The Impact of Marital Conflict on Parenting and Adolescent Prosocial Behavior

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ABSTRACT

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This study examined the relationship between marital conflict, parenting, and adolescent prosocial behavior. Parents and one target child from two-parent families \((n = 330)\) responded to questionnaires regarding levels of marital conflict, parenting behaviors, and child prosocial behavior. Using structural equation modeling, results indicated that one dimension of parenting, warmth and connection, mediated the relationship between marital conflict and child prosocial behavior. Group comparisons did not find significant gender differences. The significance on parent-child connection is discussed along with clinical implications.

Keywords: marital conflict, prosocial behavior, parenting, adolescence
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To my dear wife, Christina whose constant love and support has sustained me through the ups and downs of grad school. And to my committee members, Roy Bean, Laura Walker, and Randal Day, three mentors who have had a much greater influence on my life than they know.
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Introduction

While numerous studies have focused on the etiology of pathology and negative outcomes among children and adolescents, an equally compelling and growing body of literature emphasizes the development of positive outcomes and resilience. One such area of study is the development of prosocial behaviors in children and adolescents. Prosocial behaviors have been described as voluntary actions with the intention of helping or, in some way, benefiting others (Eisenberg, Fabes, & Spinrad, 2006). In fact, the development of prosocial behaviors has been linked to other positive outcomes including academic success, relationship stability, and lower incidence of risky behavior (Carlo, Fabes, Laible, & Kupanoff, 1999; Markiewicz, Doyle, & Brendegen, 2001). In addition, children who engage in prosocial behaviors with peers have been found to have stronger, more stable peer relationships, a known predictor of school engagement (Markiewicz et al., 2001). The development of prosocial behaviors toward family members has also been associated with age-related changes in moral reasoning and the development of empathy and perspective taking (Eisenberg et al., 2006; Eisenberg, Miller, Shell, McAlley, & Shea, 1991).

Although the research on adolescent prosocial outcomes is growing, there are two important and inter-related familial factors that require additional research attention: (1) marital conflict and (2) parenting. The case has been made repeatedly that family context, especially marital conflict, impacts parenting thus leading to poorer child outcomes (Buehler et al., 1997). Carlo, Padilla-Walker and Day (in press), for example, found that parents’ mental health problems had a negative impact on children’s prosocial behavior. Yet very little research has examined marital conflict in relation to prosocial outcomes. Thus, the purpose of this study is to
evaluate the influence of marital conflict on adolescent’s prosocial behaviors toward family members and the mediating role of parenting behaviors on this relationship for boys and girls.

**Literature Review**

**Impact of Marital Conflict on Parenting**

By virtue of their relationship and proximity, parents are able to exert a powerful influence on their children, both knowingly and unknowingly. As a result, parental stressors may have a significant impact on children’s development (Schoppe-Sullivan, Schermerhorn, & Cummings, 2007). Though removed from the child’s immediate proximity, the nature and quality of the marital relationship has been found to have a significant influence on children’s growth and development. A meta-analysis of the influence of marital conflict noted the consistent finding of a significant relationship between interparental conflict and child outcomes (Buehler et al, 1997). This influence on child behavior has been theorized to occur in two ways: (1) through conflict’s effect on parenting quality, and (2) through the emotional and psychological impact of conflict on the child.

In terms of the “parenting” hypothesis, it is suggested that marital conflict has a detrimental effect on both parenting quality and style, which in turn has an impact on the child’s well-being. In support of this perspective, research has demonstrated that increases in marital conflict tend to be associated with lower levels of parental warmth and responsiveness leading to both internalizing and externalizing problems in children (Cui & Conger, 2008; Schoppe-Sullivan et al, 2007; Webster-Stratton & Hammond, 1999). Interparental conflict has also been associated with increased harsh, hostile, inconsistent, and controlling parenting behaviors (Benson, Buehler & Gerard, 2008; Buehler & Gerard, 2002; Cui & Conger, 2008). The negative emotional arousal accompanying marital conflict may be taxing on parental patience; thus, when
a child misbehaves the parent may be more likely to be emotionally reactive and respond in harsh, critical, or punitive ways.

Furthermore, the stress and hostility from marital conflict may spillover into parent-child relationships, making parents more likely to interact with their children in harsh and conflictual ways, compromising parental closeness and connection. For example, Buehler and Gerard (2002) found that, along with increased parental harshness, parents experiencing higher levels of conflict in their marriage were less present in their children’s lives and spent less time engaging with them in positive, relational activities. Psychological stress resulting from marital conflict may create an emotional climate in which parents have difficulty focusing on their children because they are focusing most of their emotional energy on themselves thus compromising positive parenting behaviors (Benson et al., 2008; Schoppe-Sullivan et al., 2007).

