindran et al. (2019) found dynamic bidirectional associations between toddler aversive behavior and maternal non-supportive parenting. However, for children aged 5-6 and older, researchers have primarily examined bidirectional effects in longitudinal studies (Bauer et al., 2022; Combs-Ronto et al., 2009), with no direct evidence examining parent-driven or child-driven effects in micro-level interactions.

Conflict discussions represent an important and typical form of parent-child interaction for 5-6-year-olds. This developmental period represents the final years of early childhood, during which children have accumulated rich communication experiences with parents, teachers, and peers, enabling them to discuss, explain, and recall past events (Fivush et al., 2006; Nelson, 1998). Ages 5-6 mark a transitional period for self-control development (Tager-Flusberg & Sullivan, 2000). Compared to younger children, these preschoolers exhibit greater autonomy (Eisenberg & Morris, 2002), can engage in and sustain verbal conversations (Black & Logan, 1995), express their ideas more clearly, and argue with parents about conflict topics. Moreover, interactions become more egalitarian, with parents providing less direction or control. Five- to six-year-olds attempt to influence their parents more frequently than 3-year-olds while displaying fewer negative reactions (Wilson & Durbin, 2013), and begin employing more positive emotion regulation strategies in interpersonal interactions (Lu & Chen, 2007). These positive behavioral responses may influence parental parenting and conflict resolution strategies (Nelson et al., 2014). Therefore, this study explores the dynamic relationships between different valenced behaviors in parent-preschooler dyads during conversations.

[Figure 1: see original paper] illustrates the dynamic structural equation model employed in this study. Using a laboratory-based parent-child conflict discussion paradigm (Reese et al., 2007; Wang & Fivush, 2005), we examined fluctuations in parenting behaviors (non-supportive, supportive) and child behavioral responses (positive, negative) triggered by interactions, investigating dynamic bidirectional associations. To capture real-time dyadic feedback loops, effectively distinguish within-person and between-person factors, and exclude confounding effects of time-invariant characteristics, we employed Dynamic Structural Equation Modeling (DSEM)—a multilevel time-series analytic approach for intensive longitudinal data (Asparouhov et al., 2018; Hamaker et al., 2018; Sokolovic et al., 2021). If children' s momentary behavioral responses predict subsequent changes in parenting behavior (15 seconds later), this validates child-driven effects. If parenting behavior changes predict subsequent child behavioral changes, this validates parent-driven effects. The 15-second interval allows continuous assessment of parent and child behaviors while capturing relatively rapid, momentary changes during real-time interactions (Ravindran et al., 2022).

Additionally, to address which party dominates the interaction, we used multilevel linear regression to examine the effects of parenting behaviors and child responses on conflict discussion outcomes.

2. Method

2.1 Participants

Participants were drawn from a longitudinal study on child development and parenting. Families were recruited from Hangzhou, Zhejiang Province, and provided informed consent. One hundred thirteen families participated (59 boys, Mage = 5.81 $\pm$ 0.30 years). Primary caregivers (104 mothers, 9 fathers) and children engaged in a laboratory-based parent-child conflict discussion. The study was approved by the Medical Ethics Committee of the Department of Psychology and Behavioral Sciences at Zhejiang University.

Based on parent-reported family information, 95% of participating families had monthly incomes exceeding 10,000 RMB (the average monthly income for Hangzhou urban families was 13,587 RMB in 2018), and 81% of primary caregivers held bachelor' s degrees or higher.

2.2 Procedure

The parent-child discussion task was adapted from the emotional events discussion paradigm (Reese et al., 2007; Wang & Fivush, 2005). The experimenter explained the task requirements to the primary caregiver alone: "In a moment, please have a 5-minute conversation with your child in a quiet room. Choose an event from daily life where you had disagreements or unpleasant feelings and discuss it freely, trying to solve the problem together. Please interact with your child in a natural, authentic way. Raise your hand when you finish." The dyad then entered the room, sat at arm' s length, and began the discussion. To ensure natural conversation flow, the experimenter remained outside the room and did not intervene. With participants' consent, discussions were video-recorded for coding. Post-hoc analysis revealed that conflict topics primarily concerned daily habits (55%), learning habits (31%), and social habits (14%). Daily habit topics included "poor sleep schedule," "slow movements," "picky eating," and "temper tantrums." Learning habit topics included "interest classes," "homework problems," and "inattention in class." Social habit topics included "lying," "conflict with siblings," and "hitting."

