



Published in final edited form as:
J Genet Psychol. 2014 ; 175(0): 118–133.

The Differential Impact of Parental Warmth on Externalizing Problems among Triangulated Adolescents

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Abstract

Triangulation is a family-wide process in which children are inappropriately involved in interparental conflict, placing them at heightened risk for adjustment problems. A common form of triangulation occurs by parents pressuring their children to take sides, which may result in feelings of being “torn” between parents. Externalizing behaviors in particular may develop as adolescents feel caught in the middle of conflict and forced to choose a side. However, the nature of the triadic process of triangulation may be impacted by dyadic-level relationships within the family. The present study thus explores how positive parenting processes may alter the relations between triangulation and adolescent externalizing problems. Mothers, fathers, and adolescents ($n = 301$ families) provided assessments of adolescent externalizing problems, triangulation, and maternal and paternal warmth. Analyses revealed a three-way interaction between triangulation and maternal and paternal warmth predicting adolescent externalizing problems; child gender also moderated these relations. Among highly triangulated youth, boys displayed increased externalizing problems when both parents exhibited low or high warmth whereas girls showed increased behavior problems in the context of low maternal but high paternal warmth. These findings indicate the importance of examining the broader family context and gender when considering the impact of triangulation during adolescence.

Keywords

Triangulation; Parental Warmth; Externalizing Behaviors; Adolescence; Gender Differences

The detrimental effects of interparental conflict rarely stay confined to the marital dyad, often carrying negative consequences for child adjustment and family functioning. Marital conflict that directly involves the child in the dispute may especially put adolescents at risk

for developing a range of adjustment problems (Grych & Fincham, 1990). When conflict originating between parents incorporates the child, also known as triangulation, the conflict transforms into a family-wide process (Schermerhorn, Cummings, DeCarlo, & Davies, 2007; Westerman, 1987). As such, multiple family processes may impact the outcomes of triangulation, such as how triangulation is interpreted by children and what implications it carries for their development and well-being. The present study considers whether aspects of parent-child relationships, namely maternal and paternal warmth, may alter the impact of triangulation on adolescent externalizing problems above and beyond the effects of being drawn into interparental disputes, as well as if these effects are similar for boys and girls.

Family Systems Perspective, Boundary Dissolution, and Triangulation

According to a family systems perspective (Minuchin, 1974), the development of individuals within the family does not occur in isolation. Rather, the functioning and well-being of family members is impacted by their interactions within and across multiple family subsystems, such as marital or parent-child relationships. Distinctions between these subsystems, also known as boundaries, allow family members to have close but appropriate relationships while still maintaining individuality. Generally, boundaries that are clearly defined but not rigid, best position families to effectively respond to stressful situations such as conflict.

Triangulation occurs when children are drawn into interparental conflict; that is, the boundaries existing between family members are not well-defined or well-maintained. Weak boundaries make it possible for children to become involved in conflicts that more appropriately remain confined to the marital dyad (Minuchin, 1974), carrying potentially harmful consequences for children's development (Kerig & Swanson, 2010). Moreover, when triangulation occurs intergenerational boundaries are blurred, often reflected in the formation of alliances or the exclusion of the other parent. Adolescents are at heightened risk for being drawn into conflict in the marital subsystem, as they are old enough to understand and participate in interparental problems but may be too young to altogether withdraw from the conflict or avoid parental influence (Margolin, Gordis, & John, 2001; Shelton, & Harold, 2008). Parents may also be more inclined to triangulate adolescents, as opposed to younger children, because adolescents have the emotional and verbal competence necessary to build an effective parent-child alliance (Davies & Forman, 2002). Early adolescence is therefore a salient developmental period to investigate the effects of triangulation on child adjustment problems.

The characteristics of triangulation may vary among different family contexts. For example, triangulation has been widely studied in the divorce literature, in which it is largely conceptualized as the process of parents drawing children into interparental conflict by using them as messengers or go-betweens (Buchanan, Maccoby, & Dornbush, 1991). However, in cohesive but high-conflict families, triangulation may still implicate the child as a messenger by placing them in the middle of on-going conflicts (Buehler, Franck, & Cook, 2009; Buehler & Welsh, 2009; Franck & Buehler, 2007). Similarly, parents may actively blur intergenerational boundaries by using children as confidants to talk about the conflict, or by denigrating the other parent in front of or in conversation with the child (Buehler et al.,

2009; Margolin et al., 2001). Pressuring the child to take sides is another potentially distressing form of triangulation from the child's perspective (Bradford, Vaughn, & Barber, 2008; Grych, Raynor, & Fosco, 2004). For example, children may feel pressure to take sides when parents talk to them about or expose them to interparental conflict, or when parents actively try to win a child's loyalty (Buchanan & Waizenhofer 2001; Margolin et al., 2001). Feeling forced to take sides may elicit a variety of behavioral responses from the child, such as attempting to withdraw completely, stay loyal to both parents, or align with one parent (Buchanan & Waizenhofer, 2001), all of which may be distressing for children and have been linked to children's adjustment problems.