The second theorized mediator of the relationship between conflict and child behavior is the child’s own perceptions and emotional responses to interparental conflict. Davies and Cummings (1994) have suggested that the presence of marital conflict, especially at higher levels, is threatening to children’s emotional security and that the meaning children make of marital conflict profoundly impacts their behavior. Interestingly, Du Rocher Shudlich and Cummings (2007) found that even depressive marital conflicts—interactions marked by withdrawal and disengagement as opposed to verbal aggression, and violence—were distressing to children. Children’s emotional security and their level of self-blame for interparental conflict have also been found to predict maladjustment (Ablow, Measelle, Cowan & Cowan, 2009; Du Rocher Shudlich & Cummings, 2007). For example, Ablow and colleagues (2009) found that children who were more involved in their parents’ conflict experienced greater emotional distress leading to higher levels of oppositional behaviors and depression. Yet while research has often
associated marital conflict with such negative child outcomes (Ablow et al., 2009; Buehler et al., 1997; Schoppe-Sullivan et al., 2007), little is known about how marital conflict influences children’s healthy development, particularly the development of prosocial behaviors and what may mediate this relationship (McCoy, Cummings & Davies, 2009).

**Impact of Parenting on Prosocial Behavior**

Many believe that environmental factors, such as parenting practices and the nature of the parent-child relationship, are particularly relevant to the development of prosocial behavior. Indeed, the impact of parenting on child behavior has been extensively researched. Positive parenting behaviors such as parental warmth and connectedness (Eberly & Montemayor, 1998), monitoring or behavioral regulation (Finkenauer, Engels, & Baumeister, 2005; Jackson, Pratt, Hunsberger, & Pancer, 2005; Petit, Laird, Dodge, Bates, & Criss, 2001) and autonomy granting (Silk, Morris, Kanaya & Steinberg, 2003) have been found to contribute to positive outcomes in children and adolescents. Parental monitoring, for example, has been found to be associated with a lower occurrence of behavioral problems (Finkenauer et al., 2005; Petit et al., 2001) including drug and alcohol abuse and delinquency (Crouter & Head, 2002; Dishion & McMahon, 1998). Autonomy granting has similarly been found to be associated with lower levels of substance use (Dobkin, Tremblay, & Sacchitelle, 1997) as well as higher academic achievement (Kurdek, Fine, & Sinclair, 1995) and greater self-esteem (Allen, Hauser, Bell, & O’Connor, 1994). Additionally, parenting behaviors such as conversations about morality, social rewards (i.e. praise), and experiential learning (e.g. visiting a homeless shelter or volunteering at a soup kitchen) have been found to be strong predictors of prosocial behavior (Carlo, McGinley, Hayes, Battenhorst, & Wilkinson, 2007). These and other similar parenting behaviors which promote altruistic, high-cost prosocial behaviors, have been shown to lead to greater empathy and
perspective taking which in turn predict prosocial behaviors in adolescents (Carlo, McGinley et al., 2007; Padilla-Walker & Christensen, in press).

Parenting styles and behaviors characterized by warmth and acceptance have been shown to promote positive outcomes such as kindness, helpfulness, and empathy (Carlo, McGinley et al., 2007; Eberly & Montemayor, 1998). Eberly, Montemayor, and Flannery (1993) found that children’s perceptions of parental involvement and acceptance were significantly related to parent reports of child helpfulness. Similarly, perceived parental expectations and values have also been shown to promote higher rates of prosocial behavior and lower rates of delinquency and antisocial behavior, especially among adolescent boys (Padilla-Walker & Carlo, 2007; Wyatt & Carlo, 2002).

Theorists have argued that parenting approaches and behaviors characterized by warmth, responsiveness, and acceptance lead to higher levels of prosocial behaviors in children for a number of reasons (Carlo et al., 1999; Eberly & Montemayor, 1999; Eberly et al., 1993; Grusec & Goodnow, 1994). For example, when children have a strong, positive relationship with their parents they have been found to engage in more frequent prosocial behavior directed at that parent as a way of maintaining and nurturing the relationship (Eberly & Montemayor, 1998). Similarly, parental responsiveness has been shown to promote an emotional climate in which adolescents feel more secure in expressing themselves and are more likely to care for others (Frosch & Mangelsdorf, 2001).

A consideration of attachment theory may help to describe why parental warmth and connection has such an influence on child prosocial outcomes. According to attachment theory, a strong and secure attachment or “felt security” allows children to have more confidence in their own abilities and endows them with confidence to explore their surroundings (Ainsworth, 1969).
Greater confidence may allow children to focus less on themselves and more on others, a key step toward developing prosocial behavior (Eberly & Montemayor, 1999). Conversely, children of harsh, disconnected parents are more likely to have less secure emotional attachments, a pathway which has been shown to lead to depression and loneliness (Richaud de Minzi, 2006).