2.3 Measures

2.3.1 Family Demographics Parents completed a Family Demographics Questionnaire assessing child' s gender and age, family income, parental education, and other basic demographic information.

2.3.2 Behavioral Coding 2.3.2.1 Parenting Behaviors
Following previous research (Eisenberg et al., 1996; Sokolovic et al., 2021), we coded parenting behaviors during conflict discussions along supportive and non-supportive dimensions based on behavior frequency and emotional expression. Supportive parenting included encouraging expression and emotional attention; non-supportive parenting included control and punishment. To examine parenting behavior changes, we rated supportive and non-supportive behaviors separately every 15 seconds on 4-point scales: 1 = no supportive/non-supportive behaviors and no positive/negative emotional expression; 4 = two or more supportive/non-supportive behaviors with positive/negative emotional expression. Two coders rated 20% of videos for reliability, yielding Kappa coefficients ranging from 0.704 to 1.000 for supportive parenting and 0.741 to 1.000 for non-supportive parenting.

2.3.2.2 Child Behavioral Responses
Following previous research (Lu & Chen, 2007; Stansbury & Sigman, 2000), we coded child behavioral responses along positive and negative dimensions based on behavior frequency and emotional expression. Positive regulation included problem-solving and persistence; negative regulation included avoidance and venting. To examine behavioral changes, we rated positive and negative responses every 15 seconds on 4-point scales: 1 = no positive/negative responses and no emotional expression; 4 = two or more positive/negative regulation strategies with emotional expression. Inter-rater reliability yielded Kappa coefficients ranging from 0.740 to 1.000 for positive responses and 0.830 to 1.000 for negative responses.

2.3.3 Conflict Resolution Coding Following Recchia et al. (2010), we coded each complete event' s resolution outcome on a 3-point scale: 1 = conflict ignored or avoided, ultimately unresolved; 3 = conflict resolved through mutual negotiation with satisfactory solutions for both parties. Inter-rater reliability for conflict resolution coding yielded Kappa = 0.770.

2.4 Data Analysis

The average conflict discussion duration for 113 dyads was approximately 6 minutes, with 81% exceeding 3 minutes. Therefore, we used Mplus 8.3 to construct four dynamic structural equation models (DSEM) for 92 dyads across 12 time intervals (15 seconds each) during the first 3 minutes. DSEM employs Bayesian estimation with Markov Chain Monte Carlo (MCMC) algorithms, distinguishing within-level (within-person) and between-level (between-person) variance. Using parenting behaviors and child behavioral responses as outcome variables, we examined their dynamic relationships.

The models included four components: (1) means—each dyad' s average behavior scores across the 3-minute interaction; (2) inertia—behavioral consistency from autoregression (e.g., consistency between child behavior at *t-1* and *t*); (3) cross-lag parameters—predictive effects of one party' s prior behavior on the other'

s current behavior (e.g., ϕ_3 indicates parental behavior at *t-1* predicting child behavior at *t*); and (4) innovation variance—residual variance unexplained by means, autoregression, and cross-lags. We focused on cross-lag parameters to examine whether parent-child dialogue is parent-driven or child-driven, and to understand mechanisms of emotional conflict formation and predictors of discussion outcomes. We used SPSS 22.0 for regression analyses examining parental and child effects on conflict resolution outcomes. Although all 113 dyads followed instructions, 49% discussed two or more events. To eliminate multiple event/outcome effects, we used average behavior levels as predictors and the first event' s resolution as the outcome in multilevel regression analyses.

3. Results

3.1 Preliminary Analyses

Descriptive statistics and correlations for parenting behaviors and child responses appear in Table 1 . Independent samples *t*-tests examined gender differences in supportive parenting, non-supportive parenting, positive child responses, and negative child responses. Girls exhibited higher positive responses than boys (t = -2.141, p = 0.034, Cohen' s d = 0.40); no significant differences emerged between father-child and mother-child dyads ($ps > 0.057$). Bivariate correlations examined relationships between child age, caregiver education, family income, and primary variables. Child age correlated negatively with positive responses (r = -0.20, p = 0.030), and caregiver education correlated positively with supportive parenting (r = 0.20, p = 0.036). We therefore controlled for child gender, age, and caregiver education in subsequent analyses.

