

Children's Influence in the Marital Relationship

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In a 3-wave longitudinal study, the authors tested hypotheses regarding children's influence on the marital relationship, examining relations between interparental discord and children's negative emotional reactivity, agentic behavior, dysregulated behavior, and psychosocial adjustment. Participants were 233 cohabiting mothers and fathers who completed questionnaires and a marital conflict resolution task. Consistent with theory, interparental discord related to children's negative emotional reactivity, which in turn related to children's agentic and dysregulated behavior. Agentic behavior related to decreases in interparental discord, whereas dysregulated behavior related to increases in discord and elevations in children's adjustment problems. Person-oriented analyses of agentic and dysregulated responses indicated distinct clusters of children linked with meaningful individual differences in marital and psychosocial functioning. Results are discussed in terms of possible mechanisms of child effects, such as increased parental awareness of children's distress potentially leading to reduced marital conflict.

Keywords: child agency, marital conflict, bidirectionality, psychosocial adjustment, reciprocal relations

According to a transactional perspective on human development (Sameroff, 1975), children are active agents in their own development in the context of family influences (Cummings, Davies, & Campbell, 2000). Research indicates that children are not passive recipients of parenting, but active participants in parent-child relationships (P. M. Cole, 2003). Yet little research has examined children as active participants in the interparental relationship.

The notion of children's agency in the family, including the ways in which children affect broader family functioning, has been little examined (Maccoby, 1984). In examining children's influence on marital functioning, the current study has several interrelated aims, the first of which is to test interparental discord as a predictor of children's negative emotional reactivity and behavioral responses. Second, we examine links between children's behavioral responses

to marital conflict and later marital conflict. A third aim is to advance understanding of relations between children's behavioral responses to marital conflict and their adjustment. Fourth, reflecting person-oriented analyses, we investigate individual differences in responding to marital discord (agentic behavior, dysregulated behavior), including implications for marital discord and child adjustment. Reflecting transactional processes in the family, child responses to marital discord may feed back to influence marital processes and ultimately affect the child.

A Theoretical Framework for Child Effects

Family systems theory provides a theoretical basis for the examination of reciprocal relations within families (Cox & Paley, 1997). Key principles of family systems theory (Cox & Paley, 1997; Minuchin, 1985) include the notion of the family system as an organized whole, with the parts of the system being interdependent. Systems consist of subsystems, and interactions within systems are characterized by a continuous cycle of action and reaction feeding back to produce further reaction. Family systems are characterized by both self-regulation, which enables them to stabilize interaction patterns, and self-reorganization, which enables them to adapt to the environment. Research suggests that children are not passive recipients of parenting, but rather, active participants in family relationships (Maccoby, 1984). For example, Vuchinich, Emery, and Cassidy (1988) observed dyadic dinnertime conflicts in the home and found that a third family member intervened in more than one third of these conflicts.

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Reciprocal Effects Between Children and Marriage

Emotional security theory (EST; Davies & Cummings, 1994) posits that exposure to marital discord increases children's negative emotionality, reflecting emotional insecurity. Emotional insecurity, in turn, motivates children's impulses to mediate, avoid, or in other ways reduce exposure to marital discord. Attempts to reduce exposure to discord indicate that the goal of preserving emotional security is activated, serving as a mechanism by which children maintain or achieve emotional security. The first two aims of the present article are to investigate reciprocity between the child and the marital system, including examination of both the influence of marital conflict on the child and child behavioral responses that influence marital functioning.

One such class of behavioral responses is children's mediation in interparental disputes, or *agentic behavior*. We define agency as children's behaviors that are designed to influence family members (Cummings & Schermerhorn, 2003). Agentic behavior in the context of marital conflict is active helping behavior intended to diminish conflict. Agentic effects are more than bidirectional effects, requiring intentionality in the child's behavior. Surprisingly few studies have examined children's agency in the marital relationship. Schermerhorn, Cummings, and Davies (2005) examined *perceived agency* in the context of marital conflict, which reflects impulses to influence outcomes in the family. Marital discord predicted concurrent negative emotional reactivity, which in turn predicted concurrent perceived agency. Controlling for initial marital discord, perceived agency predicted reduced marital discord 1 year later.

However, this study left unanswered the question of how children affect marital discord as a function of perceived agency. Agentic behavior provides more compelling bases to account for how children may influence marital conflict than the construct of perceived agency. Extending Schermerhorn et al.'s (2005) study of perceived agency, this report describes the first empirical study of children's agentic behavior in the marital subsystem. Although it is sometimes suggested that children's agentic behaviors are inevitably ineffectual at best, and at worst contribute to the intensity of marital disputes (Emery, 1989), EST suggests that children engage in these behaviors because they may serve by some means to reduce conflict between the parents, reducing children's exposure to family threats.

Another class of behavioral responses in the context of marital discord is children's *behavioral dysregulation* (i.e., acts of verbal or physical aggression, misbehavior, or hurting oneself). The clinical literature has long indicated that marital discord relates to children's behavior problems, including aggressive behavioral dysregulation (Emery, Weintraub, & Neale, 1982). Some have contended that behavioral dysregulation may also reflect a form of agentic behavior (i.e., "taking on the symptom," Emery, 1982, p. 323) intended to distract parents from marital difficulties. Thus, children's behavioral dysregulation may serve by some means to reduce marital discord over time. Alternatively, children's dysregulation in the context of interparental hostility may escalate coercive family processes (Patterson, 1982), thereby promoting increased marital discord

over time. This article breaks new ground in examining the influence of children's behavioral responding in the context of marital conflict on subsequent marital conflict.

