

## A Process Model of Adolescents' Triangulation into Parents' Marital Conflict: The Role of Emotional Reactivity

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### **Abstract:**

This study examined adolescents' emotional reactivity to parents' marital conflict as a mediator of the association between triangulation and adolescents' internalizing problems in a sample of 2-parent families (N = 426). Four waves of annual, multiple-informant data were analyzed (youth ages 11–15 years). The authors used structural equation modeling and found that triangulation was associated with increases in adolescents' internalizing problems, controlling for marital hostility and adolescent externalizing problems. There also was an indirect pathway from triangulation to internalizing problems across time through youths' emotional reactivity. Moderating analyses indicated that the 2nd half of the pathway, the association between emotional reactivity and increased internalizing problems, characterized youth with lower levels of hopefulness and attachment to parents. The findings help detail why triangulation is a risk factor for adolescents' development and which youth will profit most from interventions focused on emotional regulation.

**Keywords:** adolescence | emotional reactivity | internalizing problems | interparental conflict | marital conflict

### **Article:**

Exposure to hostile marital conflict is a risk factor for adolescents' development in two-parent families (Cui, Conger, & Lorenz, 2005). One of the mechanisms by which marital conflict becomes a risk factor is the triangulation of the child or adolescent into parental disputes such that youth feel “caught in the middle” and torn between divided loyalties (Amato & Afifi,

2006; Grych, Raynor, & Fosco, 2004). Triangulation is a system process in which a child becomes involved in parents' conflictual interactions by taking sides, distracting parents, and carrying messages to avoid or minimize conflict between parents (Minuchin, 1974). Triangulation into parents' disputes has received much less empirical attention than has verbal and physical interparental aggression; however, some evidence exists that triangulation places youth at risk for adjustment problems, particularly internalizing problems such as anxiety, depressive symptoms, and social withdrawal (Gerard, Buehler, Franck, & Anderson, 2005; Jacobvitz & Bush, 1996; Wang & Crane, 2001).

In the current study, we examined a family process model of triangulation in which we proposed that youths' triangulation into parents' marital disputes is associated with increases in adolescents' internalizing problems, controlling for parents' marital hostility and adolescents' externalizing problems. We also proposed that adolescents' emotional reactivity to parents' conflicts would partially mediate this association between triangulation and adolescent internalizing problems, and that this indirect pathway is moderated by several individual and family factors that form the context of family interaction processes.

### **Triangulation and Adolescents' Internalizing Adjustment Problems**

Conceptually, "triangulation occurs when two people in a family bring in a third party to dissolve stress, anxiety or tension that exists between them" (Charles, 2001, p. 281). In the present study, we focused on one particular type of triangulation in families: parent-initiated triangulation of offspring into parents' marital conflict. Indicators of adolescents' triangulation into parents' marital conflict include parents' attempts to form an alliance with the child against the other parent and the child becoming the focus of parents' attention to avoid addressing their own problems (i.e., scapegoating or detouring; Bell, Bell, & Nakata, 2001; Grych et al., 2004).

The hypothesis that triangulation is associated positively with adolescents' internalizing adjustment problems was deduced from Bowenian family systems theory (Bowen, 1978; Kerr & Bowen, 1988). Bowen (1978) proposed that parents' anxiety and difficulties with balancing intimacy and autonomy needs (i.e., poor self-differentiation) create marital tension and conflict. He suggested that a primary mechanism for addressing this marital tension is to include a child in the strife so as to reduce or displace personal anxiety and relational tension. This triangulation process represents a boundary violation because it places youth in confusing and distress-provoking situations as they negotiate between parents and manage conflicting loyalties (Amato & Afifi, 2006; Jacobvitz, Hazen, Curran, & Hitchens, 2004). Over time, adolescents' involvement in their parents' relational difficulties places them at risk for psychological distress, particularly problems such as anxiety, depressive symptoms, and withdrawal tendencies (Bradford et al., 2004; Miller, Anderson, & Keala, 2004).

Although research is scant, existing evidence has suggested that triangulation into parents' marital conflict is associated with poorer adolescent functioning (Buchanan, Maccoby, &

Dornbush, 1991; Jacobvitz & Bush, 1996; Wang & Crane, 2001). For example, Grych and colleagues (2004) found that triangulation completely mediated the concurrent association between marital conflict and adolescent internalizing problems. Amato and Afifi (2006) also found that feeling caught between married parents was associated with lower levels of young adults' subjective well-being (average age = 27 years old). Bradford and colleagues (2004) examined the association between youth-reported triangulation into marital conflict and adolescents' depressive symptoms in 11 samples from nine countries and found significant effects in 8 samples. Each of these three studies measured triangulation using youth reports of parental behavior and of feeling caught between parents. Gerard et al. (2005) extended research in this area by demonstrating that parents' self-reports of triangulating behavior also were associated concurrently with adolescent problem behavior, thus providing evidence that the association between triangulation and adolescent problem behavior is not an artifact of single-informant method bias.

Although the reviewed studies have provided support for the theoretical proposition that triangulation is associated positively with adolescents' internalizing problems, each was based on cross-sectional data. Our study builds on this developing empirical literature in four important ways that enhance its contribution to the understanding of family risk and adolescents' mental health. First, the family process model of triangulation and adolescents' internalizing problems examined in this study controlled for marital hostility and adolescents' externalizing problems. This allowed for the consideration of the unique effects of triangulation and marital hostility on adolescents' maladjustment, which contributes to a richer explication of the risk factors associated with various aspects of marital conflict. The additional inclusion of adolescent externalizing problems, although not central to the proposed theoretical model, facilitated the examination of specialized effects of triangulation with adolescent internalizing problems, controlling for comorbidity with another important marker of adjustment difficulties. Second, longitudinal, autoregressive patterns were examined by focusing on changes in adolescents' internalizing problems across the first half of adolescence. Third, different reporters provided information on triangulation and adolescent internalizing problems to help minimize shared method bias. Finally, a generative process mechanism, youths' emotional reactivity to marital conflict, was examined as a potential explanation of how triangulation is associated with increases in adolescent internalizing problems.

### **Adolescents' Emotional Reactivity to Marital Conflict**

Bowen (1978) theorized that triangulation places offspring at risk for psychological distress by increasing emotional reactivity. Emotional reactivity to parents' marital conflict is defined conceptually as "chronic elevation of arousal and dysregulation of children's emotions and behavior, fostering adjustment problems" (Davies & Cummings, 1994, p. 390). Indicators include prolonged feelings of distress, sadness, fear, anger, vigilance, and preoccupation with parents' marital relationship (Davies, Forman, Rasi, & Stevens, 2002; Davies, Harold, Goeke-Morey, & Cummings, 2002).

In addition to being a salient construct in Bowen's (1978) conceptualization of dysfunctional family system processes, youths' emotional reactivity to parents' marital conflict has been highlighted in the emotional security theory (EST; Davies & Cummings, 2006) and in Grych and Fincham's (1990) cognitive-contextual framework of children's responses to marital conflict. EST proposes that repeated exposure to marital hostility is associated with increases in children's and adolescents' emotional reactivity (Davies & Cummings, 2006). EST also posits that prolonged emotional reactivity is associated over time with increases in internalizing problems, such as depressive symptoms and anxiety. The cognitive-contextual perspective proposes that emotional reactivity is part of the primary appraisal process when children and adolescents perceive that marital conflict is self-relevant, negative, and potentially threatening (Grych & Fincham; Grych, Harold, & Miles, 2003). Although the current study was not a comprehensive test of either EST or the cognitive-contextual framework, each theoretical perspective supports Bowen's theoretical contention that offsprings' emotional reactivity is a potentially important generative mechanism for offsprings' experience with and processing of triangulation into parents' marital disputes.