Table 1 Descriptive Statistics and Correlations for Parenting Behaviors and Child Behavioral Responses

Variable	*M* ± *SD*	1	2	3	4
1. Supportive Parenting	1.77 ± 0.30	—			
2. Non-supportive Parenting	1.37 ± 0.31	-0.50*** (-0.48***)	—		
3. Positive Child Responses	1.97 ± 0.48	0.31** (0.31**)	-0.16 (-0.16)	—	
4. Negative Child Responses	1.69 ± 0.36	0.10 (0.10)	0.41*** (0.42***)	0.01 (0.01)	—

Note: $\boldsymbol{p < 0.001}$, p* < 0.01; values in parentheses are partial correlations controlling for child gender, age, and caregiver education.

Paired samples t-tests examined parent-child behavioral characteristics before DSEM analysis. Results showed that supportive parenting levels were significantly higher than non-supportive levels ($t = 8.204$, $p < 0.001$, Cohen' s $d = 0.77$), and positive child behavior levels were significantly higher than negative levels ($t = 4.823$, $p < 0.001$, Cohen' s $d = 0.45$).

3.2 Dynamic Structural Equation Model Results

3.2.1 Stationarity Tests Using the 12 time points as the time variable, we conducted Augmented Dickey-Fuller (ADF) tests on time-series data for supportive/non-supportive parenting and positive/negative child responses. Results showed that among 92 participants and four primary variables (368 total time series), the vast majority were stationary; 37 non-stationary series were excluded from subsequent analyses.

3.2.2 Structural Equation Model Results We constructed four dynamic structural equation models using parenting behaviors and child responses across 12 time intervals as outcome variables, as shown in Figure 2 [Figure 2: see original paper]. We built multivariate bivariate VAR(1) models with random means, random cross-lag parameters, random innovation variances, and innovation covariances, plus models with child gender, age, and caregiver education as covariates. Results showed consistent effect patterns with and without covariates. Using the Deviance Information Criterion (DIC) for model comparison (Spiegelhalter et al., 2002), we selected the better-fitting model without covariates. The model used 50,000 iterations with 2 chains and thinning of 10 (saving every 10th iteration), with final results based on 5,000 iterations. Trace plots, autocorrelation plots, and potential scale reduction factors indicated good parameter convergence (Hamra et al., 2013).

[Figure 2: see original paper] Dynamic relationships between parenting behaviors and child behavioral responses

Note: $p < 0.05$

All models showed significant effects for means, inertia, and innovation variance. Inertia reflects the extent to which current behavior can be predicted from one' s own prior behavior (15 seconds earlier). Significant inertia coefficients across all four models indicated positive autocorrelation for supportive parenting, non-supportive parenting, and positive and negative child responses, demonstrating stable behavioral patterns for both parties.

Cross-lag coefficients revealed that children' s momentary negative behavioral responses significantly positively predicted parental non-supportive parenting in the next interval, whereas parenting behaviors—both supportive and non-supportive—did not significantly predict subsequent child behavioral responses. Table 2 summarizes non-standardized parameter estimates with 95% credible intervals for means, inertia, and cross-lags from Model 2 (non-supportive parenting and negative child responses). The posterior scale reduction (PSR) value

at the 5,000th iteration was 1.047, with trace and autocorrelation plots indicating good model fit.

Model 2 results showed a mean of 1.43 for non-supportive parenting and 1.71 for negative child responses. Given variability in cross-lag effects across dyads, we examined standardized results based on average standardized parameters per participant (Schuurman et al., 2016). Standardized estimates mirrored non-standardized results, showing that increases in children's negative responses predicted increases in subsequent parental non-supportive parenting ($\beta = 0.148$, CI = [0.073, 0.222]), indicating a robust and stable predictive effect of preschoolers' negative behavioral changes on subsequent parental non-supportive behavior.

Table 2 Non-Standardized Parameter Estimates with 95% Credible Intervals for Model 2 (Means, Inertia, and Cross-Lags)

Parameter	Estimate	95% CI
Parenting $_1$	1.432*	[1.339, 1.532]
Child Response $_2$	1.709*	[1.608, 1.815]
Parenting ϕ_1	0.144*	[0.040, 0.250]
Child Response ϕ_2	0.136*	[0.027, 0.246]
Parent→Child ϕ_3	-0.023	[-0.148, 0.103]
Child→Parent ϕ_4	0.118*	[0.034, 0.202]
Log(Parenting)	-1.795*	[-2.123, -1.506]
Log(Child)	-1.137*	[-1.344, -0.933]
Log(Covariance)	-2.979*	[-3.511, -2.458]

Note: DSEM employs Bayesian methods, producing one-tailed p-values. For interpretability, we report 95% confidence intervals (CI). $p < 0.05$, 95% CI excludes 0.