Effects on Psychosocial Adjustment

The third aim of this study is to examine relations between children's behavioral responses to marital discord and their adjustment. In one of the few studies examining this link, Patenaude (2000) found that for girls who believed they could control interparental conflict by engaging in parent-protecting behaviors, higher marital conflict was associated with better adjustment. In contrast, for boys believing in a parentified role in the marital relationship, higher marital conflict was associated with more internalizing symptoms, albeit nonsignificantly.

Individual Differences in Responding

Our fourth aim is to explore individual differences in patterns of responding, that is, person-oriented analyses. Previous research has not investigated whether children uniformly respond to marital discord by engaging in both agentic behavior and dysregulated behavior or whether there are individual differences in responding. We also examine differences in marital discord and child adjustment associated with individual differences in responding to conflict.

The Current Study

This study explored transactional processes involving children and marital conflict. Data are from a three-wave study, with 1 year between waves, providing a more rigorous test of hypotheses than would be possible with cross-sectional analysis. This is the first article to longitudinally examine links between marital conflict and children's behavioral responding to marital conflict and to distinguish between agentic behavior and behavioral dysregulation in longitudinal model testing. Addressing our first aim, we hypothesized that marital discord would relate to negative emotional reactivity, which in turn would relate to children's behavioral responses. Second, we examined links between children's behavioral responding and later marital conflict. We expected that agentic behavior would relate to reduced marital discord over time. Although some have proposed that children's dysregulation contributes to conflict escalation, others have suggested that dysregulation leads to decreased marital discord; we tested these competing hypotheses. Addressing our third aim, we hypothesized that behavioral dysregulation would relate to adjustment problems, consistent with clinical theory and research (Emery, 1989); the existing literature provides insufficient basis for hypotheses regarding links between agentic behavior and adjustment. The fourth aim was to explore individual differences in responding to marital conflict. One possibility is that children respond to marital discord by engaging in both agentic and dysregulated behavior; alternatively, some children might typically evidence minimal responding (Cummings, 1987), with others preferring either agentic or

dysregulated behavior. Because this is a new research question, we did not make specific predictions regarding individual differences.

Method

Participants

The sample is a representative community sample of 232 primarily middle-class, cohabiting couples with a kindergarten-age child. Children (105 boys, 127 girls) had an average age of 5.99 years at Time 1 (T1; $SD = .45$, range = 4.99–7.11). Families were recruited via postcard mailings, sign-ups at community events, letters to parents of children attending local schools, and referrals from other participating families. To obtain a sociodemographically diverse sample representative of the geographic areas, we made targeted efforts to actively recruit participants through school districts, community agencies, and events tailored to families of low socioeconomic status and of racial and ethnic diversity. Seventy-one percent of children were European American, 14% were African American, 13% were biracial, and 2% were Hispanic, and the median income fell between \$40,000 and \$54,999. With regard to sample representativeness, the United States Census 2000 (U.S. Census Bureau, 2000) across the two counties indicated that there were 82% White, 13% Black, and 5% Hispanic children. The median household incomes in the two counties were \$49,653 and \$55,900, respectively. Couples had to have cohabited for at least 3 years to be eligible to participate. Stepfamilies made up 6% of the families in our sample (0.4% of mothers; 5.6% of fathers). Parents reported cohabiting an average of 11.1 years ($SD = 4.84$), and 209 of the couples (90.1%) were married. The mean age for mothers was 35 years ($SD = 5.57$) and for fathers was 37 years ($SD = 6.09$). Approximately 98% of mothers had completed at least a high school education, and 39% had completed college or beyond; approximately 93% of fathers had completed at least high school, and 43% had completed college or beyond.

The sample size decreased slightly over time because of attrition, with 222 families retained at T2 and 212 families retained at T3. Tests for differences in each of the variables as a function of attrition indicated no significant differences in the central variables of the study. We found two differences for the demographic variables. Compared with families who did not participate in all three waves, families participating in all three waves had higher income levels (\$40,000–54,999 vs. \$29,000–39,999), $t(223) = 3.46$, $p < .001$, and parents had completed more years of education ($M = 14.67$, $SD = 2.23$ vs. $M = 12.83$, $SD = 2.60$), $t(228) = 3.77$, $p < .001$.

Procedure

This research was approved by the Institutional Review Boards at both sites prior to the beginning of the study. Procedures, risks, and benefits of participation were explained to parents and children at the beginning of each visit, followed by obtaining parental consent and child assent to participate. As part of a larger longitudinal project, parents participated in laboratory sessions (approximately 3 hr) every year for 3 years. Mothers and fathers completed questionnaires in separate rooms, and together completed a marital conflict resolution task. With parents' permission, teachers reported on children's psychosocial functioning at school.

Measures

Marital functioning. Mothers and fathers reported their global marital satisfaction on the 15-item Marital Adjustment Test (Locke

& Wallace, 1959), which has demonstrated good content and concurrent validity. Mothers' and fathers' respective Cronbach's alphas in this sample at T1 were .75 and .79. T1 scores provided bases for comparing the marital functioning of this sample with that of other community samples. The respective mean marital satisfaction scores for mothers and fathers were 109.38 ($SD = 27.05$) and 102.24 ($SD = 29.42$). Suggesting marital distress, 66 mothers (28.4%) and 86 fathers (38.4%) had Marital Adjustment Test scores below 100, and 110 couples (47.4%) included at least 1 partner with a score below 100. Although percentages in the distressed range are somewhat higher than in other community samples (e.g., McHale, Kuersten-Hogan, Lauretti, & Rasmussen, 2000), average distress levels are comparable.