There is a growing body of research that has documented a longitudinal association between emotional security (Cummings, Schermerhorn, Davies, Goeke-Morey, & Cummings, 2006) and reactivity (Buehler, Lange, & Franck, 2007) and adolescent internalizing problems. These studies included marital distress as the primary predictor and youths' emotional responses to marital conflict as mediators. The present study builds on these findings by focusing on triangulation rather than marital hostility. This shift in focus responds to Fincham's (1994) call for research that moves beyond the effects of marital hostility by addressing other potentially important aspects of marital conflict. As we have shown in this review, both theory and recent research have suggested that youths' triangulation in parental conflicts is a potentially deleterious aspect of marital hostility and is in need of careful examination.

### **Contextualizing the Generative Process Pathway**

EST proposes that various individual and family characteristics moderate the association between (a) destructive marital conflict variables and youths' emotional security in the interparental relationship (Davies & Cummings, 2006; Davies et al., 2002; Davies, Winter, & Cicchetti, 2006) and (b) between youths' emotional security and adolescent internalizing problems (Davies et al., 2002). The general proposition of moderating effects, however, has not been examined with regard to the consequences of triangulation and with a specific focus on emotional reactivity rather than the broader construct of emotional security. The examination of moderating effects is an important contribution of the current study, therefore, because a more detailed understanding of the conditions under which the generative mechanism of emotional reactivity operates and does not operate is needed to inform prevention and intervention programs.

Risk and resiliency theories and research provided guidance regarding potential moderators. Protective effects were defined as individual attributes and cohesive family relationships that reduce the deleterious effects of negative relational risk processes on young adults' psychosocial maladjustment (Luthar, Cicchetti, & Becker, 2000; Masten & Garmezy, 1985). Three protective moderators were examined: youths' hopefulness (Cummings, Davies, & Campbell, 2000) and youths' attachment to mothers and fathers (Waters & Cummings, 2000). We hypothesized that the individual attribute of perceived hopefulness during adolescence would partially buffer the deleterious consequences of triangulation on adolescents' internalizing problems. We conceptualized hopefulness as the tendency to report a sense of general well-being, a sense of comfort, and optimism over time and relationships. The hypothesized buffering effects of hopefulness are consistent with research on the positive effects of optimism (Geers, Handley, & McLarney, 2003; Meadows, Kaslow, Thompson, & Jurkovic, 2005). Although we were unable to find research on the moderating effects of hopefulness (or optimism) on the effects of marital conflict on youths' adjustment, we hypothesized buffering effects on the basis of the theoretical proposition that select aspects of offspring's individual disposition conditionalize marital conflict responses (Grych & Fincham, 1990).

We also hypothesized that higher levels of attachment to mothers and fathers would buffer the deleterious consequences of triangulation into parents' disputes. Although this has not been examined in past research, tangential analyses have shown direct associations between attachment security and lower levels of internalizing problems (Allen, Moore, Kuperminc, & Bell, 1998) and significant buffering effects for maternal attachment security with regard to the deleterious effects of marital hostility (Davies et al., 2002).

Amplification moderators are additional individual, relational, or contextual factors that exacerbate the negative effects of a focal risk factor (Gore & Eckenrode, 1996). Three amplification moderators were examined: youth gender (Davies & Lindsey, 2004) and mothers' and fathers' depressive symptoms (Hops, Sherman, & Biglan, 1990). Although gender moderating analyses in marital conflict research have resulted in null or inconsistent findings (Cox, Paley, & Harter, 2001; Gerard, Krishnakumar, & Buehler, 2006), Davies and Lindsey (2004) found stronger negative consequences of marital conflict for daughters than for sons; this finding was explained by female youths' greater communion orientations. This gender-related finding is salient for the present study when combined with research that has documented girls' higher levels of internalizing problems during early adolescence that have corresponded with greater rumination tendencies (Nolen-Hoeksema & Girgus, 1994).

Although more is known about the effects of mothers' than fathers' depressive symptoms, parents' depressive symptoms also might increase adolescents' vulnerability to the negative effects of relational risk processes (Downey & Coyne, 1990). For example, offspring exposed to both marital hostility and parents' depressive symptoms are at greater risk for problem behaviors than are offspring exposed to only one of these risk factors (Essex, Klein, Cho, & Kraemer, 2003). Although we were unable to find research that has documented interaction effects

between parental depression and triangulation, we speculated that parental dysphoria would create an environmental context for offspring that is conducive to internalized distress responses to salient family stressors. Thus, we hypothesized that adolescents exposed to higher levels of parents' depressive symptoms would be more vulnerable to the deleterious effects of triangulation and emotional reactivity, particularly with regard to predicting increases in adolescents' internalizing problems.

In summary, four hypotheses were tested in this study. First, we hypothesized that adolescents' triangulation in parents' marital conflict would be associated positively with increases in adolescents' internalizing problems, controlling for marital hostility and adolescents' externalizing problems. Second, we hypothesized that youths' emotional reactivity to marital conflict would partially mediate the associations between triangulation and adolescents' increases in internalizing problems. Third, we hypothesized that youth hopefulness and attachment to mothers and fathers would buffer the triangulation → emotional reactivity → adolescent internalizing problems pathway. Fourth, we hypothesized that parents' depressive symptoms and being a female youth would amplify the triangulation → emotional reactivity → adolescent internalizing problems pathway.

## **Method**

### **Sampling Procedures and Characteristics**

The sample was taken from a larger study of the effects of family life on the transition from childhood into adolescence. For the larger study, sixth grade youth in 13 middle schools in a large, geographically diverse county in the southeastern United States were invited to participate. Children in sixth grade were selected because they are beginning the transition from childhood into adolescence. Ninety-six percent of the teachers participated. Youth received a letter during homeroom inviting their participation. Two additional invitations were mailed directly to parents. Consent forms were returned by 71% of the youths and parent(s), and 80% of these youth received parental permission to complete a questionnaire on family life during school. This resulted in a sample of 2,346 sixth grade youth. The sample was representative of families in the county on race, parents' marital status, and family poverty status (contact the author for details using county census information).

Families for the present study of two-parent families were recruited from the larger sample of youth using the following criterion: parents were married or long-term cohabitants and no stepchildren were in or out of the home. Married or long-term cohabitants were examined because the effects of triangulation on adolescent well-being have been particularly strong in married rather than divorced families (Amato & Afifi, 2006). Stepfamilies were not included for three reasons: (a) Stepfamilies have complex structures that differ from ever-married families, and a careful study would need to include adequate sample sizes of these various structures to conduct group comparisons; (b) data would need to be collected regarding birth parent-child

relations as well as stepparent–child relations to understand the findings accurately; and (c) funds were inadequate to collect questionnaire and observational data from both stepparents and nonresidential birth parents.