The implications of triangulation may also vary by gender. Though many studies have included child gender as a moderator of the effects of involvement in marital conflict (Davies & Lindsay, 2004), few have examined relations between child gender and triangulation specifically (Buehler et al., 2009). Amato and Afifi (2006) reported that parents are more likely to pressure daughters as opposed to sons to take sides in marital conflict, and feeling caught in the middle causes most harm to the mother-daughter relationship. However, Buchanan and colleagues (1991) found that boys were most likely to feel triangulated or caught between parents. Parent and child gender may also interact to alter the nature of triangulation. For example, Margolin, Gordis, and John (2001) reported that mothers of boys as opposed to girls were rated higher on triangulating behaviors, but that fathers were not rated differently on level of triangulation based on child gender. Thus, although findings suggest that child and parent gender may influence both behaviors and outcomes associated with triangulation, these relations should be further explored.

Triangulation and Adolescent Adjustment

Prior research has focused primarily on the emotional and cognitive responses that may contribute to the link between adolescents' experiences of being triangulated and adjustment problems, with less investigation of possible factors within the family that may mollify or exacerbate adjustment problems for adolescents who feel torn between parents. Triangulation is accompanied by heightened uncertainty about family boundaries, increasing adolescents' risk for developing problem behavior (Kerig & Swanson, 2010); however, additional aspects of parent-child relationships may influence how family boundaries are perceived by youth, altering the impact of triangulation on their subsequent adjustment.

The process of triangulation may leave adolescents especially prone to the development of externalizing behaviors. A number of processes, such as self-blame, may motivate adolescents' over-involvement in conflict, which often leads to increases in problem behaviors (Harold & Shelton, 2008). Similarly, feelings of being caught in the middle of a marital dispute may encourage 'acting out' to distract from the conflict. Adolescents may become inclined to express behavioral difficulties during interparental disagreements if the outcome of this behavior stops, limits, or distracts from the expression of the conflict itself (Buchanan & Waizenhofer, 2001; Davis, Hops, Alpert, & Sheeber, 1998; Westerman, 1987). Because it is difficult for triangulated adolescents, especially in early adolescence, to completely withdraw from conflict, intervening is the more likely response, which may reinforce behaviors associated with externalizing problems (Dallos & Vetere, 2012; Harold

& Shelton, 2008). Additionally, repeated involvement in interparental disputes may facilitate aggression through witnessing displays of maladaptive conflict strategies or hostile interactions, effectively socializing externalizing-type behaviors (Erel & Burman, 1995; Fosco & Grych, 2008; Grych & Fincham, 1990).

Parental Warmth

Aspects of the parent-child relationship may alter the threatening nature of triangulation, either enhancing or diminishing its effects on adolescent adjustment. Though triangulation has been operationalized in a variety of ways, it is consistently conceptualized as a process that connects interparental conflict, parenting, and child maladjustment (Kerig & Swanson, 2010), making it especially important to study through the lens of the family system. Despite these connections, most studies to date have emphasized triangulation's role in interparental conflict, focusing less on how triangulation itself may be altered by separate parenting processes. Parenting can play a critical role in affecting many of the stressors introduced by interparental conflict (Erel & Burman, 1995; Margolin et al., 2001), including triangulation (Franck & Buehler, 2007). In particular, the presence of parental warmth, or expression of positive affect, affection, and admiration (Davidov & Grusec, 2006; Maccoby & Martin, 1983), may possibly lower the extent to which children appraise conflict as threatening to the self or family structure, thereby protecting children from the harmful effects of the stress that accompanies witnessing conflict (Grych & Fincham, 1990). Warmth and involvement from both parents is related to fewer problem behaviors over the course of adolescence (Scaramella, Conger, & Simons, 1999). However, in the presence of triangulation, the dynamics of the parent-child relationship are inherently altered, potentially casting displays of warmth in a different light.