Mothers and fathers completed the 2-item Frequency/Severity subscale of the Conflicts and Problem-Solving Scales (Kerig, 1996) at T1 and T3, rating the frequency of minor and major conflicts. Kerig reported moderate test-retest reliability and good convergent and discriminant validity. Mothers' and fathers' respective Cronbach's alphas in this sample were .64 and .67 for T1 and .60 and .71 for T3.

Mothers and fathers engaged in a marital conflict resolution task in the lab at T1 and T3, which involved selecting two topics that the couple identified as particularly difficult to handle. Parents were then asked to discuss each issue as they would at home for 10 min, working toward a solution. Interactions were videotaped with parental consent and later coded. Conflict tactics were coded for every 30-s time interval and emotions were coded once for each interaction. Two coders coded the same 30 tapes, and intraclass correlation coefficients (ICCs) were computed. Only codes with ICCs greater than or equal to .67 were included in analyses. Although this cutoff is low by some standards, other researchers have described similar reliabilities as acceptable (Noreau et al., 2004; Shiu & Wong, 2004). The destructive codes we used were nonverbal anger, defensiveness, verbal anger, angry feelings, and sad feelings; constructive variables were physical affection, problem solving, compromise, and positive feelings. ICCs for these variables ranged from .67 to .98. Of the 24 codes we used, 20 had ICCs of .75 or greater. Omitting the codes with ICCs less than .70 would have restricted the range of marital behaviors and emotions assessed. These codes reflect central dimensions of a comprehensive assessment of destructive conflict (e.g., verbal anger, sadness); thus, we included them to increase the validity of the measure. For data reduction purposes, the codes were averaged across intervals, interactions, and mothers and fathers, converted to z -scores, and composited to yield a single marital interaction score for each couple. Cronbach's alphas for the composite scores were .87 for T1 and .91 for T3.

Child negative emotional reactivity. Mothers and fathers completed the 7-item Negative Emotional Reactivity subscale of the Security in the Marital Subsystem—Parent Report Inventory (SIMS; Davies, Forman, Rasi, & Stevens, 2002), reporting their child's reactions specifically to marital conflict in the past year (as opposed to more general child responses). Items are completed on a 5-point ordinal scale from 1 (*not at all like him/her*) to 5 (*a whole lot like him/her*) and include feeling sad, angry, afraid, and upset (e.g., "Still seems upset after we argue"). Davies, Forman, et al. (2002) reported good reliability for the SIMS, as well as both discriminant and convergent validity, indicated by the measure's theoretically meaningful associations with other assessments of child reactivity. The measure has demonstrated predictive validity through its associations with subsequent child adjustment problems even after controlling for concurrent adjustment problems (Davies, Harold, Goeke-Morey, & Cummings, 2002). Mothers' and fathers' respective Cronbach's alphas in our sample were .82 and .80 at T2; the alpha for interparental agreement was .43 at T2,

too low to form composite scores but appropriate for constructing latent variables.

Child agentic behavior. Other items from the SIMS (mother and father) served as the basis for scoring agentic behavior during marital conflict. A panel of 9 psychologists rated each SIMS item for the degree to which it matched our definition of agentic behavior. Items were rated on a 5-point scale from 1 (*not at all important to include in a measure of agentic behavior*) to 5 (*very important to include in a measure of agentic behavior*). Each of the agentic behavior items had mean ratings larger than 3.8; thus, all were well above the midpoint (3.0) on the rating scale. Principal components analysis was conducted on all 37 of the items from the SIMS T2 responses to identify agentic items, with separate analyses for mothers and fathers. A three-factor solution was tested with Promax rotation, allowing factors to correlate with one another. Factor loadings for mothers' and fathers' respective reports were .55 and .54 for "Tries to distract us by bringing up other things"; .70 and .69 for "Tries to help us solve the problem"; .71 and .83 for "Tries to comfort one or both of us"; .72 and .74 for "Shows concern and sympathy for one or both of us"; .65 and .57 for "Tells us to stop arguing"; .64 and .28 for "Gets involved in the argument"; .67 and .75 for "Tries to cheer us up after the argument." These items all loaded on the agentic behavior factor, and they loaded significantly lower on the other two factors. For fathers, "Gets involved in the argument" did not load as highly as anticipated, but this item was included in the agentic behavior scale on the basis of theory and experts' ratings of the items. In sum, items ($n = 7$) were selected for inclusion on the basis of (a) experts' ratings, (b) principal components analysis, and (c) our theoretical conceptualizations of agency. Mothers' and fathers' respective Cronbach's alphas were .84 and .84 at T1, and .83 and .83 at T2, and alphas for interparental agreement were .51 at T1 and .59 at T2.

Child behavioral dysregulation. Mothers and fathers completed the 5-item Behavioral Dysregulation subscale of the SIMS, reflecting dysregulation during marital conflict. Sample items include "Yells at family members" and "Causes trouble." Cronbach's alphas in our sample were .74 and .71 at T1, and .68 and .69 at T2; alphas for interparental agreement were .49 at T1 and .71 at T2.

Child adjustment. To assess child externalizing and internalizing symptoms, we had parents complete the Child Behavior Checklist for ages 4–18 years (Achenbach, 1991a). The internalizing scale consists of the Withdrawn (9 items), Somatic Complaints (9 items), and Anxious/Depressed (14 items) subscales; the externalizing scale consists of the Delinquent Behavior (13 items) and Aggressive Behavior (20 items) scales. Cronbach's alpha for mothers' and fathers' respective reports for internalizing were .85 and .88 at T1, and .87 and .87 at T2, and for externalizing were .87 and .90 at T1, and .90 and .90 at T2.