Of the 1,131 eligible families from the larger study, 416 (37%) agreed to participate. Primary reasons given for nonparticipation included time constraints or an unwillingness for one or more family members to be videotaped. This response rate was similar to that in studies that have included three or four family members and have used intensive data collection protocols (e.g., National Survey of Families and Households—34%; Updegraff et al., 2004—37%). Using information from the initial youth survey for selection analyses, eligible participating families were similar to eligible nonparticipating families on all study variables, suggesting minimal selection bias. (Contact corresponding author for statistical details from the multivariate and univariate analyses of variance.)

At Wave 1 when youth were in the sixth grade (W1), they ranged in age from 11 to 14 years ( $M = 11.86$  years,  $SD = 0.69$ ). There were 211 daughters (51%). In terms of race, 91% of the families were European American and 3% were African American. This 3% is lower than the percentage of married African American couples with their own children younger than 18 years in the county (5%) and in the United States (7.8%; U.S. Census, 2000a, Table PCT27 of Summary File 4). The average level of parents' education in this sample was an associate's degree (2 years of college). Parents' educational attainment was similar to that of European American adults in the county who were older than 24 years (county mean category was some college, no degree; U.S. Census, 2000c, Table P148A of Summary File 4). The median level of 2001 household income for families in this study was about \$70,000, which was higher than the median 1999 income for married-couple families in the county (\$59,548; U.S. Census, 2000b, Table PCT40 of Summary File 3).

To further demonstrate the utility of this sample for the present study, we compared the distributions of marital hostility and adolescents' internalizing problems at W1 (sixth grade) with norms and national distributions. The prevalence of physical marital aggression in the present sample (6.7%) was comparable to rates found in the 1985 National Survey of Family Violence (3.4%; Straus & Gelles, 1986) and 1994 National Survey of Families and Households (6.4%; Sweet & Bumpass, 2005). The amount of verbal aggression in the sample (78.4%) was comparable to that found in the 1985 National Survey of Family Violence (75%; Straus & Gelles, 1986). Using the Child Behavior Checklist—Youth Self-Report (CBCL–YSR; Achenbach, 1991), the percentage of youth in the present sample that scored in the clinical range on self-reported internalizing problems was 15% ( $M$  raw score = 10.96,  $SD = 7.62$ ), which was comparable to that reported by Achenbach (1991:  $M$  raw score = 11.70,  $SD = 7.8$ ).

## **Data Collection Procedures**

Youth completed a questionnaire during school. They had as much time as needed to finish, and several trained assistants and the study director were available to answer questions. After completion, students were treated to a pizza party. Family members (i.e., mothers, fathers, youth) also were mailed a questionnaire and asked to complete it independently. The completed questionnaires were collected during a home visit. Parents and youth completed another brief questionnaire during the home visit. This second questionnaire contained the most sensitive information (e.g., marital hostility) and a researcher's presence ensured privacy.

Family members also participated in three interaction tasks during the home visit. The first two tasks focused on parent-child relationships. Youth interacted separately with mother and father in a 15-min semistructured discussion of parent-child relationships. The order for the mother-child and father-child task was randomized by using a coin flip. Topics for discussion, using discussion cards that family members alternated reading, included shared activities, areas of conflict, parental expectations, and consequences of child's misbehavior. The third task was a problem-solving discussion activity. This task involved the mother, father, and youth and focused on trying to solve issues of contention selected by family members. At the beginning of the home visit, each family independently completed the 28-item Issues Checklist (Conger et al., 1992). Item 28 on this checklist was an "other" option in which family members had the chance to list and rate issues not identified on the checklist. The home visitors selected eight areas of disagreements from family members' reports, beginning first with issues identified by all three of the family members. During the 20-min discussion task, family members were asked to elaborate on a given issue, identify who usually is involved, and suggest possible solutions. Participants were told that they did not need to get through all of the issues, and were not stopped if they digressed onto self-selected discussion topics (home visitors were out of sight and ear shot during each task to ensure family privacy).

The semistructured interaction was videotaped. Trained coders (> 250 training hr) rated the interaction using the Iowa Family Interaction Rating Scales (Melby & Conger, 2001). Coders passed an extensive written exam (90% correct criterion) and a viewing exam (criterion level 80% match with ratings by experienced Iowa State University coders). Each family member's behavior was coded during each task. Within each family, different trained coders rated the interaction from the tasks to minimize coder carryover effects.

As part of the longitudinal research design, assessments (questionnaires and observations) were conducted again 1 year later (W2), 2 years later (W3), and 3 years later (W4). Most youth were in seventh grade at W2 (mean age = 12.84 years,  $SD = 0.68$ ), in eighth grade at W3 (mean age = 13.83 years,  $SD = 0.67$ ), and in ninth grade at W4 (mean age = 14.84,  $SD = 0.68$ ). Data collection procedures were similar for each wave. Family members were mailed a questionnaire and asked to complete it independently. The completed questionnaires were collected during a home visit. Parents and youth completed another questionnaire during the home visit. There were 366 participating families at W2, 340 families at W3, and 320 at W4 (77% retention of W1 families). Attrition analyses using multivariate analysis of variance were conducted using the W1



data; there were no differences between the retained and attrited families on any of the study variables. For example, we grouped variables into sets on the basis of content and reporter and analyzed the data using multivariate analysis of variance. Five multivariate analyses of variance were estimated that included variables for the present study, and none of the multivariate *F*s were statistically significant (0.64–1.60). Thus, there was little evidence of attrition bias. Families were paid \$100 for their participation in W1, \$120 for W2, \$135 for W3, and \$150 for W4.

## Measurement

### Adolescents' triangulation into parents' marital disputes

Triangulation was measured at W1 with self-reports and spouse reports of each others' behavior using a 13-item triangulation questionnaire scale created using items from four existing measures ( Buehler et al., 1998, 4 items; Grych, Seid, & Fincham, 1992, 3 items; Kerig, 1996, 3 items; Margolin, Gordis, & John, 2001, 3 items) to increase content validity. Items focused on parent-initiated triangulation. The 5-point response format ranged from 1 (*never*) to 5 (*always*). Sample items were “How often does your spouse involve this child in disagreements between you and your spouse?” and “How often do you try to get this child to side with you during family or marital disagreements?” Items were averaged and a higher score indicated greater triangulation. Mothers' self-reports and spouse reports were averaged to create a composite score, as were fathers' self-reports and spouse reports. Cronbach's alphas were above .89 (see Table 1). These composite summary scores were created because preliminary analyses of the measurement model indicated that the error residuals for self-reports and spouse reports were highly correlated (> .60).