Padilla-Walker and Christensen (in press) also found that the strength of the parent-child relationship was the strongest predictor of prosocial behaviors toward family members. Prosocial behavior directed toward family members is an important part of the development of a broader set of prosocial behavior and attitudes. Through engaging in prosocial behaviors at home, particularly with siblings, children learn how to be concerned for the welfare of others and to engage in social perspective taking (Carlo et al, 1999). Children also discover that prosocial behaviors observed and learned in the home can be socially beneficial as a way of maintaining and improving interpersonal relationships, a skill that is valuable in terms of familial relationships, as well as for negotiating social interactions at school and other social settings (Eberly & Montemayor, 1998; Markiewicz et al, 2001). For children, learning to develop feelings of empathy and sympathy, traits highly correlated with warm, supportive parenting (Carlo, McGinley et al., 2007), have also been correlated with prosocial behaviors toward others including peers and strangers (Estrada, 1995). Thus prosocial behavior toward family members can be seen as a good indicator of prosocial behavior in other social settings.

Taken together, this body of research demonstrates that the nature of the parent-child relationship is a foundational aspect of the growth of prosocial behavior. Because parenting has such a profound effect on children and their well-being, and marital conflict has been shown to be related to the quality of parenting, it is important to understand how these factors (i.e. marital
conflict and parenting) interact together to influence the development of prosocial behavior in children. Research on this topic, however, has been extremely limited.

**Limitations of Previous Research**

Despite the wealth of literature on the effects of parenting on prosocial behaviors and of marital conflict on child adjustment, there is a lack of research exploring the relationship between marital conflict and prosocial behavior as well as potential mediators or moderators of this relationship. To date, we have identified only one article examining such a model. Using a sample of 235 two-parent families, McCoy and colleagues (2009) studied the relationship between constructive and destructive marital conflict, parental warmth and child emotional security, and child prosocial behaviors. They found that children’s emotional security mediated the relationship between both constructive and destructive marital conflict and prosocial behavior. Warm, responsive parenting, in contrast, was not found to mediate the relationship between either of the two marital conflict constructs and prosocial behavior. McCoy and colleagues’ study demonstrated that marital conflict, as a second order construct, was predictive of positive child outcomes. This relationship was also demonstrated longitudinally, increasing confidence in the direction of causality that has been theorized. McCoy and colleagues’ study also demonstrated that the process model of child outcomes may be a feasible model for understanding children’s prosocial behavior. Observational data was also used in assessing parental conflict, adding more objective measures to the assessment. While their lack of significant findings regarding parental warmth and responsiveness as a mediator of prosocial behavior seems to contradict previous findings, it does demonstrate the need for further understanding of parental warmth as a mediator of marital conflict and child outcomes.
One of the primary limitations of McCoy and colleagues’ (2009) findings was that no child reports were assessed at any level. The target population included families with children ages 5-7, thus the children in the sample lacked the reading skills necessary to complete self-report assessments. Additionally, warm parenting was assessed by a relatively brief scale and thus may not have fully assessed the meaning of warm parenting in the context of marital conflict. By employing a more mature sample and by obtaining self-report measures from both parents and children, the current study hopes to achieve a more objective assessment of processes occurring within the family, with a focus on clarifying the issue of gender differences described earlier.

The Current Study

The primary hypothesis of this study is that positive parenting strategies—including connection, autonomy granting, and regulation—will mediate the relationship between marital conflict and adolescent prosocial behavior. As described earlier, parenting is a key family process by which adults interact with their children and is thus one of the primary avenues through which distal factors impacting the family’s executive subsystem (i.e. the parents) influence the children. As a potential mediator, parenting is expected, in this study, to be the process through which the stress of marital conflict is transferred to children.

Specific hypotheses regarding relationships identified between variables are as follows: 1) marital conflict (reported by both mother and father) will be significantly and negatively associated with child prosocial behavior, 2) marital conflict will be significantly and negatively associated with parenting behaviors, 3) parenting behaviors as assessed by both mother and father report will be significantly and positively associated with child prosocial behavior, 4)
parenting behaviors (maternal and paternal) will mediate the relationship between marital conflict and child prosocial behavior (see Figure 1 for full hypothesized model).

Post hoc analysis is also proposed to identify gender-based differences in the strength and direction of path relationships between variables. Based on previous literature we anticipate that parents and children will report higher levels of prosocial behavior among girls (Eisenberg et al, 2006). These gender differences are likely to be the result of socialization processes that emphasize caring- and other-oriented behavior for girls, whereas boys are generally socialized to be more competitive and assertive (Witt, 1997). There is also some debate about whether or not gender differences persist. Some studies have found that while girls engage in more prosocial behaviors earlier in adolescence, boys catch up quickly and engage in similar levels of prosocial behavior by middle to late adolescence (Eisenberg, Carlo, Murphy, & Van Court, 1995; Eisenberg et al., 1991). Others have found that gender differences tend to be maintained through adolescence (Carlo, Crockett, Randall, & Roesch, 2007; Carlo, McGinley et al., 2007) and that these differences may persist into adulthood (Skoe et al., 2002). It should be noted that these gender differences tend to appear primarily in self-reports of prosocial behavior. Nevertheless, little is known about how these gender differences may manifest themselves in the presence of marital conflict and we are uncertain how boys’ and girls’ prosocial behavior may be impacted differently by marital conflict.