Teachers reported on children's behavior at school using the 62-item Externalizing scale of the Teacher Report Form (Achenbach, 1991b). Sample items include "Gets in many fights" and "Lying or cheating." For our sample, Cronbach's alphas were .92 for T1 and .93 for T2.

The Child Behavior Scale (Ladd & Profilet, 1996) was also completed. Mothers and fathers completed the 6-item Asocial scale, and teachers completed the 4-item Hyperactive–Distractible scale. This measure has demonstrated good internal consistency, stability, and validity (Ladd & Profilet, 1996). For our sample, Cronbach's alphas for mothers' and fathers' respective reports for the Asocial subscale were .74 and .72 for T1, and .76 and .74 for T2, and for teachers' reports for the Hyperactive–Distractible scale were .84 for T1, and .86 for T2.

Results

Descriptive statistics and intercorrelations are available from E. Mark Cummings (they were not included for reasons of space). Correlations supported the construction of the planned latent variables, and t tests indicated no significant gender differences. For the first three aims of the study, structural equation modeling (SEM) was conducted with Analysis of Moment Structures (Amos, Version 4.01; Arbuckle & Wothke, 1999). SEM allows the researcher to efficiently accommodate data from multiple sources, and Amos handles missing data using the full information maximum likelihood approach, which has performed well in tests (Croy & Novins, 2005). In our model testing, whenever the same construct was modeled at multiple time points, we allowed its indicators to be correlated over time. We report multiple fit indices to facilitate evaluation of the degree to which our models fit the sample data. The traditional chi-square discrepancy test is presented, although it produces a poor fit with samples of even moderately large size (Bentler & Bonett, 1980). Values of the relative chi-square index (χ^2/df) should be below 3 (Arbuckle & Wothke, 1999), values of the root mean square error of approximation (RMSEA; Browne & Cudeck, 1993) should be less than or equal to .08, and values of the comparative fit index (CFI; Bentler, 1990) and the normed fit index (NFI; Bentler & Bonett, 1980) should be at least .90.

Interparental Effects on Children

Addressing our first aim, we tested the direct path from marital discord to children's behavioral responses. As expected, T1 marital discord was related to T2 agentic behavior ($\beta = .32, p < .05$) and behavioral dysregulation ($\beta = .33, p < .01$). Fit indices were $\chi^2(12, N = 232) = 56.94, p < .001, \chi^2/df = 4.75, NFI = .98, CFI = .99, RMSEA = .13$, which was unsurprising given the omission of constructs central to our theoretical perspective. This test supports our hypothesis, that is, that marital discord is associated with child behavioral responses intended to increase emotional security, and represents the first step in testing mediation (Baron & Kenny, 1986).

A mediational model was tested for the path from T1 interparental discord to T2 agentic behavior and behavioral dysregulation through children's T2 negative emotional reactivity. The path from interparental discord to negative emotional reactivity was significant ($\beta = .44, p < .001$), as were the paths from negative emotional reactivity to agentic behavior ($\beta = .78, p < .001$) and to behavioral dysregulation ($\beta = .69, p < .001$). With negative emotional reactivity in the model, the path from marital discord to agentic behavior dropped substantially ($\beta = -.09, p = .46$), as did the path from marital discord to behavioral dysregulation ($\beta = -.01, p = .95$), consistent with full mediation. Fit indices were $\chi^2(22, N = 232) = 77.43, p < .001, \chi^2/df = 3.52, NFI = .98, CFI = .99, RMSEA = .10$. These results suggest that marital conflict predicts children's behavioral responding through negative emotional reactivity.

A further test of mediation compared model fit omitting the direct pathway from marital conflict to children's be-

havioral responses (Holmbeck, 1997). The direct pathway did not significantly improve fit ($\chi^2_{\text{diff}} = .56$, $df_{\text{diff}} = 2$, $p = .76$), indicating that this path was not significantly different from zero. This test provides further support for negative emotional reactivity as a mediator between discord and behavioral responses. Accordingly, the direct paths from marital discord to children's behavioral responses were not included in subsequent models, for reasons of parsimony. However, as D. A. Cole and Maxwell (2003) pointed out, this "half-longitudinal" design biases the effect of negative emotional reactivity, partly because it coincides in time with agentic and dysregulated behavior, and partly because we have not controlled for earlier levels of child response variables. When some of the relevant paths are not included, the paths that are modeled are biased, and some of the variance that is actually due to other variables is attributed to the paths that are modeled. Nonetheless, this test does represent an improvement over cross-sectional analyses.

Child Effects on Marriage

Advancing our second aim, we tested a model with paths from (a) T1 marital discord to T2 child negative emotional reactivity, (b) T2 negative emotional reactivity to T2 children's behavioral responses, and (c) these behavioral re-

sponses to T3 marital discord, while controlling for the effect of T1 marital discord on T3 marital discord. The model demonstrated acceptable fit to the data (see Figure 1). As before, T1 marital discord was associated with elevated T2 negative emotional reactivity ($\beta = .40, p < .001$), and negative emotional reactivity was related to high levels of both agentic behavior ($\beta = .79, p < .001$) and behavioral dysregulation at T2 ($\beta = .67, p < .001$). As hypothesized, agentic behavior was linked with lower marital discord at T3 ($\beta = -.31, p < .05$); in contrast, behavioral dysregulation was linked with higher marital discord at T3 ($\beta = .35, p < .01$). We used stacked models to test for group differences in the SEM paths (Sturge-Apple, Davies, Boker, & Cummings, 2004). No significant gender differences emerged ($\chi^2_{\text{diff}} = 6.03, df_{\text{diff}} = 6, p = .42$).