**Table 1.** *Descriptive Statistics and Correlations Among Central Variables*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. WR W1 triangulation	—													
2. HR W1 triangulation .37*		—												
3. Ad. Internalizing W4YSR	.11*	.15*	—											
4. Ad. Internalizing W4CDI	.11*	.23*	.67*	—										
5. W2 emotional reactivity	.15*	.11*	.27*	.23*	—									
6. W3 emotional reactivity	.15*	.12*	.30*	.26*	.57*	—								
7. Ad. Externalizing W4YSR	.10*	.09	.55*	.43*	.12*	.17*	—							

8. Ad. Externalizing W4Del.	.10*	.14*	.18*	.25*	.15*	.08	.51*	—						
9. Marital hostility W1	.25*	.30*	.17*	.17*	.21*	.23*	.19*	.13*	—					
10. Ad. Internalizing W1YSR .	.11*	.08	.44*	.27*	.29*	.22*	.23*	.06	.14	—				
11. Ad. Internalizing W1CDI	.09	.07	.31*	.21*	.24*	.14*	.22*	.13*	.14*	.61*	—			
12. Ad. Externalizing W1YSR	.08	.07	.19*	.15*	.15*	.16*	.37*	.31	.13*	.54*	.37	—		
13. Ad. Externalizing W1Del.	-.04	.05	.09	.08	.15*	.03	.25*	.49*	.02	.26*	.30*	.51*	—	
14. Parental harshness W1 .17*	.14*	.17*	.20*	.12*	.15*	.29*	.16*	.38*	.19*	.15*	.24*	.02	—	
M	1.32	1.35	7.92	1.87	1.51	1.39	8.57	1.15	1.83	10.96	1.31	9.47	1.10	3.61
SD	0.30	0.32	7.46	2.70	0.53	0.50	7.40	0.21	0.65	7.50	2.20	5.98	0.13	1.27

Note. WR = wife reported; HR = husband reported; W = wave; Ad. = adolescent; YSR = Child Behavior Checklist—Youth Self-Report; CDI = Children’s Depression Inventory; Del.= delinquency.

\*Significant at  $p < .05$ .

### Emotional reactivity

Youths’ emotional reactivity to parents’ marital conflict was measured using the nine-item Emotional Reactivity subscale from the Security in the Interparental Subsystem (Davies et al., 2002) at W2 and W3. Items had a 4-point response format that ranged from 1 (*not at all true*) to 4 (*very true of me*). Sample items for the stem “When my parents have an argument” included “I feel unsafe” and “I can’t seem to calm myself down.” Within each year, items were averaged and a higher score indicated greater emotional reactivity. Cronbach’s alphas were good for both years (i.e.,  $> .87$ ).

### Internalizing problems

Adolescents’ internalizing problems were measured at W4 using the CBCL–YSR (Achenbach, 1991). Each of the 31 items had a 3-point response format (0 = *not true*, 1 = *somewhat or sometimes true*, and 2 = *very true or often true*). Sample items included “feel worthless or inferior” and “am unhappy, sad, or depressed.” Items were summed and a higher score indicated greater internalizing problems. Cronbach’s alpha was .90. W4 internalizing problems also were measured using the 10-item Children’s Depression Inventory. A sample item asked youth to think about the past 2 weeks and select one of the following: “I am sad once in a while”, “I am

sad many times,” and “I am sad all the time.” Cronbach’s alpha was .83. These same measures from W1 were used to control for baseline problems and had good interitem consistency ( $> .80$ ).

### **Moderating variables**

Perceived youth hopefulness was measured using the 10-item Hopefulness Subscale of the Child/Adolescent Measurement System ( Doucette & Bickman, 2001). Youth completed this measure at each wave and scale scores were averaged across the four waves. Cronbach’s alphas ranged from .84 to .87. Youth attachment to mother and father was measured using the Inventory of Parent Attachment separately for mothers and fathers at W3 and W4 (Armsden & Greenberg, 1987). Cronbach’s alphas ranged from .84 to .92. For the present study, two subscale scores of trust and communication were averaged across time for mothers and fathers. At each wave of data collection, mothers and fathers completed the 20-item Center for Epidemiological Studies Depression scale to assess parental depressive symptoms (CES–D; Radloff, 1977). Cronbach’s alphas ranged from .85 to .92. Scores were averaged across the four waves to create one score for mothers’ depressive symptoms and one score for fathers’ depressive symptoms.

### **Control variables**

Adolescents’ W4 externalizing problems were measured using the 30-item CBCL–YSR subscale (Achenbach, 1991). Sample items included “I lie or cheat” and “I disobey at school.” Items were summed and a higher score indicated greater externalizing problems. Cronbach’s alpha was .90. W4 externalizing problems also were measured using youth reports on a 17-item measure of the frequency of delinquent behaviors ever committed (Elliott, Huizinga, & Ageton, 1985). Examples of items are “purposely damaged or destroyed property” and “cheated on a test.” The response format ranged from 1 (*never*) to 3 (*three or more times*). Items were averaged and Cronbach’s alpha was .82. These same measures from W1 were used to control for baseline problems and had interitem consistency greater than .80.

Observed marital hostility was included in the model as a control variable so that any associations involving triangulation could be interpreted as unique effects. Observers rated wife’s behavior toward husband and husband’s behavior toward wife during the problem-solving and marital discussion tasks. The following scales were used from the Iowa Family Interaction Rating Scales: Hostility (e.g., criticism), Angry Coercion (e.g., hostile control attempts), Verbal Attack (e.g., demeaning comments), and Antisocial (e.g., rudeness; Melby et al., 1993). In addition, two rating scales were developed for this study: Personal Attack and Yelling. Personal attack includes global criticisms that are directed toward the partner’s character. Yelling includes intense, expressed negative affect. Behavior was rated using a 1 (*not present*) to 9 (*mostly characteristic*) response format. Cronbach’s alpha was .85 for the observed rating composite. Twenty percent of the tasks were selected randomly to be coded by a second coder and the average agreement across raters was .79. Interrater reliability was assessed by calculating single-item intraclass correlation coefficients (ICCs) based on a one-way random effects analysis of

variance. The average ICC for this composite measure was .51, which is adequate for these rating scales and comparable to other studies that have used the Iowa Family Interaction Rating Scales ( Melby & Conger, 2001).

Observed parental harshness toward youth was included as a control variable so that any associations involving youths' emotional reactivity could be interpreted as reactivity to parents' marital functioning rather than emotional distress resulting from being treated harshly by a parent. Harshness was measured using observer ratings from the Iowa Family Interaction Rating Scales ( Melby et al., 1993). This variable was included to minimize inaccurate interpretations regarding the mediating role of youths' emotional reactivity to parents' marital conflict; therefore, it was not necessary to distinguish mothers' and fathers' harshness. Instead, observer ratings of both mothers' and fathers' harshness toward youth were combined into a 10-item composite measure of parental harshness. Observers rated mothers' and fathers' W1 hostility and antisocial behavior toward youth during the problem-solving task and their use of harsh discipline (e.g., insulting the youth) as demonstrated or reported during the two parent-child tasks. The rating scales ranged from 1 (*not at all characteristic*) to 9 (*mainly characteristic*). Ratings were averaged and higher scores indicated greater parental harshness. Cronbach's alpha was .72 and interrater reliability estimated using two observers' ratings of 20% of the interaction tasks was greater than .70 for most ratings.

### **Analytic Procedures**

Hypotheses were tested using structural equation modeling (Amos 7.0). The adequacy of each structural equation model was evaluated using the chi-square statistic and two fit indices. A nonsignificant chi square indicated a good model fit. However, because of the relatively large sample size, a significant chi square was expected for most models and two additional fit indices were examined ( Byrne, 2001). The comparative fit index (CFI; Bollen & Long, 1993) is based on a comparison of the hypothesized model and the independence model (e.g., there are no relationships between the variables in the model; Byrne, 2001). The CFI ranges from 0 to 1.00, with a cutoff of .95 or higher indicating a well-fitting model and .90 indicating an adequate fit ( Byrne, 2001; Hu & Bentler, 1999). Browne and Cudeck's (1993) root-mean-square error of approximation (RMSEA) compares the model to the projected population covariance matrix. RMSEA values below .05 indicate good model fit and values between .06 and .08 indicate an adequate fit (Browne & Cudeck; Byrne, 2001).