**Method**

**Participants**

The participants for this study were taken from wave 4 of the *Flourishing Families Project* (FFP), a longitudinal study of inner-family life. At Time 1, this study consisted of 500 (163 single parent and 337 two-parent) families, 93.8% of whom had complete data for Time 4.
(N = 469, 330 two-parent families and 139 single-parent families). Participant children averaged 14.3 years of age, while mothers averaged 46.2 years and fathers average 48.3 years in age. Given the emphasis in the current study on marital conflict as a predictor of child behavior, only two-parent families were included in analyses. Approximately 51% of children from two-parent families were female. The ethnicity of the sample was relatively homogenous: two hundred ninety-eight families were of European American decent, 56 were African American, with smaller numbers of Hispanic (1) and Asian American (4) families. Eighty-nine families are categorized as multi-ethnic, based on a combination of two or more ethnicities among family members. In terms of parental education, 60.9% of mothers and approximately 69.7% of fathers had a bachelor’s degree or higher. Related to yearly family income, 18.2% of families reported making less than $59,000; 28.5% reported income in the $60,000-99,000 range; 32.1% reported income in the $100,000-149,000, with another 21.2% making $150,000 or more per year. Just under ninety-seven percent of two-parent families were currently married (never divorced).

Procedure

Participant families for the FFP were selected from a large northwestern city and were interviewed during the first eight months of 2007 for Time 1. Follow-up interviews were conducted at one-year intervals through the summer of 2010. Families were primarily recruited using a purchased national telephone survey database (Polk Directories/InfoUSA). This database claimed to contain 82 million households across the United States and had detailed information about each household, including presence and age of children. Families identified using the Polk Directory were randomly selected from targeted census tracts that mirrored the socio-economic and racial stratification of reports of local school districts. All families with a child between the ages of 10 and 14 living within target census tracts were deemed eligible to participate in the
Of the 692 eligible families contacted, 423 agreed to participate, resulting in a 61% response rate. However, the Polk Directory national database was generated using telephone, magazine, and internet subscription reports; so families of lower socio-economic status were under-represented. Therefore, in an attempt to more closely mirror the demographics of the local area, a limited number of families were recruited into the study through other means (e.g., referrals, fliers; \( n = 77, 15\% \)). By broadening our approach, we were able to significantly increase the social-economic and ethnic diversity of the sample.

All families were contacted directly using a multi-stage recruitment protocol. First, a letter of introduction was sent to potentially eligible families (this step was skipped for the 15 families who responded to fliers). Second, interviewers made home visits and phone calls to confirm eligibility and willingness to participate in the study. Once eligibility and consent were established, interviewers made an appointment to come to the family’s home to conduct an assessment interview that included video-taped interactions (not used in the current study), as well as questionnaires that were completed in the home. The most frequent reasons cited by families for not wanting to participate in the study were lack of time and concerns about privacy. It is important to note that there were very little missing data. As interviewers collected each segment of the in-home interview, questionnaires were screened for missing answers and double marking.

**Measures**

**Child prosocial behaviors.** Children’s prosocial behavior was assessed during Time 4 using a modified version of Inventory of Strengths: Kindness/Generosity and Prosocial Behaviors (Peterson & Seligman, 2004). The measure assesses prosocial behavior directed toward family members and consists of 9 items. Parents and children responded to this measure
based on a 5-point Likert-type scale, ranging from 1 (not like me at all) to 5 (very much like me) in terms of how much they disagreed or agreed with statements about themselves. Sample statements included “I help my family, even if it is not easy for me,” and “I enjoy being kind to members of my family” (wording was changed for appropriate use by parents). Higher scores indicate greater levels of kindness and generosity toward family members. A Cronbach’s Alpha coefficient of .70 was found for the original measure (Peterson & Seligman, 2004). Reliabilities (Cronbach’s alpha) were found to be .912 (child), .917 (P1), and .922 (P2) for the current research sample.

**Marital conflict.** Marital conflict was assessed at Time 4. Parents responded to eight common problems experienced in couple relationships in terms of how often each item is a problem. Items were selected from the RELATE assessment battery (Busby, Holman, Taniguchi, 2001), including items such as, “rearing children,” “roles (Who does what)” and “financial matters.” Responses were based on a 5-point Likert scale ranging from 1 (never) to 5 (very often). Previous reliability (Busby, Holman, Taniguchi, 2001) for this measure was found to be .80 (males) and .83 (females). The reliability for this sample (Cronbach’s Alpha) was found to be .746 (P1) and .763 (P2).