In the context of warm parental affect, adolescents may be more likely to positively view the parent-child relationship that has been distorted by triangulating behaviors, in turn helping to prevent the development of maladaptive outcomes. In particular, parental warmth may play a key role in buffering against the development of behavioral maladjustment in triangulated youth. High parental warmth has been linked with the development of children's emotional regulation capacities (Darling & Steinberg, 1993; Lee & Gotlib, 1991). Warm parents may thus help adolescents learn to self-regulate their emotions and behaviors (Eisenberg et al., 2005; Walton & Flouri, 2010) which could be particularly adaptive in high-conflict environments. Therefore, when parental warmth is high, even children who feel triangulated may be better equipped to suppress 'acting out' in response to triangulation due to higher emotion regulation capacities. Additionally, low warmth can interfere with a child's ability to regulate arousal, making it increasingly difficult to restrain problematic behavior exacerbated by direct involvement in conflict. Low parental warmth may also exacerbate the negative cognitions resulting from the process of being triangulated. For example, lack of parental warmth may substantiate a child's feelings that his/her needs are unimportant to the parent (Cummings & Davies, 2010), which may be especially relevant to triangulated families if the child feels used as a confidant or intermediary between parents. Since the experience of being triangulated has been shown to decrease perceptions of parent-child closeness (Buehler & Gerard, 2002), warmth (Krishnakumar & Buehler, 2000), and support, and heighten children's risk for maladjustment (Buehler & Gerard, 2002; Cummings,

Goeke-Morey, & Papp, 2003), especially warm parents may help buffer against these processes.

Alternatively, parental warmth may adversely affect adolescent adjustment when paired with triangulating behaviors. As Kerig and Swanson (2010) note, “there are a number of different family processes that might result from the link between interparental conflict and triangulation, some of them rife with negative affect but others characterized by ostensible warmth and support” (p. 62). Though high warmth and closeness may be characteristic of cohesive families, these constructs may also manifest in families marked by weak boundaries, such as *enmeshed* families (Barber & Buehler, 1996). In enmeshed families, loyalty and emotional closeness are required, compromising individual well-being and increasing family members’ reactivity to each other (Olson, 2000). Although parents may maintain warm affect in the face of triangulation and family conflict, it is possible that the nature of triangulating behaviors may similarly color this warmth so that instead of acting in the genuine interest of the child, it is perceived by the child as coercive or intrusive.

Present Study

The current study longitudinally examines the effects of triangulation on externalizing behavior while considering the unique impact of maternal and paternal warmth that may alter these relations. It was hypothesized that while higher triangulation would be linked to increased externalizing behavior, the presence of parental warmth would moderate this relationship such that lower parental warmth may increase the incidence of externalizing behaviors in the context of high triangulation. However, it was alternatively considered that parental warmth may appear coercive or manipulative to triangulated adolescents, increasing the pressure they feel to take sides in interparental conflict and thereby exacerbating problem behavior. Additionally, given that adolescents have unique relationships with each parent, each of which may become either increasingly distinct or enmeshed when triangulation is high, parental warmth is assessed separately for mothers and fathers as well as considering the interaction of both parents’ use of warmth on adolescent externalizing problems. Although hypotheses regarding the moderating effects of mother and father warmth were exploratory, it was expected that the interaction of maternal and paternal warmth would have particularly important implications for family processes involving triangulation. Namely, incongruence in perceived maternal and paternal warmth might foster alliances, whereas similar levels of warmth may increase feelings of being torn; either of which process could exacerbate youth externalizing behavior. Lastly, child gender is considered in these relations, though no specific hypotheses were posited as to how perceptions of triangulation and parental warmth would differentially impact boys’ and girls’ adjustment due to a lack of clear findings in previous studies. The present study thus addresses the dearth of research on triangulation as it operates within the family system by examining the impact of mother- and father-adolescent relationships as they uniquely and interactively relate to externalizing behavior.

Method

Participants

Participants included 301 families taking part in a larger, dual-site, two phase longitudinal study. The data for the current study are drawn from the adolescent phase of the project (T1 median grade = 7, 73.3%; range 6-8; T2 median grade = 8, 74.1%; range 7-10). Participating families reflected two cohorts: an original cohort recruited when children were in kindergarten and a supplemental cohort recruited at the start of the adolescent phase. Despite differences in the timing of recruitment, families from both cohorts participated in identical procedures at each of the adolescent time points included in the present study. The original cohort of families ($n = 235$; 106 boys, 129 girls; M age = 6.00, $SD = .48$) were eligible to participate if they had a child in kindergarten, all three family members had been cohabitating for a minimum of three years, and all members were English proficient. Of the original cohort, 196 (83.1%) families participated in the start of the adolescent phase (T1). An additional 20 families of the original cohort rejoined the study in the second year of the adolescent phase (T2); resulting in 91.9% ($n = 216$) of families from this cohort participating during the adolescent phase.