Links With Adjustment

For our third aim, we tested relations between adjustment and behavioral responses to marital conflict. T1 behavioral dysregulation was significantly correlated with T1 internalizing problems ($r = .37, p < .01$) and T1 externalizing problems ($r = .67, p < .001$). T1 agentic behavior was not associated with either T1 internalizing ($r = -.04, p > .72$) or T1 externalizing problems ($r = .04, p > .67$). Fit indices

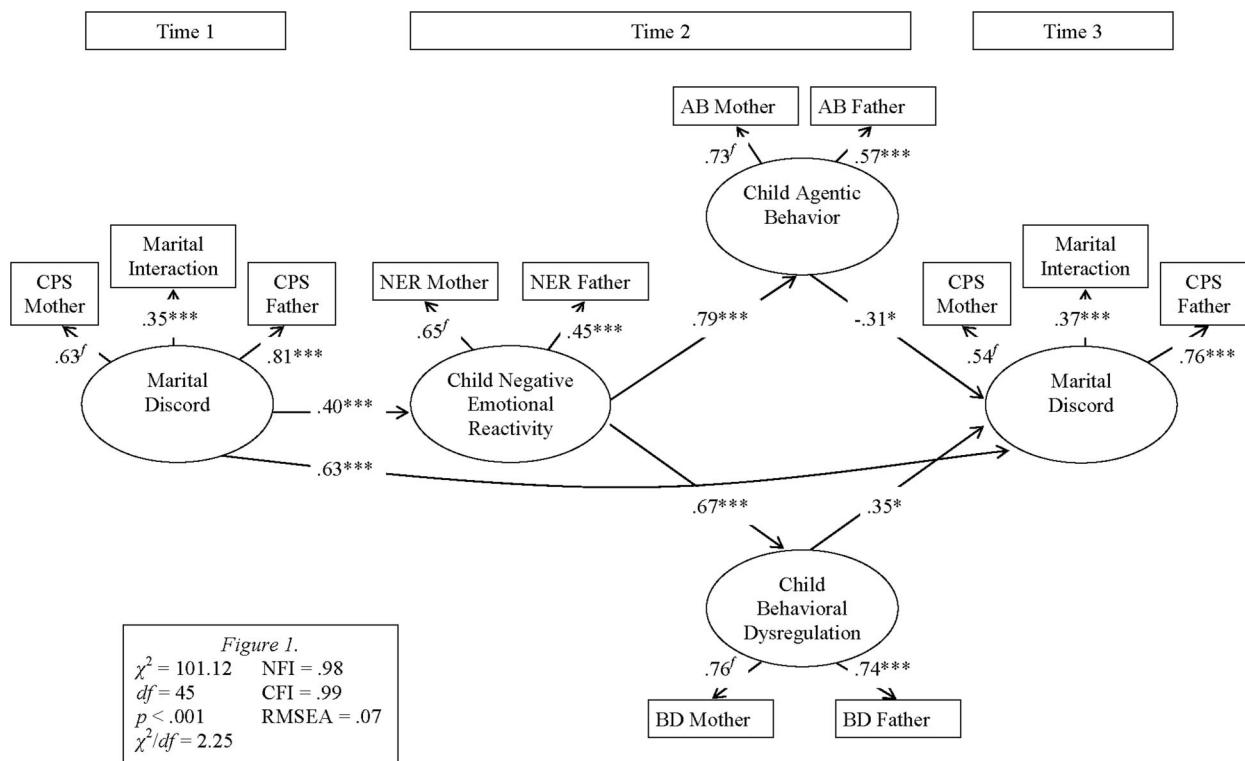


Figure 1. Full model of transactional processes. Standardized path coefficients are presented, and f superscripts indicate fixed loadings for model estimation purposes. CPS = Frequency/Severity subscale of the Conflicts and Problem-Solving Scales; NER = Negative Emotional Reactivity subscale of the Security in the Marital Subsystem—Parent Report Inventory (SIMS); AB = Agentic Behavior scale derived from the SIMS; BD = Behavioral Dysregulation subscale of the SIMS; NFI = normed fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation. * $p < .05$. *** $p < .001$.

were $\chi^2(48, N = 232) = 335.37, p < .001, \chi^2/df = 6.99$, NFI = .96, CFI = .96, RMSEA = .16. Using the stacked models approach, we found no significant gender differences ($\chi^2_{\text{diff}} = 9.80, df_{\text{diff}} = 6, p > .13$). Subsequent analyses were run on the entire sample, for reasons of parsimony.

For the significant correlational paths, we examined longitudinal relations between behavioral dysregulation and internalizing and externalizing problems from T1 to T2. Behavioral dysregulation was significantly related to subsequent internalizing and externalizing problems ($\beta = .19, p < .05$, and $\beta = .26, p < .05$, respectively), even control-

ling for initial levels of those constructs. Internalizing and externalizing problems were not associated with subsequent behavioral dysregulation ($\beta = -.05, p > .80$, and $\beta = -.12, p > .73$, respectively). Model testing compared model fit with the nonsignificant paths omitted (see Figure 2, Paths a and b). This comparison indicated no significant improvement in fit by including paths from adjustment to behavioral dysregulation ($\chi^2_{\text{diff}} = 1.24, df_{\text{diff}} = 2, p > .53$), indicating these paths were not significantly different from zero. These findings indicate (a) behavioral dysregulation relates to subsequent adjustment but (b) adjustment does not relate to subsequent behavioral dysregulation.