**Parenting behavior.** Parents responded to 15-items at Time 4 assessing three separate aspects of positive parenting: autonomy granting, regulation, and connection. Each subscale consists of five items each based on a five point Likert-type scale ranging from 1 (never) to 5 (always). Higher scores indicate higher levels of the specific dimensions of parenting behavior. Sample questions in response to the statement “how often do you do the following?” included “Encourage my child to talk about his/her troubles” (regulation dimension), “Give comfort and understanding when my child is upset” (connection dimension), and “Encourage my child to
freely express themselves even when disagreeing with us” (autonomy granting dimension). In the current sample, Cronbach’s alpha reliability coefficients for the three subscales range from .759 to .857 for P1 and from .769 to .860 for P2. Items were drawn from the Parenting Styles and Dimensions Questionnaire-Short Version (PSDQ; Robinson, Mandleco, Olsen, & Hart, 2001).

**Proposed Data Analyses**

Initial data analyses will include bi-variate correlations among study variables and mean difference tests (T-tests) of study variables on the basis of child gender. Results from these tests, along with means and standard deviations, will be presented prior to examination of the hypothesized model (see Figure 1). The relationships between marital conflict, parenting behaviors, and child prosocial outcomes will then be explored through structural equation modeling using AMOS 17.0 (Arbuckle, 2003).

Several parameters will be estimated in examining the marital conflict model including (a) path coefficients between marital conflict variables and parenting variable; (b) path coefficients between marital conflict variables and the outcome variable (prosocial behavior); and (c) coefficients between parenting variables and the outcome variable. The hypothesized model will first be examined controlling for family SES, child age, and family ethnicity. When the model is determined to be parsimonious and viable, group comparison analyses will be conducted to determine whether the model and, more specifically, the path coefficients differed by child gender. Group comparisons following the procedure set out by Bollen (1989) will fit the data separately for each group using a chi-square difference test to examine the question of group equivalence. This is done by first establishing a “baseline” or unconstrained model, referred to as “hypothesis of form” or “H-form”, in which all parameters are unconstrained. Using H-form as a comparison, the model will be run again with the path coefficients constrained to be invariant
between groups and the chi-squares for the two models will be compared. If the chi-square difference test is found to be significant, this indicates a group difference (e.g., males versus females) in the nature of the relationships between marital conflict, parenting behaviors, and child prosocial behavior.

**Results**

Means and standard deviations as well as gender differences (using independent sample T-tests) comparing boys and girls for all study variables are presented in Table 1. Gender differences were found only in youth self-reports of prosocial behavior with girls reporting higher levels of prosocial behavior ($t = 3.04$, $p < 0.05$) although parent reports of prosocial behavior indicating higher levels among girls were approaching significance. Bivariate correlations were also calculated among the marital, parenting, and prosocial behavior variables for boys and girls (see Table 2). Correlations between parenting measures and youth prosocial behavior measures were found to be significant and in the expected direction for boys. For girls, all parenting measures were found to be significantly correlated with youth self-report of prosocial behavior. However, only parental connection was also found to be significantly correlated to parental reports of daughters’ prosocial behavior. Maternal report of marital conflict was significantly related to both maternal and paternal reports of girls’ prosocial behavior ($r = -0.181$, $p < 0.05$; $r = -0.258$, $p < 0.01$, respectively) but not youth self-reports. Paternal report of marital conflict was significantly related to maternal report of youth prosocial behavior ($r = -0.173$, $p < 0.05$) but not to paternal or youth self-report of prosocial behavior. Maternal reports of marital conflict were significantly and negatively correlated with paternal reports of parenting for girls but were not significantly correlated with any parenting measures for boys. Paternal reports of
marital conflict were significantly related to parental connection for boys and with paternal connection and regulation for girls.

**Structural Equation Analysis**

Structural equation modeling was used to analyze pathway relationships between the exogenous and endogenous variables. Preliminary analysis showed that the control variables, youth age, family ethnicity, and SES, were not found to be statistically significant in relation to youth prosocial behavior and were, consequently, dropped from the model to allow for greater parsimony. Allowing for the statistical bias associated with chi-square analyses using large samples, fit indices for the unconstrained model were within professional standards, \(X^2 = 175.2, \text{ df} = 75, p < .001\), with CMIN/DF = 1.8 (below the recommended 2.0 limit, Carmines and McIver (1981)), with CFI = .95 (above the .90 minimum) and RMSEA = .05 (equal to the .05 standard). As such, a good fit was found for the complete model (see Figure 2), with roughly a fourth of the variance in youth prosocial behavior explained \(R^2 = .24\).

**Group Comparisons**

Following the procedure set out by Bollen (1989), group comparisons were examined by fitting the data separately for each group and then by using a chi-square difference test to examine the question of group equivalence. This was done by first establishing a “baseline” or unconstrained model, in which all parameters are unconstrained. Using the unconstrained model as comparison, the model was run again with the path coefficients constrained to be invariant between gender groups, and the chi-squares for the two models were compared. As reported above, relevant findings for the unconstrained model were \(X^2 = 329.8, \text{ df} = 196, p < .001\), while the findings for the constrained model (with path coefficients assumed to be invariant) were
\( X^2 = 336.1, df = 206, p < .001. \) The Chi-square difference test was not found to be significant (\( \Delta X^2 = 6.3, \Delta df = 8, p = .616 \)), indicating that the model fit equally well for boys and girls. No further group comparison analyses were performed.