A second cohort of families ($n = 85$; 50 boys, 35 girls; M age = 12.77, $SD = .53$) was recruited to participate during adolescence when the original sample of children were in seventh grade. Eligibility criteria for the supplemental cohort of families required that all three family members were cohabitating for a minimum of one year, had a child in the seventh grade, and were English proficient. Families from both cohorts were recruited from communities in the Midwest and Northeast through flyers distributed to local schools, churches, community events, and neighborhoods. Most (88%, $n = 75$) of these families participated in both time points.

Families were representative of the communities from which they were drawn. Of participants, 76.1% were White, 17.7% were Black or African-American, and 6.1% reported other racial or multiracial backgrounds. Assessed separately from racial background, 4.2% of participants were Hispanic. The median family income range was \$55,000-74,999 ($n = 63$) with families ranging from less than \$6,000 to more than \$125,000 a year. The majority of parents were married during the adolescent phase (84.7%) and all three family members lived together for an average of 12 years 3 months ($SD = 3$ years 6 months) at T1. The majority of mothers (92.9%) and fathers (79.3%) were the biological parent of the study child.

Families lost to attrition at T2 did not differ on any study variables or demographic variables at T1, including ethnicity, child gender, relationship to child, marital status, or family income. Participants in the original and new cohorts did not differ on any study variables at the start of the adolescent phase and most demographic variables. However, parents in this cohort were older (mother M age = 42.30, $SD = 5.78$; father M age = 44.34, $SD = 5.93$) compared to parents in the new cohort (mother M age = 40.46, $SD = 6.30$, $F(1,276) = 5.64$, $p < .05$; father M age = 42.21, $SD = 7.97$, $F(1,252) = 5.73$, $p < .05$) while the children in the original cohort were younger (M age = 12.58, $SD = .57$) than children in the new cohort (M

age = 12.75, $SD = .55$, $F(1,267) = 5.39$, $p < .05$), with a higher percentage of girls in original (43.8%) compared to the new cohort (41.0%; $\chi^2(1) = 5.26$, $p < .05$).

Procedure

Data collection for the present study involved annual laboratory sessions. Family visits were conducted at research sites at the University of Rochester and the University of Notre Dame. Identical protocols were used at both sites, and mothers, fathers, and adolescents visited the laboratory. A variety of assessment techniques were utilized during family visits. The present study used parent- and child-report questionnaires selected from the larger battery.

Measures

Triangulation—To measure adolescent perceptions of triangulation, a 3-item revised version of the triangulation subscale of the Children's Perceptions of Interparental Conflict scale (CPIC; Grych, Seid, & Fincham, 1992) was utilized. Questions were evaluated on a 3-point likert scale ranging across true, somewhat true, and false. Items were summed with higher scores indicating more triangulation. Items were indicative of taking sides during conflict; items included, "My mom wants me to be on her side when she and my dad argue", "My dad wants me to be on her side when he and my mom argue", and "I feel caught in the middle when my parents argue." This scale has been shown to have good test-retest reliability with a broad age-range of children and has been used in numerous studies on interparental conflict and triangulation (Fincham, Grych, & Osborne, 1994). The internal reliability coefficient for the current sample was $\alpha = .69$, which is similar to internal reliability coefficients reported in other studies (e.g., α s = .62 - .71; Grych et al., 1992).

Parental Warmth—Maternal and paternal warmth were each measured based on multiple reports of parental warmth on the 20-item parental warmth subscale of the Parental Acceptance-Rejection Questionnaire (PARQ; Rohner, Saavedra, & Granum, 1991). Adolescents, mothers, and fathers each evaluated the warmth of the target parent. Ratings were made on a 5-point likert scale ranging from 1 (*never*) to 5 (*always*), in response to questions regarding the amount of warmth or affection displayed by each parent. The 20 items comprising the warmth scale on the PARQ included "my mother/father talk to me in a warm and loving way". Composite variables were created for maternal and paternal warmth using ratings from each reporter (e.g., parent self-report, parent partner-report, adolescent-report). Scores across reporters were significantly correlated (see Table 1). The current sample had high internal reliability for the composite scores; the coefficient for maternal warmth was $\alpha = .95$ and for paternal warmth was $\alpha = .95$.