There were few missing data within each wave (less than 3%). Missing data within and across waves (i.e., attrition) were addressed using the full information maximum likelihood estimation method because it produces less biased estimates than other methods such as imputing the sample mean or dropping cases for data missing within and across waves ( Acock, 2005; Newman, 2003).

### **Results**

Descriptive statistics and zero-order correlations among the variables in the base model are in Table 1. Associations among variables were in the expected directions. Correlations involving the moderating variables can be obtained from the corresponding author.

### Triangulation and Adolescents' Internalizing Problems

The first hypothesis was that adolescents' triangulation in parents' marital conflict would be associated positively with increases in adolescents' internalizing problems, controlling for marital hostility and adolescent externalizing problems (see Figure 1). The hypothesis was supported, and the model fit was adequate,  $\chi^2(35) = 115.14, p < .001$ ; CFI = .93; RMSEA = .07. The standardized association between W1 triangulation and increases in adolescents' W4 internalizing problems was .23 ( $p < .01$ ). The unstandardized estimate was 8.90 ( $SE = 3.52$ ), indicating that for each unit increase in W1 triangulation, adolescents' W4 internalizing problems increased by 8.90 units on the latent internalizing problem variable that was scaled to the CBCL–YSR (range 0 to 44). As part of the measurement model, the error covariances were estimated a priori between W1 CBCL–YSR internalizing and externalizing subscales ( $r = .53, p < .001$ ) and between W4 CBCL–YSR internalizing and externalizing subscales ( $r = .53, p < .001$ ). These significant error covariances were expected because of shared method variance (Bollen & Long, 1993).

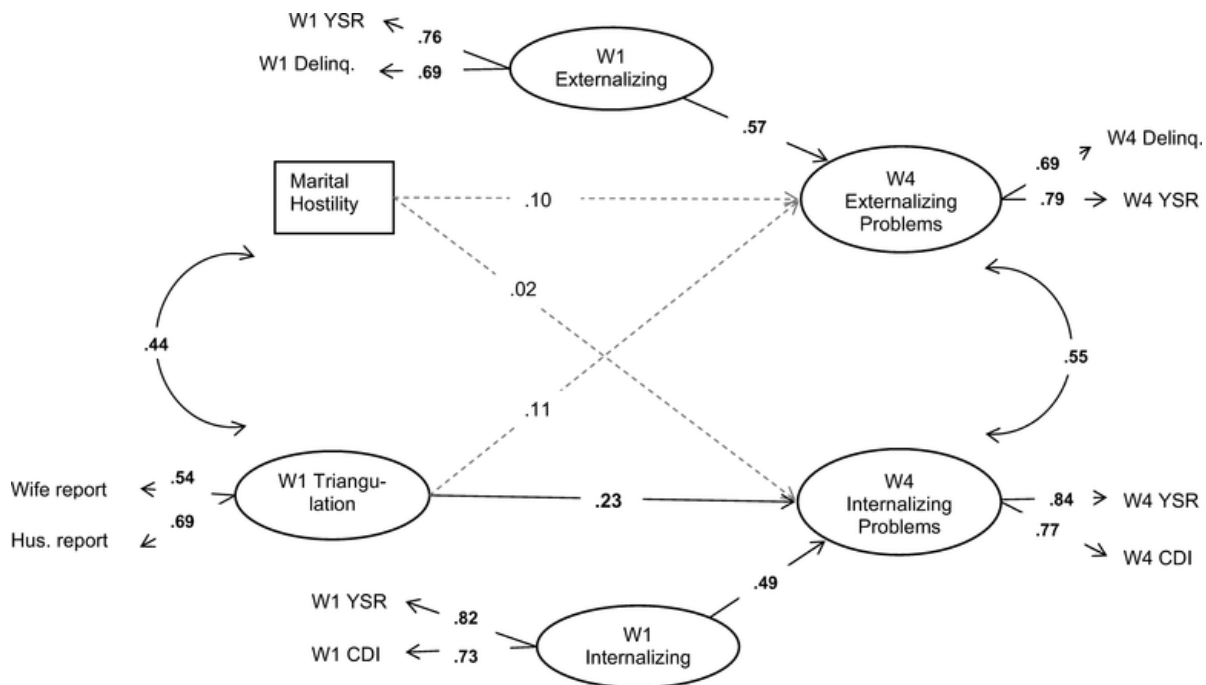


Figure 1. Triangulation and adolescents' internalizing problems. Measurement errors and residuals are not shown to simplify presentation. W1 to W4 = Waves 1 to 4; CBCL–YSR = Child Behavior Checklist–Youth Self-Report; CDI = Children's Depression Inventory. Bolded estimates are significant at  $p < .05$ .

### Triangulation, Youths' Emotional Reactivity, and Adolescents' Internalizing Problems

The second hypothesis was that youths' emotional reactivity to marital conflict would partially mediate the associations between triangulation and adolescents' increases in internalizing problems. This hypothesis was supported, in part (see Figure 2), and the model fit was adequate,  $\chi^2(64) = 213.58, p < .001$ ; CFI = .90; RMSEA = .075. W1 triangulation was associated positively with W2 and W3 youths' emotional reactivity ( $\beta = .28, p < .01$ ). Youths' emotional reactivity, in turn, was associated with increases in adolescents' W4 internalizing problems ( $\beta = .23, p < .001$ ). The statistical significance of the indirect pathway was tested using Sobel's single-order test and was significant ( $Z = 2.37, p < .05$ ). Thus, adolescents' triangulation in parents' marital disputes was associated with adolescents' internalizing problems through youths' emotional reactivity to marital conflict across time. The association between W1 triangulation and increases in internalizing problems, however, remained significant ( $\beta = .19, p < .05$ ).