**Direct and Indirect (Mediating) Relationships**

Based on structural equation analyses, it appeared that there were two variables acting as mediators: maternal and paternal connection. Using the Sobel test for mediation, both maternal and paternal connection mediated the relationship between marital conflict and child prosocial behavior (Sobel test for maternal = -2.43, \( p < .05 \); Sobel test for paternal = -2.29 \( p < .05 \)). These results suggest that an indirect relationship exists between marital conflict and youth prosocial behavior through parental connection.

We also tested the model to determine if a direct relationship existed between marital conflict and youth prosocial behavior by setting the values between marital conflict variables and parenting variables to zero. However, when these path values were changed the regression coefficients for the relationships between marital conflict and child prosocial behavior failed to increase to the point of significance suggesting that despite the indirect effect present through parenting, there is no direct relationship between marital conflict and youth prosocial behavior.

In summary, several relationships were found to be significant based on the above structural analysis, including the following: (a) maternal marital conflict predicted maternal connection, (b) paternal marital conflict predicted paternal parenting (connection, regulation, and autonomy granting), (c) maternal connection predicted youth prosocial behavior, (d) paternal connection predicted youth prosocial behavior, and (e) parental connection in both mothers and fathers mediated the relationship between marital conflict and youth prosocial behavior.
Discussion

The hypotheses of this study were partially supported. Fathers’ reports of marital conflict were negatively associated with all three paternal parenting constructs. Mothers’ reports of marital conflict, however, were only associated with maternal connection. In relation to the parenting variables, connection (both maternal and paternal) was significantly related to youth prosocial behavior and served as a mediator between marital conflict and child prosocial outcomes. Interestingly, however, neither regulation nor autonomy granting were found to be significantly related to child prosocial behavior contrary to our hypotheses. We also failed to identify significant gender differences in the overall model.

The finding that parental connection is related to youth prosocial outcomes is consistent with previous findings (Eberly & Montemayor, 1998, 1999; Frosch & Mandelsdorf, 2001; McCoy et al., 2009). Eberly et al. (1993) similarly reported that children whose parents are more involved demonstrate greater levels of prosocial behavior. McCoy et al. (2009) also found that parental warmth predicted child prosocial behavior in the presence of destructive marital conflict. However, McCoy and colleagues did not find that parental warmth and connection mediated the relationship between marital conflict and child prosocial behavior although it was a strong predictor of prosocial outcomes. Frosch and Mangelsdorf (2001) additionally found that warm, supportive parenting seemed to buffer young children from the negative effects of marital conflict. Children whose parents are warm and nurturing have also been found to have greater academic achievement, social competence, and problem solving skills, as well as better mental and emotional health in terms of self-esteem and self-reliance (Barnes & Farrell, 1992; Beveridge & Berg, 2007; Bradford et al., 2003; Jackson et al., 2005).
For the children in our sample, having a strong connection with parents appears to be a good predictor of prosocial outcomes. From an attachment theory perspective, having a strong parent-child relationship is necessary in order to establish a “secure base” from which children are able to explore the world around them as well as a “safe haven” to return to when struggling (Ainsworth, Blehar, Waters, & Wall 1978). When a child experiences that feeling of connection with a secure parental figure then that child may be less likely to perceive their parents’ conflict as directly threatening to their own welfare thus freeing up mental and emotional resources making it more likely that the child will invest time and energy into activities that benefit others (Eberly & Montemayor, 1999). Indeed, children’s perceptions of parental acceptance have been linked with parental ratings of adolescent helpfulness supporting our finding that parent-child connection significantly predicts child prosocial behavior (Eberly et al., 1993).

However, other positive parenting constructs (autonomy granting and regulation) were not significantly related to prosocial outcomes. This finding is not especially surprising. Previous studies have shown that parenting behaviors that promote sympathy and the internalization of parental prosocial values are more effective at encouraging prosocial behavior in children than other parenting strategies such as material rewards, parental demands, or discussions about moral and ethical behavior (Carlo, McGinley et al, 2007; Grusec & Goodnow, 1994). Though beneficial in other areas, allowing democratic participation in family life (autonomy granting) or helping the child reason about his or her actions (regulation) do not appear to be parenting behaviors that promote moral emotions such as sympathy in the same manner as parental warmth and connection. Autonomy granting, for example, has been found to promote children’s self-confidence and sense of independence (Silk et al., 2003). This developmental task, while important to success in later in life, promotes children’s separateness from the family and others
and emphasizes individual self-reliance. Similarly, regulation emphasizes processes internal to the child (i.e. reasoning and self-awareness) that promote individual competence and self-efficacy. In contrast, parent-child connection may emphasizes the inter-relatedness of individuals, especially family members, as well as the child’s reliance on others for physical and emotional support, security, and growth (Carlo, McGinley et al, 2007). In this way, parent-child connection may help to create a positive, connective orientation toward others. Parent-child connection may also model prosocial behaviors and attitudes toward others and serve as a vehicle for the development of empathy and sympathy.