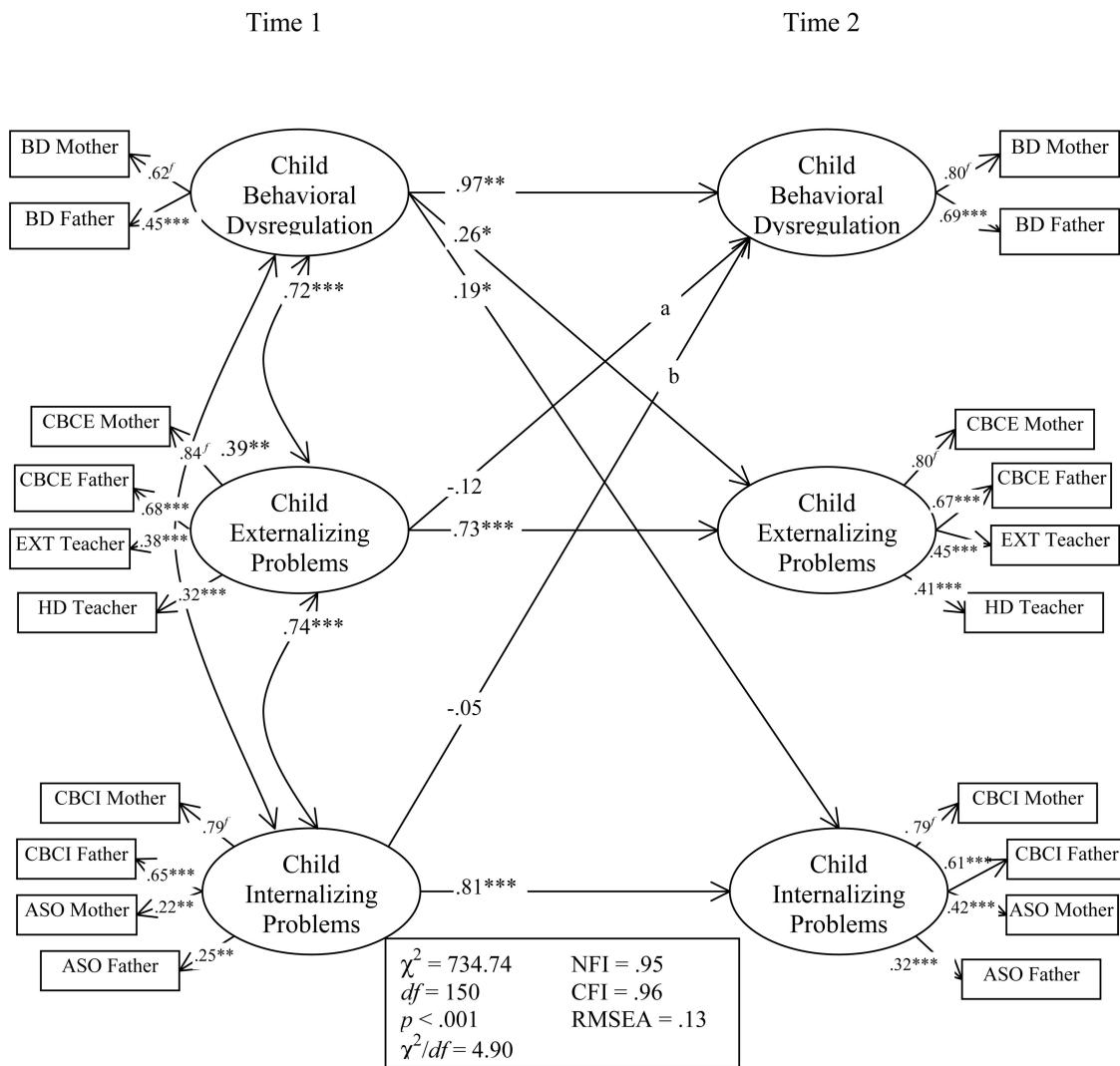


Figure 2. Longitudinal relations between behavioral dysregulation and internalizing and externalizing behavior. Standardized path coefficients are presented, and *f* superscripts indicate fixed loadings for model estimation purposes. BD = Behavioral Dysregulation subscale of the Security in the Marital Subsystem—Parent Report Inventory; CBCE = Externalizing subscale of the Child Behavior Checklist; EXT = Externalizing subscale of the Teacher Report Form; HD = Hyperactive-Distractible subscale of the CBCL; CBCI = Internalizing subscale of the Child Behavior Scale; ASO = Asocial subscale of the Child Behavior Scale; NFI = normed fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation. * $p < .05$. ** $p < .01$. *** $p < .001$.

Person-Oriented Analyses

The foregoing analyses left unanswered the question of whether children show preferences for particular types of behavioral responses to conflict (e.g., primarily agentic, primarily dysregulated) or use a combination of response types. Thus, addressing our fourth aim, we conducted cluster analyses to investigate this question. Cluster analyses were completed in two steps. The first step, hierarchical agglomerative cluster analysis, was used to determine the number of clusters in the data, using T2 reports of agentic behavior and behavioral dysregulation. We used T2 assessments for consistency with our SEM tests of child effects on marital conflict. Although interparental agreement for children's agentic behavior was somewhat low ($\alpha = .59$), the correlation between mothers' and fathers' reports was significant ($r = .42, p < .001$). Consistent with Gorman-Smith, Tolan, and Henry's (2000) recommendation to combine multiple reports of the same construct from different sources when conducting cluster analysis, we averaged mothers' and fathers' reports. The averages were then transformed by dividing by their respective ranges to equate the scaling of the variables while preserving differences in the variances of the two variables (Milligan & Cooper, 1988).