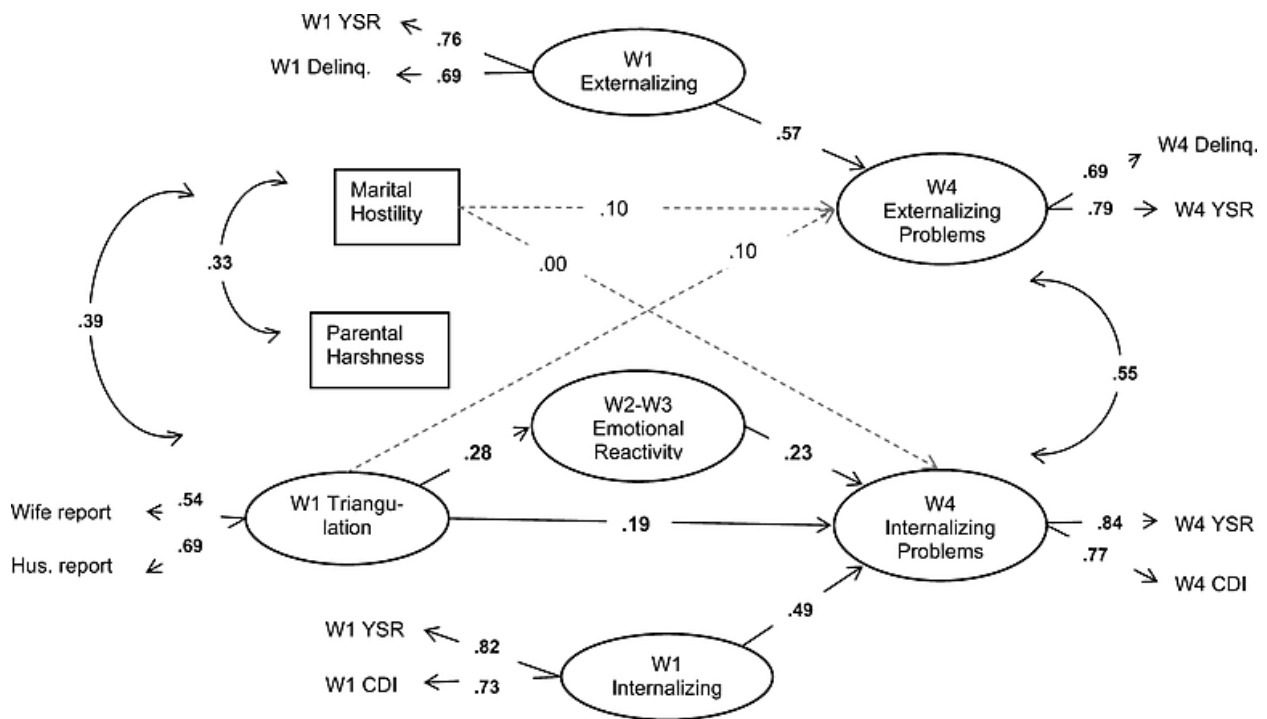


Figure 2. Triangulation, youths' emotional reactivity, and adolescents' internalizing problems. Factor loadings for emotional reactivity not shown to simplify presentation (.68, .86). W1 to W4 = Waves 1 to 4; CBCL-YSR = Child Behavior Checklist—Youth Self-Report; CDI = Children's Depression Inventory. Bolded estimates are significant at  $p < .05$ .

### Moderating Effects

Hypotheses 3 and 4 focused on moderating factors of the indirect pathway triangulation → emotional reactivity → adolescent internalizing problems. The correlations between moderating variables with other study variables are displayed in Table 2. The effects of each moderator were examined one at a time (i.e., separate analyses) using multiple-group structural equation modeling. For each analysis, we formed groups by splitting the sample into lower and higher

groups. In separate analyses, we used several cutting points to increase the sensitivity of the analyses. Moderating groups were formed by splitting the sample at the median, at the bottom quartile, and at the top quartile (Sameroff, Martko, Baldwin, Baldwin, & Seifer, 1998).

**Table 2.** *Correlations of Moderating Variables with Predictors and Outcomes*

Variable	Hope	Maternal attachment	Paternal attachment	Youth gender	Maternal depression	Paternal depression
WR W1 triangulation	-.18*	-.10	-.14*	-.02	.14*	.08
HR W1 triangulation	-.18*	-.18*	-.17*	.04	.19*	.32*
Ad. internalizing W4YSR	-.54*	-.28*	-.38*	-.23*	.19*	.05
Ad. internalizing W4CDI	-.55*	-.37*	-.48*	-.11*	.19*	.06
W2 emotional reactivity	-.31*	-.10	-.15*	.03	.01	.03
W3 emotional reactivity	-.29*	-.15*	-.10	-.06	.07	-.01
Ad. externalizing W4YSR	-.44*	-.44*	-.39*	-.05	.15*	.02
Ad. externalizing W4Del.	-.31*	-.31*	-.23*	.23*	.10	-.02
Marital hostility W1	-.22*	-.09	-.10	.02	.22*	.17*
Ad. internalizing W1YSR	-.42*	-.14*	-.12*	-.03	.13*	.13*
Ad. internalizing W1CDI	-.45*	-.25*	-.25*	.00	.11*	.00
Ad. externalizing W1YSR	-.34*	-.21*	-.15*	.17*	.16*	.10*
Ad. externalizing W1Del.	-.30*	-.18*	-.14*	.35*	.06	.06
Parental harshness W1	-.24*	-.23*	-.24*	.04	.19*	.13*
M	3.45	3.92	3.76	0.49	0.47	0.46
SD	0.41	0.69	0.70	0.50	0.93	0.94

Note. WR wife reported; HR husband reported; W wave; Ad. adolescent; YSR Child Behavior Checklist—Youth

Self-Report; CDI Children's Depression Inventory; Del. delinquency. Significant at  $p < .05$ .

The multiple-group analysis was conducted in two steps. First, the model tested for Hypothesis 2 was estimated across the two moderating subgroups with all of the statistical parameters (i.e., both measurement and structural parameters) constrained to be the same. Beginning with a fully constrained model minimizes the chance of interpreting the differences inaccurately given all of the remaining parameters are constrained to equality across groups. This analysis produced a chi-square estimate of overall fit for the fully constrained model across two groups. Second, a new model was estimated in which three regression paths (i.e., structural paths) were allowed to vary across the moderating subgroups: (a) triangulation and youths' emotional reactivity to marital conflict, (b) emotional reactivity and adolescents' internalizing problems, and (c) triangulation and internalizing problems. This second analysis produced a chi-square estimate of overall fit for the "partially freed" model across two groups. These two chi-square estimates were compared using the chi-square difference test with 3 degrees of freedom because three paths were allowed to vary in the second analysis. A significant difference in chi squares indicated that one of the focal associations differed across the two subgroups. The specific nature of the difference was identified using the critical ratio estimates in Amos, which distribute as Z scores; critical ratios greater than 1.96 were statistically significant ( $p < .05$ ). The null hypothesis for the critical ratio was no difference in a given partialized association between two variables (i.e., the regression coefficient). The alternative hypothesis was a group difference in the two regression coefficients. Once the specific location of the difference was identified, we examined the unstandardized regression coefficients across the two groups to determine the direction of the difference. Finally, a second analysis was conducted in which the factor loadings were allowed to vary across groups. This was done to determine whether the significant moderating effects were present regardless of differences in the measurement model (i.e., weak measurement invariance). Significant moderating effects are reported only if they were present both when factor loadings were constrained to equality and when they were allowed to vary across groups.

### **Youth hopefulness**

The third hypothesis was that the pathway triangulation → emotional reactivity → adolescent internalizing problems would be weaker for youth with higher levels of hopefulness and attachment to parents. Beginning first with hopefulness, we examined three separate multigroup models to increase the sensitivity of the moderating analyses: splitting the sample into two hopefulness groups at the median, at the bottom quartile, and at the top quartile. The pathway through youths' emotional reactivity was moderated when the sample was split at the bottom quartile of hopefulness,  $\Delta\chi^2(3) = 96.91, p < .001$ . The association between emotional reactivity and increased internalizing problems was significant for youth with lower levels of hope ( $b = 26.62, p < .001$ ) but not for youth with higher levels of hope ( $b = 0.82, ns$ ). This moderating



effect replicated when the sample was split at the median,  $\Delta\chi^2(3) = 18.66, p < .001$ , but not when the sample was split at the upper quartile,  $\Delta\chi^2(3) = 4.58, p = .21$ . The critical ratios documenting a significant moderating effect are in Table 3, and the statistical details not reported here (e.g., the median-split regression coefficients) can be obtained from the corresponding author.