It was surprising, however, to find that marital conflict did not directly impact child prosocial behavior even when parenting was removed from the structural equation analyses but operated solely through parenting. This finding lends some support to what has become known as the spillover hypothesis. Originally applied in family science to refer to the impact of the work environment and stresses on the home environment (and vice versa), the spillover effect has been described as experiences that are generalized or transferred in some manner between two domains (e.g. work and home; Edwards & Rothbard, 2000). When marital conflict exists in a family, the conflict and tension between parents may spill over into the parent-child relationship compromising positive parenting, especially parent-child connection. The mechanism of this spillover may be the parents’ emotional state or mood. When parents engage in marital conflict they may be less likely to respond to their children’s emotional needs with patience and understanding but rather respond harshly or begin to detach emotionally. Other research has found that negative moods originating in the workplace tend to disrupt family relationships by interfering with the performance of family roles which in turn lead to lower family life satisfaction (Barling & MacEwen, 1992; Nolen-Hoeksema, Parker, & Larson, 1994). It is
possible that, in the current sample, parents who experience greater levels of marital conflict may similarly carry their bad moods over into their interactions with their children leading to poorer parent-child connection and lower levels of prosocial behavior.

The finding that both mothers’ and fathers’ reports of marital conflict predicted lower levels of positive parenting is consistent with previous research (Erel & Burman 1995; Grych & Fincham, 1990). However, it was very interesting to find that while mothers’ reports of marital conflict only predicted lower levels of maternal connection, fathers’ reports of marital conflict was associated with significant decreases in all three areas of parenting. While the association between mothers’ marital conflict and maternal connection may signal a spillover of negative mood, the decrease in all areas of father’s parenting may signal a general retreat from family life for men in high conflict marriages. Physiological studies of marital conflict have shown that men tend to become more easily emotionally aroused and overwhelmed than their wives, a process known as “flooding” (Carrère & Gottman, 1999). When men become emotionally flooded during marital arguments they tend to become emotionally withdrawn and isolated, leading to a greater risk of marital dissolution. The current findings seem to suggest that men who are overwhelmed emotionally by marital conflict may not only withdraw from their marriage relationships but from positive interactions with their children as well. This possibility becomes worrisome when considering the fact that fathering has been found to uniquely contribute to child outcomes, especially in protecting against internalizing and externalizing problems and promoting social initiative (Day & Padilla-Walker, 2009; Lamb, 2004; Stolz, Barber, & Olsen, 2005).

Despite the presence of an indirect effect through parenting, the lack of a direct relationship between marital conflict (maternal/paternal reports) and children’s prosocial behavior is unexpected given previous findings supporting such a relationship (e.g., McCoy et al,
It may be that our current sample may include such low levels of variability in marital conflict that we are not able to detect any significant relationships between marital conflict and child level constructs. Given that our sample was drawn from a non-clinical community population, it is possible that the families in this study are higher functioning and do not experience as broad a range of conflict as other potential samples (e.g. clinical samples). Other studies using the same measure have reported similar means and distributions when employing community samples (Busby & Holman, 2009). However, few, if any, measures of marital conflict have been sufficiently standardized making it difficult for us to compare the distribution of our marital conflict scores with those found in other studies. Additionally, this measure has not been used previously as a predictor of child prosocial outcomes. It is possible that there may be a stronger relationship between marital conflict and positive child outcomes but that this measure is simply a poor predictor of them.

It may also be possible that parenting, in this case, is acting as a moderator of marital conflict, a model that has produced mixed results (Cui & Conger, 2008; Frosch & Mangelsdorf, 2001). It is possible that despite the presence of marital conflict, parents are able to remain warm and supportive, thus buffering their children from the negative effects of marital conflict. Again, if the current sample is generally high functioning, most parents could be shielding their children from the negative effects of marital conflict by working hard to connect and stay connected to them. However, testing for moderation is beyond the scope of this study and will need to be addressed in future research.

The gender differences that were identified were modest at best. Girls’ self-reports of prosocial behavior were slightly higher than boys’ self-reports, a finding that has been replicated in the past (Carlo, Crockett et al., 2007; Carlo, McGinley et al., 2007; Eberly & Montemayor,
1998; 1999). It should be noted, however, that some research suggests that gender differences are primarily an artifact of survey data and that gender differences tend to be eliminated when observational methods of assessing behavior are used in favor of self-report measures (Eisenberg et al., 2006). It is interesting to note that the only significant gender differences which we found were based on child self-reports. Because girls are socialized to be more empathic and other-oriented they may tend to self-identify more readily with descriptions of prosocial behavior (Eisenberg et al., 2006). The future use of observational measurement of prosocial behavior may eliminate this self-identification bias and lead to a better understanding of gender differences in prosocial behavior.