Child Adjustment—Adolescent externalizing problems were evaluated using maternal and paternal report on the Child Behavior Checklist (CBCL; Achenbach, 1991). Composite scores were created by averaging mother- and father-report; mother and father reports were highly correlated at each time point (see Table 1). The CBCL externalizing problems scale consists of 32 items which respondents rate on a scale ranging across 0 (*never true*), 1 (*somewhat or sometimes true*), and 2 (*very true or very often true*). Example behaviors of the externalizing scale include: argues a lot, gets in many fights, and disobedient at home. The current sample had high internal reliability for composite scales; coefficients were $\alpha = .$

94 at T1 and $\alpha = .95$ at T2. Utilizing parent composite scores, 10% and 7% of adolescents at T1 and T2 were classified as borderline/clinical on the externalizing problems scales, respectively.

Results

Descriptive Statistics

Means, standard deviations, and correlations for all study variables are presented in Table 1. Parental warmth variables were highly correlated across reporters. Greater family annual income was associated with lower levels of triangulation and externalizing problems, thus family income was included as a covariate in analyses. Aggregate composite variables (e.g., averaged) were created using all three reporters for maternal and paternal warmth to reduce mono-reported bias. Additionally, a composite averaged externalizing problems score was created using mother and father reports. A one-way analysis of variance was conducted to examine gender differences in adolescent externalizing problems. Boys and girls did not differ in externalizing problems at T1 ($F(1,219) = 1.79, ns$) or T2 ($F(1,202) = 3.02, ns$).

Parental Warmth and Child Gender as Moderators of Triangulation on Adolescent Externalizing Problems

Path analysis within a structural equation framework was conducted to examine the impact of triangulation on changes in adolescent externalizing problems one year later. Multigroup path analysis was conducted to examine the role of maternal and paternal warmth and child gender as moderators in the relationship between triangulation and externalizing problems. Analyses included continuous manifest variables of the main effects, two-way interactions, and a three-way interaction between T1 triangulation, T1 maternal warmth, and T1 paternal warmth on T2 adolescent externalizing problems. Predictor and moderator variables were centered and multiplied to create interaction terms. Externalizing problems at T1 was included as an autoregressive control of T2 externalizing problems, thus the independent variables predicted the change in externalizing problems from T1 to T2. Family income was included in the model as a covariate of T2 adolescent externalizing problems. Multigroup path analysis compared a model with pathways between the predictor variables and outcome variable constrained to be equal among boys and girls to a model where these pathways were free to vary to examine if the 3-way interaction between triangulation and maternal and paternal warmth was similar for boys and girls. A significant chi-square difference test suggests these relations among the predictor variables (e.g., 3-way interaction) and outcome variable (T2 externalizing problems) were significantly differed for boys and girls. Thus, the unconstrained model was retained (constrained model: $\chi^2(10) = 22.71$; unconstrained model: $\chi^2(1) = .28$; χ^2 difference = 22.43, $df = 9, p < .01$). Regression coefficients for the boy and girl models are displayed in Table 2. There was a significant three-way interaction for both boys and girls, however the nature of these relations varied by child gender (See Figure 1).

Slope difference tests (Dawson & Richter, 2006) were conducted to probe for differences in slopes separately for the boy and girl models. For boys, there was a significant difference in slopes for both low maternal/low paternal warmth and high maternal/high paternal warmth

compared to the slopes of low maternal/high paternal warmth ($t = 2.97, p < .05; t = -2.27, p < .01$, respectively). Additionally, there was a trend effect for slope differences between high maternal/low paternal warmth compared to low maternal/low paternal warmth ($t = -1.67, p < .10$). In the context of high triangulation, low maternal/low paternal warmth was related to higher externalizing problems compared to adolescent boys with low maternal/high paternal warmth. Similarly, high maternal/high paternal warmth was also related to higher externalizing problems in the context of high triangulation compared to adolescents with low maternal/high paternal warmth. However, in the context of low triangulation, low maternal warmth/high paternal warmth was related to the highest levels of externalizing problems.

Slope difference tests for girls showed that there was a significant slope difference between low maternal/high paternal warmth when compared to high maternal/high paternal warmth ($t = -2.14, p < .05$) and a trend toward significance when compared to low maternal/low paternal ($t = 1.92, p < .056$). In the context of high triangulation, low maternal/high paternal warmth lead to greater externalizing problems for girls compared to high maternal/high paternal warmth contexts and a trend compared to low maternal warmth/low paternal warmth.