**Table 3.** *Critical Ratios for Moderating Comparisons From Multigroup Structural Equation Modeling Analyses*

Moderating variable	Triangulation and emotional reactivity	Emotional reactivity and internalizing problems	Triangulation and internalizing problems
Hopefulness <sup>a</sup>	-1.43	-3.09**	0.18
Maternal attachment <sup>b</sup>	1.26	-2.67**	-0.87
Paternal attachment <sup>a</sup>	-0.24	-2.27*	1.26
Youth gender	-1.57	-1.65	1.51
Maternal depressive symptoms	0.36	1.45	-0.88
Paternal depressive symptoms	-0.17	0.59	0.26

Note. Critical ratios greater than or equal to 1.96 were significant at the .05 level; critical ratios greater than or equal to 2.58 at the .01 level.<sup>a</sup> Sample split at bottom quartile. <sup>b</sup> Sample split at median.  $p < .05$ . \*  $p < .01$ . \*\*

### **Youths' perceived attachment to parents**

The moderating effects of youths' attachment perceptions for mothers and fathers were examined separately. As with youths' hopefulness, three cutting points were used in separate analyses to form groups. Significant moderating effects were present for maternal attachment when using a bottom quartile split,  $\Delta\chi^2(3) = 9.83, p < .05$ , and a median split,  $\Delta\chi^2(3) = 10.52, p < .05$ . When split at the bottom quartile of maternal attachment, the association between triangulation and adolescents' internalizing problems was significant for the top 75% of the youth ( $b = 13.16, p < .01$ ) but not for youth in the bottom 25% ( $b = -9.06, ns$ ). This difference was present only for youth who scored lowest on maternal attachment because the difference disappeared when the sample was split at the median. Using a median split, the significant group difference shifted to the path from emotional reactivity to adolescent internalizing problems. This path was significant for youth in the bottom half on maternal attachment ( $b = 5.91, p < .001$ ) but not for youth with scores above the median ( $b = 0.98, ns$ ). Thus, youths' perceptions of maternal attachment buffered the deleterious effects of emotional reactivity on increased internalizing problems.

Significant moderating effects also were present for paternal attachment. This statistical significance was present when using a bottom quartile split,  $\Delta\chi^2(3) = 29.48, p < .001$ . The association between emotional reactivity and increased internalizing problems was stronger for

youth with lower levels of paternal attachment ( $b = 7.22, p < .001$ ) than for youth with higher levels of paternal attachment ( $b = 2.81, p < .01$ ). Thus, youths' perceptions of paternal attachment partially buffered the deleterious effects of emotional reactivity on increased internalizing problems.

### **Youth gender**

The fourth hypothesis was that the pathway triangulation → emotional reactivity → adolescent internalizing problems would be stronger for daughters and for youth in families in which parents' have higher levels of depressive symptoms. Although the estimates were in the hypothesized direction for youth gender (i.e., the pathway being stronger for daughters than for sons), the differences were not statistically significant,  $\Delta\chi^2(3) = 6.03, p = .11$ .

### **Parental depressive symptoms**

The moderating effects of depressive symptoms for mothers and fathers were examined separately. For each analysis, parents with a score of 16 or above on the CES–D during any 1 of 4 years were placed in the higher symptom group. A score of 16 or higher was selected because it indicates that an individual is “at risk” for clinical depression. The high depressive symptoms group included 26% of the mothers and 25.7% of the fathers. Yearly percentages of parents at or above 16 on the CES–D ranged from 8.2% to 13.9%.

Beginning with mothers' depressive symptoms, the model with the freed structural paths did not fit the data better than did the fully constrained model,  $\Delta\chi^2(3) = 4.31, p = .23$ . Fathers' depressive symptoms also were not a statistically significant moderator. The model with the freed structural paths did not fit the data better than did the fully constrained model,  $\Delta\chi^2(3) = 5.30, p = .15$ . Thus, the process model fit equally well in families with lower and higher levels of parental depressive symptoms.

### **Discussion**

A central focus of this study was to test Bowen's (1978) proposition that youths' triangulation into parents' marital conflict is associated with increased offsprings' internalizing problems. We found support for this proposition in a sample of 416 two-parent families during the first half of adolescence. We also tested the hypothesis that youths' emotional reactivity to marital conflict mediates the association between triangulation and adolescents' internalizing problems. We found support for an indirect pathway, even when controlling for parental hostility, externalizing symptoms, and parents' harshness toward youth. Finally, we tested the proposition that individual and family characteristics moderate the pathway triangulation → emotional reactivity → adolescent internalizing problems. We found several moderating effects for the association between youths' emotional reactivity and adolescents' internalizing problems and only one moderating effect for the association between triangulation and youths' emotional reactivity to marital conflict. Assessed one at a time, the association between youths' emotional reactivity and

adolescents' internalizing problems was buffered for (a) youth who perceived higher levels of hopefulness and (b) youth who perceived higher levels of attachment to mothers and fathers. Maternal attachment also moderated the association triangulation and youths' emotional reactivity.

Our finding that adolescents' triangulation in their parents' marital conflict is associated with youths' internalizing symptoms replicates findings by others of the link between triangulation and adolescent internalizing symptoms (Buchanan et al., 1991; Grych et al., 2004; Jacobvitz & Bush, 1996; Wang & Crane, 2001). In addition, the results extend findings from previous studies in a few important ways. First, to our knowledge, this is the first study to link triangulation prospectively with *increased* internalizing symptoms 3 years later. Previous studies have either been cross-sectional or retrospective in design and have been unable to examine how triangulation affects subsequent changes in functioning during adolescence. The use of autoregressive controls is a strength of this study. Our findings suggest that triangulation is associated with increases in adolescents' internalizing symptoms 3 years later above and beyond their initial level of internalizing symptoms. This longitudinal link supports Bowenian theory positing a developmental pathway whereby parental triangulation of children leads to future internalizing problems (Kerr & Bowen, 1988). It is interesting that the correlation between triangulation and internalizing symptoms was stronger for W4 symptoms than for W1 symptoms. From Bowen's theoretical perspective, to the extent that there is consistency in triangulation over time, the deleterious effects of it should become larger over time because the family process patterns of triangulation become structuralized. Second, previous research has relied primarily on adolescent reporting of all constructs. Our study included both parents and adolescents as reporters and included questionnaire and observational measures, which reduced the problems associated with shared method variance. Third, our study controlled for marital hostility and externalizing symptoms, which demonstrates the greater differential predictive power of triangulation and suggests that triangulation produces specialized effects on internalizing problems rather than having more generalized effects on generic symptomatology. Taken together, this growing body of empirical research strongly supports family systems theory, indicating the harmfulness of triangulating adolescents in parental marital conflict. Researchers and clinicians working in the divorce field have long discussed the deleterious impact of involving children in marital conflict (Buchanan et al., 1991). It is clear that triangulating adolescents also is harmful to adolescents in married families. Thus, clinicians and others who work with families need to assist parents with keeping marital problems within the marital dyad. Adolescent children need to be left out or blocked from parents' marital issues. Parents need to improve their ability to cope with and handle the anxiety associated with marital conflict in ways that do not involve their children.