3.3 Effects of Parenting Behaviors and Child Responses on Conflict Resolution

Correlation analyses examined relationships between parent/child behaviors and conflict resolution outcomes. Controlling for child gender, age, and caregiver education, children' s positive responses correlated significantly positively with resolution ($r = 0.36$, $p < 0.001$), while negative responses correlated significantly negatively (r = -0.23, p = 0.018). These results indicate that positive child behavior facilitates constructive conflict resolution, whereas negative behavior hinders it. Parenting behaviors—both supportive and non-supportive—did not correlate significantly with resolution (r = 0.16, p = 0.096; r = -0.16, p = 0.104).

We conducted multilevel regression analysis using the first complete event' s resolution as the outcome variable. Step 1 entered child gender and caregiver

education as controls; Step 2 added supportive parenting, non-supportive parenting, positive child responses, and negative child responses. Results (Table 4) showed that child gender significantly influenced conflict resolution. Girls' dyads (M = 2.24, SD = 0.82) resolved conflicts better than boys' dyads (M = 1.76, SD = 0.86). Additionally, children' s positive responses significantly predicted resolution, consistent with preliminary analyses showing girls exhibited higher positive responses than boys (t = -2.141, p = 0.034, Cohen' s d = 0.40). No effects emerged for child age or caregiver education.

Table 4 Regression Analysis of Child Behavioral Responses and Parenting Behaviors on Conflict Resolution

Step	Predictor	β
Step 1 (Enter)	Child Gender	3.215*
	Caregiver Education	5.305***
Step 2 (Enter)	Child Gender	-2.89**
	Caregiver Education	-2.09*
	Supportive Parenting	4.10***
	Non-supportive Parenting	
	Positive Child Responses	
	Negative Child Responses	

Note: $\boldsymbol{p < 0.001}$, p* < 0.01, $p < 0.05$

4. Discussion

Children aged 5-6 transition from home to multiple environments (home, school, community). During this period, family systems primarily influence child social development through parent-child interactions (Combrinck-Graham, 1990; McDonald, 1980). Using everyday conflict discussions as a window, this study examined parent-driven and child-driven effects during interactions. Employing multilevel modeling, we investigated dynamic relationships between supportive/non-supportive parenting and positive/negative child responses in micro-level time series, and each party's influence on conflict resolution. Results showed that children' s negative responses predicted subsequent parental non-supportive parenting, while children' s positive responses predicted constructive conflict resolution—both supporting stronger child-driven effects.

Children are not passive in socialization but actively influence parental behavior through their own behaviors and characteristics, consistent with previous longitudinal findings on long-term effects. Child antisocial behavior elicits higher parental negative emotion and lower emotional support (Duncombe et al., 2012; Larsson et al., 2008), while noncompliance and disruptive behavior predict non-supportive parenting (Combs-Ronto et al., 2009; Plamondon et al., 2018). This study validates children's active role at the micro-level, demonstrating that child-driven effects operate across time scales—both over months and years (Yan et

al., 2021) and in real-time interactions. These findings support dynamic transactional models (Sameroff & Mackenzie, 2003), showing that child-environment interactions unfold continuously over time, with children influencing parental responses.

Preschoolers' increased negative responses predicted increased parental non-supportive behavior in the next moment, but did not affect supportive parenting. One possible explanation is that 5-6-year-olds'rapidly developing social-cognitive abilities and emerging self-awareness lead to more noncompliance with parental control (Kuczynski & Kochanska, 1990). Faced with noncompliance or negative emotions during discussions, parents may feel a loss of control and respond critically to children' s poor attitudes (Dix & Reinhold, 1991). Such responses may represent attempts to regain situational control and guide child behavior. Ravindran et al. (2019) found similar results in a delay-of-gratification task, where increased child negative responses (e.g., negative emotion, disruptive behavior) predicted subsequent maternal non-supportive parenting. The null finding for supportive parenting may reflect that parents of young children maintain stable supportive levels focused on comfort and care (Dallaire & Weinraub, 2005). Additionally, supportive parenting may be more influenced by stable parenting styles and values; Ding et al. (2020) suggested that parental sensitivity reflects a stable trait with minimal fluctuation.