Discussion

The results of this study further support links between triangulation and adolescents' adjustment problems, using a longitudinal design and controlling for prior levels of adjustment. Though triangulation is measured in different ways throughout the literature, the focus in the present study is on adolescents' subjective feelings of pressure to take sides during parental conflicts. Although there is evidence that triangulation may motivate behavioral responses such as intervening in the conflict (Buchanan & Waizenhofer, 2001) which have been linked to the development of externalizing problems (Fosco & Grych, 2008), the extent to which conflict is interpreted as threatening may be exacerbated or alleviated by other aspects of family relationships, such as parental warmth. Given that differences in parent-adolescent relationships uniquely impact adolescent adjustment (Kitzmann, 2000), it was important to separately consider the role of warmth in both mother-adolescent and father-adolescent relationships. From a family systems perspective, however, the family as a whole as well as each set of relationships within the family impact each other *and* individual family member's well-being; it was therefore also of interest to examine the interactive effects of maternal and paternal warmth on adolescent adjustment in the context of triangulation. Accordingly, analyses revealed a three-way interaction between triangulation, maternal warmth, and paternal warmth in predicting adolescent externalizing problems. The three-way interaction found among triangulation, maternal warmth, and paternal warmth varied by child gender. Contrary to our initial suppositions, however, the results appear to support the alternative hypothesis that parental warmth in the context of high triangulation may at times exacerbate youth externalizing behaviors. Amongst girls, incongruence in levels of parental warmth may heighten levels of externalizing behaviors whereas for boys similarities in levels of parental warmth were linked to increased behavioral problems.

In the context of high triangulation, girls experiencing low maternal warmth and high paternal warmth had the highest levels of externalizing problems one year later. Furthermore, congruence in levels of warmth (i.e., high or low warmth from both mothers and fathers) lead to lower levels of externalizing problems. This finding interestingly suggests that for girls who are triangulated, an imbalance in parental warmth may outweigh the positive influence or protective effect of high warmth from one parent. There are a few conceivable reasons why these results may have emerged. Sturge-Apple, Davies, and Cummings (2010) suggest that in a family system with thin boundaries, warmth and support may come with a “cost”, including the promotion of hostility between other family members. As adolescent girls become increasingly aware of and involved in others’ relationships (Davies & Lindsay, 2004), an imbalance in parental affect that serves to perpetuate conflict in the marital subsystem may have worse implications for their adjustment than for boys. Triangulation often leads to alliance formation, in which by siding with one parent the child ends up having a closer and warmer relationship with that parent. However, parent-child coalitions often increase conflict in the marital relationship, which may be especially distressing for girls (Kerig, 1995), and furthermore, may alter perceptions of warmth within parent-child relationships. In families characterized by alliances, warmth can often be partnered with elements of coercion or psychological control (Kerig, Swanson, & Ward, 2011; Rohner, 1986). In the context of low maternal warmth, higher levels of paternal warmth may be viewed as coercive or as an attempt by fathers to form an alliance with the daughter. Thus, though close parent-child relationships can promote positive adjustment in cohesive families, warmth within a cross-generational coalition may become tarnished if it enforces the process of excluding or working against the other parent (Grych et al, 2004).

It should be noted that for adolescent girls incongruence in parental warmth was only related to increased externalizing behaviors in the context of low maternal/high paternal warmth. In much of the research on intergenerational alliances, mother-child alliances are reported to be the most common (Kerig, 1995; Vuchinich et al., 1988), and having an emotionally strong mother-daughter relationship is especially important for later adjustment (Jacobvitz & Bush, 1996). Given that girls may tend towards closer relationships with mothers, high paternal warmth in the context of low maternal warmth may especially increase girls’ experience of feeling ‘caught in the middle’ or pressure to take sides with one parent. Thus father-daughter coalitions, encouraged by warm affect, may be detrimental to girls’ well-being through undermining the mother-daughter relationship (Jacobvitz & Bush, 1996).

For adolescent boys, externalizing behaviors were exacerbated when parents displayed congruent levels of warm affect, even when both mother and father were high in warmth. Although it was expected that low congruent parental warmth would lead to an increase in behavioral problems (Eisenberg et al., 2005), it is surprising that high maternal and paternal warmth would likewise have harmful effects. Furthermore, contrary to findings for girls, boys’ externalizing problems were buffered by having one warm parent, in particular when fathers’ levels of warmth were high. It seems likely that whereas consistently low parental warmth may negatively affect children by increasing deficiencies in parental support, high parental warmth from both parents may increase boys’ experiences of feeling torn; perhaps aligning with one warm parent relieves distressing feelings of being ‘caught in the middle’