Following the recommendations of Henry, Tolan, and Gorman-Smith (2005), we began by using single linkage with squared Euclidian distance. Single linkage did not produce identifiable clusters, so we next used Ward's (1963) linkage with squared Euclidian distance (Henry et al., 2005), which maximizes the similarity of observations within clusters. The dendograms produced by this analysis suggested the presence of three or four clusters. The three-cluster solution was consistent with our preconceived notions of potential clusters and produced clusters that were more distinct from one another than those of the four-cluster solution.

To evaluate the stability of the three- and four-cluster solutions, we conducted the second step of our analysis using K-means nonhierarchical cluster analysis (MacQueen, 1967), an iterative process that assigns each observation to the cluster with the closest center (Henry et al., 2005). We first conducted K-means analysis with randomly generated initial centers, followed by a second analysis using the centers from the hierarchical analyses as the initial centers to replicate this solution; these methods produced virtually identical final cluster centers. Comparing the hierarchical analysis with the K-means analysis indicated consistency of classifications for the three-cluster solution ($\kappa = .89$); the consistency of the four-cluster solutions was much weaker ($\kappa = .55$). Thus, the three-cluster solution was used in subsequent analyses.

Descriptive statistics for agentic and dysregulated behavior for each of the three clusters are presented in Table 1, as are results of all subsequent tests. For these tests, observations were drawn from the time points that corresponded to the time points used in the SEM tests of child effects, and all possible pairwise comparisons were tested with Tukey's honestly significant difference procedure (Tukey, 1953) to control the experimentwise error rate. The first cluster displayed low levels of both agentic behavior and behavioral

dysregulation and was labeled *low behavioral*. The second cluster exhibited moderate levels of dysregulated behavior and high levels of agentic behavior and was labeled *agentic*. The third cluster was characterized by high levels of agentic behavior, and even higher levels of behavioral dysregulation, and was labeled *high behavioral*.

To examine correlates of differences in children's responding to marital discord, we conducted a MANOVA using the manifest variables representing T2 negative emotional reactivity. Results indicated that the low behavioral group had significantly lower levels of negative emotional reactivity than either the agentic or high behavioral groups. Children in both the agentic and high behavioral groups experienced elevated levels of negative emotional reactivity. We next investigated group differences in T3 marital conflict and T2 psychosocial functioning. The high behavioral group was associated with more destructive marital conflict than the low behavioral and agentic groups, consistent with SEM analyses linking behavioral dysregulation with marital discord. Compared with the agentic and low behavioral groups, the high behavioral group exhibited more mother-reported internalizing problems, externalizing problems, and asocial behavior, and more father-reported externalizing problems.

Discussion

As hypothesized, we found that exposure to destructive marital conflict was linked with children's negative emotional reactivity, which was further linked with high levels of both agentic behavior and behavioral dysregulation. Agentic behavior and behavioral dysregulation had opposing associations with later marital discord, as agentic behavior related to low levels of subsequent discord and behavioral dysregulation related to high levels of subsequent discord. Whereas agentic behavior was not related to adjustment problems, behavioral dysregulation was related to increases in internalizing and externalizing problems over time. Distinct groups of low behavioral, agentic, and high behavioral children were identified and were associated with differences in negative emotional reactivity, adjustment, and subsequent marital conflict.

Interparental Effects on Children

Consistent with previous research (Davies, Harold, et al., 2002), interparental discord was associated with higher levels of both agentic and dysregulated responding. Negative emotional reactivity mediated this effect, suggesting that children's emotional reactions were more proximal to children's responses than conflict per se (Davies & Cummings, 1994).

Child Effects on Marriage

The current study suggests that when children respond proactively to interparental discord by attempting to mediate, conflict may decrease over time. Although agentic behavior is a sign of insecurity about the marital relationship, the current study suggests that children's use of agen-

Table 1
Means, Standard Errors, and Statistical Comparisons of the Three Clusters of Children

Measure	Low behavioral (L; n = 101, 46% of sample)		Agentic (A; n = 92, 41% of sample)		High behavioral (H; n = 29, 13% of sample)		Post hoc	
	M	SE	M	SE	M	SE		
Child agentic behavior ^a	0.52	0.01	0.89	0.01	0.78	0.03	188.40*** 172.93***	
Child behavioral dysregulation ^a	0.45	0.01	0.53	0.01	0.88	0.02	H > A***, H > L***, H > L***, A > L***	
Time 2 child negative emotional reactivity ^b	9.96	0.39	12.07	0.41	13.85	0.75	13.38*** 7.43***	
Mother report	9.91	0.39	11.63	0.41	12.58	0.74	H > L***, A > L**	
Father report								
Time 3 marital discord ^c	7.88	0.33	8.61	0.35	11.06	0.71	8.44*** 4.67*	
CPS mother	7.46	0.37	8.17	0.40	10.13	0.80	H > L***, H > A** H > L**, H > A†	
CPS father	0.29	0.95	-0.22	1.02	1.13	2.05	0.19	
Marital interaction								
Time 2 psychosocial adjustment ^c	51.11	1.19	52.89	1.28	60.44	2.57	5.44*** H > L**, H > A*	
CBCL mother	52.30	1.18	53.05	1.27	56.75	2.53	1.27	
CBCL father	7.31	0.22	8.03	0.23	9.06	0.47	6.66** H > L**, A > L†	
ASO mother	7.80	0.22	7.97	0.24	8.56	0.47	1.09	
ASO father	47.60	1.04	49.17	1.12	58.00	2.25	8.83*** H > L**, H > A** H > L*, H > A†	
CBCE mother	49.05	1.11	50.09	1.19	56.19	2.38	3.70*	
CBCE father	4.58	1.03	5.33	1.11	6.59	2.22	0.37	
EXT teacher	5.07	0.22	5.36	0.24	5.44	0.48	0.51	
HD teacher								