Our second hypothesis examined a potential generative mechanism to explain the process whereby involving adolescent children in marital conflict leads to internalizing symptoms. We found that youths' emotional reactivity to parental conflict linked triangulation and increases in

subsequent adolescent internalizing symptoms, even when observed parental harshness, marital hostility, and externalizing symptoms were controlled. Bowen (1978) and Minuchin and his colleagues (1975) described children's responses of emotional dysregulation in response to being caught in parents' marital conflict. Parent conflict and tension are proposed to induce emotional arousal in children, triggering emotional and physiological responses. In families that exhibit patterns of triangulation, this emotional and physiological response is posited to not "turn off" as it does in families with better boundary maintenance. Thus, the child's emotional and physiological response to family conflict is maintained for long periods at a highly aroused level (Minuchin et al., 1975). Triangulation upsets and agitates adolescents and this level of emotional reactivity is associated with increased internalizing symptoms. Triangulation may upset adolescents because adolescents feel compelled to side with one parent against the other, and fear, anxiety, tension, resentment, or guilt may result from the boundary violation. Chronic emotional reactivity is likely to keep adolescents' energy focused on maintaining their parents' marriage, rather than investing that energy in typical, individual interests (Bell et al., 2001; Davies & Cummings, 2006). This inappropriate expenditure of developmental energy during the important adolescent period when youth are supposed to be focused on gaining autonomy within the parent-adolescent subsystem may reflect itself in internalizing symptomatology. The applied value of understanding this mediating pathway suggests that clinicians should focus on minimizing adolescents' emotional reactivity to dysfunctional triangulation in parental marital conflicts. Interventions focused on stress management and emotional regulation, which are aimed at reducing adolescents' levels of emotional reactivity, are clearly warranted by our findings.

Although there was a significant pathway from triangulation to increased internalizing problems through youths' emotional reactivity, a significant pathway between W1 triangulation and W4 internalizing symptoms still remained after the inclusion of emotional reactivity, indicating the impact of other mechanisms in addition to emotional reactivity. Cognitive mechanisms should be explored in future studies, including adolescents' appraisals of self-blame (Grych & Fincham, 1990) and decreased self-efficacy that may result from getting triangulated into parental conflict as other potential mediating mechanisms in addition to emotional reactivity.

Our final two hypotheses examined individual and family factors that we predicted would amplify or buffer the pathway from triangulation through emotional reactivity to adolescent internalizing symptoms. We found that all three of our proposed protective factors, youth hopefulness, maternal attachment, and paternal attachment, buffered or partially buffered youth from the negative consequences of emotional reactivity. None of the three proposed amplification factors, youth gender, mothers' depressive symptoms, or fathers' depressive symptoms, significantly moderated either the pathway from triangulation to emotional reactivity or the pathway from emotional reactivity to increased internalizing symptoms.

It is interesting that all three protective factors moderated the impact of the second path in our model of triangulation → emotional reactivity → internalizing symptoms. Thus, our findings

indicate that the three buffering factors serve to reduce the deleterious impact of the path between adolescents' emotional reactivity and youth internalizing symptoms. Only one of the factors we examined moderated the first path in our model (i.e., between triangulation and emotional reactivity): maternal attachment. The moderating effect of maternal attachment on the association between triangulation and emotional reactivity was the weakest finding of the moderator analyses and was in the opposite direction of our hypothesis. That is, youth who reported the lowest levels of maternal attachment were buffered from the negative consequences of becoming triangulated in parental conflict. This finding disappeared when the sample was split at the median. The finding of few significant moderators in the first link in our model from triangulation to emotional reactivity may indicate that this link is more robust and reflects a more general association for all adolescents. That is, most adolescents, regardless of individual characteristics or family conditions, may react to triangulation with increased emotional reactivity. Only those youth who have extremely poor attachment with their mothers may not react in this manner. These findings suggest that most adolescents are upset when they get triangulated into their parents' marital conflicts; however, not all youth who are upset by the triangulation develop maladaptive symptoms. In addition, these results suggest that the path from emotional reactivity to internalizing symptoms is more contextually dependent, and, therefore, potentially more malleable. Interventions designed to help adolescents recognize when they are upset and then to be able to calm themselves may potentially be more efficacious than cognitive strategies aimed at preventing the emotional reactivity in the first place.

Individual characteristics of adolescents as well as characteristics of the family environment buffered the deleterious impact of emotional reactivity to marital conflict. Adolescents who displayed more hopefulness were buffered from the deleterious impact of emotional reactivity. Hope indicates an individual cognitive style, and adolescents' cognitive appraisals have been implicated in theories explaining the impact of triangulation on adolescents' psychological functioning (Grych & Fincham, 1990; Grych et al., 2004). Hope reflects an optimistic lens through which adolescents view family interactions, and hopeful youth probably interpret family behavioral patterns in more positive ways that are likely to reduce the impact of the distress associated with triangulation and, thus, protect adolescents from the pathogenic impact of triangulation. Attachment to mothers and fathers also buffered the deleterious impact of increased emotional reactivity associated with triangulation. These findings suggest that the quality of the parent-adolescent relationships can help protect adolescents from negative consequences associated with triangulation and the emotional upsettedness it creates. Having secure relational models can serve as important long-term foundations upon which adolescents can rely and that may be more powerful than and buffer adolescents from the impact of other maladaptive current family patterns.

There are several limitations to our findings. First, our sample was not representative of the racial and economic diversity of the United States nor did it include participants from other countries. Other studies have found the link between triangulation and youth internalizing

problems in more ethnically and economically diverse samples (Grych et al., 2004), which suggests that other aspects of our findings might generalize more broadly. In addition, investigations have found triangulation linked with poorer developmental outcomes (lower ego development, problem behaviors) in countries outside of the United States, suggesting some degree of cross-cultural applicability to the pathway for adolescents (Bell et al., 2001; Bradford et al., 2004). Nevertheless, replication of our findings in more diverse samples within the United States and with samples from other countries is important. Second, our measure of triangulation assessed adolescents being caught in the middle of their parents' conflicts. It did not measure other types of triangulation such as scapegoating and detouring. The triangulation measure also did not separate parent- and youth-initiated triangulation, which might have differential effects on adolescents' mental health (Grych, Fosco, & Hauser, 2008). Future research should investigate the differential impact of various types of triangulation. It is also important to note that the association between triangulation and internalizing symptoms was small. Thus, the investigation of other important predictors of adolescent internalizing symptoms is warranted. Finally, emotional reactivity was assessed solely through youth self-report assessment. The internalizing problems latent construct was assessed using youth indicators as well and raises the possibility that the association between the two variables was inflated by method variance. Future investigations should include physiological measures of emotional reactivity.

In summary, findings from this longitudinal, multireporter, multimethod study of adolescents and their parents indicate (a) a pathway from triangulation through emotional reactivity to internalizing problems and (b) that the part of this pathway from emotional reactivity to adolescents' internalizing problems is moderated by individual and family contextual factors. These findings are important for developing interventions aimed at promoting adolescent functioning because they target several different potential avenues for change. Family-oriented clinicians can intervene at the level of the family or parents by blocking triangulation or by improving the parent-adolescent relationship. They also can intervene by working with the adolescent to reduce emotional reactivity by helping adolescents improve their stress management and emotional self-regulation skills. Future research should include physiological assessment of emotional reactivity to parental conflict and should examine this model with other adolescent outcomes. For example, most research on family conflict in general and triangulation in particular has examined its link with adolescent psychological functioning. The relational context in which the triangulation is occurring suggests that adolescents' future relational functioning also may be deleteriously affected by triangulation. Future research should examine the impact of triangulation on adolescents into parental marital conflict on adolescents' social relationships with close friends and romantic partners.

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