(Amato & Afifi, 2006). While for girls warmth originating from one parent may be interpreted as a coercive effort to enlist the child in a coalition or as representing a lack of harmony in the family system, for boys the psychological burden of trying to remain loyal to both parents may outweigh the protective value of high parental warmth. This interaction found between parental warmth and triangulation for adolescent boys is perhaps reflective of the idea that warm parental affect may have harmful implications in certain family structures. For example, enmeshed families are characteristically high in conflict, but due to diffuse emotional boundaries delineating subsystems, are also often high in warm affect. In enmeshed families a lack of boundaries may often lead to the involvement of children in conflict (Jacobvitz & Bush, 1996), and enmeshment amongst family members has been found to predict youth behavioral problems (Barber & Buehler, 1996). In the current findings, the combination of high triangulation and high warmth could thus be indicative of an enmeshed family system, in which warmth does not serve to support the child but rather is harmful, implemented as a means of gaining emotional access to the child to fulfill parents' own needs (Barber & Buehler, 1996). Corroborating this notion, Davies, Cummings, and Winter (2004) reported that parents in enmeshed families showed higher levels of parental acceptance (a factor in warmth) than cohesive families, but also higher levels of psychological control and co-parenting disagreements. Thus, it is possible that having two warm parents may lead to the development of boys' externalizing problems, as the link between warmth and coercion in the context of triangulated families could lead to increased feelings of being torn between parents.

Additionally, boys' decreased externalizing behavior in the context of incongruent parental warmth may be bolstered by the fact that the protective nature of warmth from one parent may compensate for the lack of warmth from the other. Sandler and colleagues (2008) suggest that in high conflict homes, a "compensation effect" may occur, in which a warm relationship with one parent may compensate for the lack of one with the other parent, protecting against maladjustment. Thus, different patterns of parenting behaviors may serve to limit the incidence of adolescent externalizing problems, though the family context in which boys and girls find triangulation distressing may differ.

Limitations and Future Directions

Although the present study provides new insight into the role of parental warmth in the context of triangulation, limitations are important to consider. The triangulation subscale of the CPIC is a reliable and widely-used measure; however, the internal reliability was reduced in the current sample. Moreover, this scale only contains a few items; given the complex nature of triangulation, this may not be enough to truly unpack these processes. While this scale allowed for examining adolescents' overall feelings of being triangulated into marital conflict in the present study, it did not allow for unique examination the role of mother-child and father-child alliances. New measurements developed to evaluate the behaviors (i.e., parent vs. child initiated), cognitions (i.e., motive or intent behind the triangulation), and emotional outcomes associated with triangulation would help begin to tease apart which elements of triangulation most account for adolescent maladjustment. Future research should disentangle the role of mother-child and father-child alliances in the study of triangulation, parenting, and adolescent adjustment. Lastly, future research should

examine other elements of parent-child relationships, such as responsiveness and attachment security, in triangulated families.

Despite these limitations, the current study provides new insight into how parenting may alter the impact of triangulation on adolescent adjustment. The influence of emotional affect in the family does not stay confined to individual subsystems, accounting for why processes such as parental warmth are particularly relevant in cases of triangulation (Westerman, 1987). Adolescents' interpretation of parental warmth is highly contextual, pointing to why warmth may differentially impact adolescents depending on the nature of the family environment. The study explored new areas of family relations and uncovered new patterns of relations, which necessarily require replication. However, the results also suggest that interrelations between patterns of family processes may be complex and that challenge some assumptions about the impact in broader family context of typically positive family processes, such as warmth. By uncovering the ways in which seemingly positive parenting variables such as warmth affect adolescents in the unique circumstances of triangulation, we may be able to better understand how variations in family subsystems alter the effectiveness of these protective factors. However, due to the novel nature of our findings, replication will be necessary before clinical implications can be inferred. Further investigation into how triangulation alters the effect of family-wide processes on adolescent adjustment would be beneficial in educating parents about how to foster healthy relationships with their sons and daughters, even in the face of marital conflict.