Note. CPS = Frequency/Severity subscale of the Conflicts and Problem-Solving Scales; CBCL = Internalizing subscale of the Child Behavior Checklist; ASO = Asocial subscale of the Child Behavior Scale; CBCE = Externalizing subscale of the Child Behavior Checklist; EXT = Externalizing subscale of the Teacher Report Form; HD = Hyperactive-Distractible subscale of the Child Behavior Scale.

^adfs = 2, 219. ^bdfs = 2, 204. ^cdfs = 2, 154.

*p < .10. **p < .05. ***p < .01. ****p < .001.

tic behavior as a constructive coping strategy can contribute toward reducing marital conflict. In contrast to agentic behavior, children's dysregulated behavior was linked with more destructive interparental relations over time. It appears that these behaviors by children do not distract parents from their conflicts but have the opposite effect of increasing discord.

However, the mechanisms of these associations are unclear. The implications of children's behavior in the context of marital conflict are best understood from a transactional perspective (Sameroff, 1975). That is, parents who recognize that their children are actively and constructively trying to intervene might be more likely to reduce their discord. We suspect that it is not so much the case that children solve their parents' problems, but that children's responses make parents more aware of their children's distress, which may lead parents to have fewer conflicts both in the short term and the long term. This awareness may well be more significant to parents' problem solving than children's constructive coping strategies per se. Regardless of the mechanism of child effects on marital functioning, we do not advocate that children should get involved in marital conflict, particularly given findings that children's helping behavior in the context of depressed interparental interactions might contribute to children's depression (Davis, Sheeber, Hops, & Tildesley, 2000). Rather than advocating for children's involvement in marital conflict, we are investigating the results of their behavior when they do get involved.

Effects on Psychosocial Adjustment

Longitudinal analyses indicated that behavioral dysregulation was associated with increases in internalizing and externalizing problems, even controlling for initial levels of those variables, but adjustment did not predict subsequent behavioral dysregulation. These results support the interpretation that behavioral dysregulation in the context of marital discord may be a mechanism contributing to the development of behavior problems and is not simply a correlate of behavior problems. The fact that behavioral dysregulation predicted both types of problem behaviors suggests that a common process model may hold (e.g., EST), as opposed to distinct explanations accounting for internalizing and externalizing problems, respectively.

Person-Oriented Analyses

Building on the variable-oriented analyses, person-oriented analyses suggested the presence of three clusters of children, one with low levels of behavioral responding, one with high levels of agentic behavior, and one with high levels of both agentic and dysregulated behavior. These findings suggest that children respond to marital conflict with a preferred pattern of behavioral strategies, a notion that is consistent with previous research (Cummings, 1987; Davies & Forman, 2002; Maughan & Cicchetti, 2002).

Children in both the agentic and high behavioral groups evidenced elevated levels of negative emotional reactivity, suggesting greater emotional insecurity (Davies & Cummings, 1994), but different methods of responding to that

distress. High behavioral children were at greatest risk for adjustment problems, whereas agentic children experienced levels of adjustment problems comparable to children in the low behavioral group.

Future Directions

Because our sample was a community sample, our findings are limited to similar samples. Future research should test generalizability to clinical samples or physically violent couples. At the same time, these results are not limited to just one group (e.g., children with clinical levels of psychopathology). In addition, fit indices for the SEM models gave mixed support for our models; thus, our models will need replication. Moreover, correlations among the SIMS subscales were significant, raising possible concerns about multicollinearity. Nonetheless, these correlations were modest in magnitude. Moreover, there are bases for expecting the replicability of the findings (Schermerhorn, Cummings, & Kouros, 2006). Future research should also investigate possible links between different negative emotions and different agentic actions, and between different agentic actions and marital conflict.

In summary, the current study suggests that children are active responders in contexts of marital conflict, with potential implications for their parents' marital functioning. Thus, we may need to rethink our conceptions of the meaning and implications of children's responding in the face of marital conflict, consistent with family systems theory. At times, children may engage in active helping efforts to decrease marital conflict, which may serve to ameliorate marital conflict over time by some (unknown) mechanism. However, when children's involvement in marital conflict is not constructive, the outcome may well be a result that is in opposition to their goal of reducing conflict. Moreover, children's dysregulated behavior also predicted increased difficulties in psychosocial functioning. Thus, consistent with a transactional perspective on relations between marital and child functioning, children's dysregulated behavior may increase marital problems, with marital problems in turn increasing children's adjustment problems.

Concerning the translation of research into practice, clinicians should consider the transactional nature of relations between the child and the marital system. For example, by highlighting the negative effects of marital conflict on children, clinicians may be able to motivate parents to improve their marital conflict tactics. The consequences for adjustment of certain responses to conflict also have implications for clinical work. Chronic high behavioral responding by children in the face of marital conflict may be a warning sign that children are especially disturbed by parents' conflicts and at risk for developing significant adjustment problems. This study provides an advance over previous research that has largely neglected children's influence on the marital relationship, with the further implication that the direction of children's influence on marital conflict may depend on exactly how they respond behaviorally.

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