We found no evidence that 5-6-year-olds' positive responses predicted parenting behaviors, possibly because parents in conflict discussions attend more to negative than positive child responses. In Chinese sociocultural contexts, parents bear responsibility for "teaching their children" (Lin & Fu, 1990; Luo et al., 2013). Negative child responses often signal rule violations, danger, or problem behaviors (Lonigan et al., 2017), making them more salient to parents.

Regarding conflict resolution, children' s positive responses were decisive. Positive responses—including problem-solving, persisting in expressing viewpoints, and attention regulation—help establish positive communication climates (Barbato et al., 2003) and facilitate effective conflict resolution. Nelson et al. (2014) found that when children offered more constructive suggestions, conflicts were more likely resolved through negotiation than stalemate or win-loss outcomes. Children displaying positive responses may possess stronger regulatory and adaptive capacities, enabling effective conflict resolution. Previous research shows that when children use attention redirection to regulate negative emotion and negotiate to integrate both parties' goals, conflicts resolve more successfully (Stein & Albro, 2001). We did not find negative effects of child negative responses on resolution, perhaps because this effect was weaker or masked by positive behavior effects.

In contrast to child-driven effects, we found no micro-level parent-driven effects. Neither supportive nor non-supportive parenting predicted subsequent child responses, and parenting levels did not predict resolution outcomes. This contradicts previous longitudinal findings. Prior research suggests that in parent-child conflict, power is asymmetrical, with parents dominating through greater

knowledge or social power, while children are seen as recipients of social skills and values (Perlman et al., 2000; Recchia et al., 2010). Our results suggest that examining parental effects on child behavior requires considering time scale. Child behavior, particularly externalizing problems, may more strongly influence parenting in short time frames (Fite et al., 2006; Verhoeven et al., 2010). Compared to cross-time effects, child behavior exerts greater influence in real-time interactions (Plamondon et al., 2018; Sulik et al., 2015). Children may not be immediately affected by momentary parenting changes, but accumulated interactive experiences may alter their behavioral patterns over months or years. Future research should employ varied time-scale designs to further explore this issue. Additionally, parenting may influence not only externalizing problems (e.g., venting observed here) but also internalizing problems like anxiety and withdrawal, which are difficult to observe in brief interactions. Future studies could incorporate physiological indicators (e.g., vagal tone) to monitor children' s physiological arousal (Beauchaine, 2012; West et al., 2021). Furthermore, we found no real-time bidirectional links between supportive parenting and child behavior, perhaps because such dynamics emerge more in low-stress, relaxed contexts (e.g., play or joint problem-solving; Ravindran et al., 2019).

In summary, this study examined conflict discussion processes and outcomes, revealing distinct roles for child negative and positive responses. Children' s noncompliance or negative emotions during discussions serve as "triggers" for poor communication, eliciting parental loss of control. These findings suggest that in daily family interactions, parents should be vigilant about their own non-supportive responses to children' s negative reactions, as mutual opposition hinders communication and may harm the parent-child relationship. Although children retain negative, low-effort response patterns after age 5 (Lu, 2004), adopting positive emotion regulation strategies (e.g., problem-solving) enables constructive conflict resolution. Therefore, parents should encourage and reinforce positive behaviors through strategies like reward systems and positive feedback to promote healthy child development and communication.

4.1 Limitations and Future Directions

First, although our 5-6-year-old participants had rich communication experience, we did not control for individual differences in language development. Future research should control for such factors to enhance generalizability. Second, the conflict discussion task occurred in a laboratory setting. Although we encouraged natural conversation, parental behavior may have deviated from daily life due to observation. Research shows mothers vocalize more and show higher attention, responsiveness, and activity levels in labs than at home (Belsky, 1980; Jaffee et al., 2004). Future studies should examine multi-context dialogues. Additionally, although we focused on everyday conflict topics, specific content may vary by family circumstances. Future research could incorporate parenting styles and parental appraisals of conflict events to strengthen conclusions.

5. Conclusion

This study employed dynamic structural equation modeling—a multilevel approach—to examine within-person dynamic relationships between preschoolers' behavioral responses and parental parenting during everyday conflict discussions, and each behavior' s effect on resolution. We found that increases in children' s negative behavioral responses across 15-second intervals predicted subsequent increases in parental non-supportive parenting, while children's positive responses facilitated constructive conflict resolution. These results highlight children' s crucial role in parent-child interactions. Guiding children toward positive behavioral regulation strategies proves more beneficial for constructive conflict resolution than controlling their negative responses.

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Note: Figure translations are in progress. See original paper for figures.