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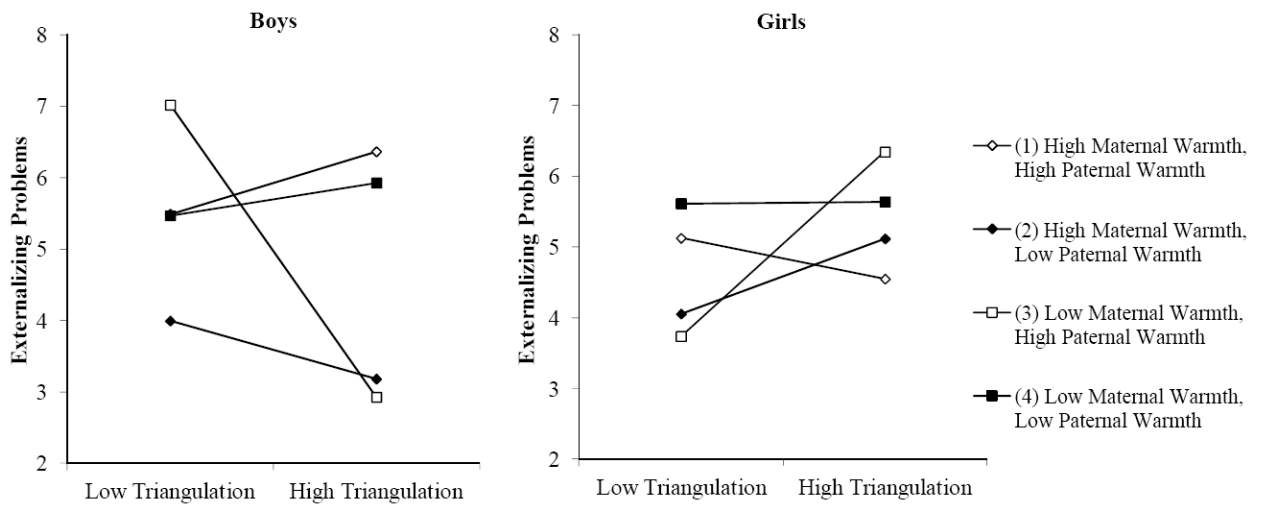


Figure 1.

Interaction between Triangulation, Maternal Warmth, and Paternal Warmth for Adolescent Externalizing Problems for boys and girls. Figure depicts 1 SD above and below the mean.

Table 1

Correlations and descriptive statistics

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Triangulation – CR	--											
2. Maternal Warmth – CR	-.30**	--										
3. Maternal Warmth – MR	-.18**	.42**	--									
4. Maternal Warmth – FR	-.09	.25**	.32**	--								
5. Paternal Warmth – CR	-.35**	.74**	.26**	.10	--							
6. Paternal Warmth – MR	-.14*	.15*	.51**	.14*	.33**	--						
7. Paternal Warmth – FR	.02	.16*	.15*	.59**	.20**	.26**	--					
8. T1 Externalizing Problems –MR	.15*	-.19**	-.20**	-.16*	-.13*	-.23**	-.17*	--				
9. T1 Externalizing Problems –FR	.10	-.27**	-.17**	-.24**	-.25**	-.17**	-.30**	.63**	--			
10. T2 Externalizing Problems –MR	.12	-.14*	-.17**	-.17*	-.13	-.23**	-.15*	.82**	.61**	--		
11. T2 Externalizing Problems –FR	.02	-.22**	-.10	-.27**	-.18*	-.16*	-.24**	.57**	.85**	.67**	--	
12. Family Income –MR	-.15*	.20**	-.02	.00	.20**	.14*	.00	-.19**	-.25**	-.18**	-.27**	--
<i>M</i>	.62	84.77	87.85	81.52	81.06	87.33	82.80	5.90	5.62	5.61	5.07	--
<i>SD</i>	1.20	13.10	8.36	12.72	15.47	9.98	11.31	6.41	6.59	6.96	6.54	--

Note. CR = Child Report, MR = Mother Report, FR = Father Report.

* p < 0.05.

** p < 0.01.

Table 2
 Multigroup Regression Analyses Examining Maternal and Paternal Warmth as Moderators of the Relationship between Adolescent Triangulation and Externalizing Problems for Boys and Girls

	Boys			Girls		
	R ²	Unstand. β (SE)	Stand. β	R ²	Unstand. β (SE)	Stand. β
T1 Triangulation		-.35 (.27)	-.07		.34 (.32)	.08
T1 Maternal Warmth		-.04 (.06)	-.05		-.04 (.06)	-.07
T1 Paternal Warmth		.05 (.05)	.07		-.01 (.05)	-.02
Triangulation * Maternal Warmth		.05 (.05)	.07		-.03 (.04)	-.10
Triangulation * Paternal Warmth		-.03 (.04)	-.05		.01 (.03)	.05
Maternal Warmth * Paternal Warmth		.01 (.01)	.10*		.00 (.01)	.07
Triangulation * Maternal Warmth * Paternal Warmth		.01 (.01)	.11*		-.01 (.00)	-.54**
T1 Externalizing Problems		.98 (.05)	.90**		.79 (.06)	.85**
Family Income		.04 (.09)	.02		-.11 (.10)	-.08
T2 Externalizing Problems	.85			.69		

Note. Standard errors are presented in parentheses.

Unstand. = Unstandardized regression coefficient. Stand. = Standardized regression coefficient.

Bolded values are significant parameters.

* $p < .05$,

** $p < .01$.