**Clinical Implications**

Our findings demonstrate and confirm that maintaining a strong parent-child relationship is important for promoting prosocial outcomes in children. When there are high levels of marital conflict it is likely that there will be some level of impact on the parents’ relationships with their children. In the presence of such conflict it is important for parents to remain connected with their children and to maintain a positive relationship with them. If marital conflict is allowed to impact how parents interact with their children then there may likely be a negative impact on children’s prosocial development. Thus when working with distressed couples, especially when levels of marital conflict are high, it may be beneficial to regularly assess family dynamics especially parent-child connections in order to help protect against a negative impact on children’s behavior.

Of particular clinical interest is the fact that fathers’ parenting was more compromised by marital conflict than mothers’ parenting. Because fathering has been found to be unique in terms of its contribution to the socialization and development of children (Day & Padilla-Walker,
2009; Lamb, 2004; Stolz et al., 2005) clinicians and other service providers would do well to pay particular attention to keeping fathers in high conflict marriages engaged with their children in order to prevent further risks to the family system. Attachment based family therapy treatments such as Emotionally Focused Family Therapy (EFFT) may be one way of helping fathers remain engaged with their families. By eliciting and identifying the children’s attachment needs and helping fathers work through their own emotional barriers to serving those needs, EFFT clinicians may be able to help fathers be more connected with their children and prevent future risks in their children’s lives. Other approaches such as Theraplay or Filial Therapy also serve to help parents become more engaged with their children as well as to provide appropriate structure and nurturing. Such therapy modalities could help fathers to see that they do serve a crucial role in the lives of their children and be a motivator to remain actively involved.

Limitations

The findings of the current study must be considered in light of its limitations. First, cross-sectional data was used in all analyses. Despite the advantages of SEM, it remains difficult to fully determine causation. Further research using longitudinal data over longer periods of time is needed in order to better understand the growth and development of prosocial behavior and how it may be impacted directly and indirectly by family-level factors (e.g., parenting, marital conflict, etc.) and external factors (e.g. peer associations and school environments).

Second, it may be possible that constructs such as prosocial behavior are generally stable across adolescence, as has been suggested by some research (Eisenberg et al, 1995; Carlo, Crockett et al., 2007). If this is the case then it may be difficult to find significant relationships between prosocial behavior and other constructs which may be more sensitive to other family and general life circumstances. Further research on family-level predictors of prosocial behavior
is needed in order to better understand how family dynamics influence this and other positive outcomes.

It is also possible that as a community sample of generally healthy couples and families, our data may not contain enough variability in marital conflict to establish strong linear relationships with prosocial behavior. Although the full range of scores was reported in the sample, a simple study of the central tendencies of our sample suggests that the majority of parents reported levels of conflict, on average, between 2 and 3 (rarely and sometimes) on our measure or marital conflict. If a direct relationship truly exists between marital conflict and child prosocial behavior, then a more heterogeneous sample and a more sensitive instrument may be needed in order to yield significant results.

Fourth, the measure of prosocial behavior used in this study focused solely on prosocial behavior within the family (i.e. where the target of the helping behavior was a family member). Our findings, therefore, do not indicate if or how marital conflict and parenting may be related to children’s prosocial behavior when the target is a friend, peer, or stranger. Further research is needed to tease out the differences between what influences prosocial behavior toward different targets.

Despite these limitations, the findings of this study do add to the body of literature describing the relationship between marital conflict and children’s positive outcomes. Little has been described previously regarding this relationship. We have identified one aspect of parenting, namely parental connection, which has previously been associated with beneficial outcomes and have shown that it may be impacted by other family level stressors, namely marital conflict. Further research is needed in order to better understand these relationships and how they function in the broader context of family relations.
References


Appendix A

Table 1

*Means (Standard Deviations) for Marital, Parenting, and Youth Variables*

<table>
<thead>
<tr>
<th></th>
<th>Girls (n= 169)</th>
<th>Boys (n= 156)</th>
<th>T-tests</th>
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<tr>
<td>Marital Conflict (maternal)</td>
<td>2.38 (.56)</td>
<td>2.39 (.49)</td>
<td>t = -.162</td>
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<tr>
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<td>2.39 (.54)</td>
<td>2.38 (.52)</td>
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<td>Maternal Connection</td>
<td>4.26 (.50)</td>
<td>4.21 (.48)</td>
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<td>Maternal Regulation</td>
<td>3.94 (.70)</td>
<td>3.98 (.62)</td>
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</tr>
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<td>3.77 (.56)</td>
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<td>4.08 (.71)</td>
<td>3.82 (.84)</td>
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*Note: *p < 0.05.*
Table 2

*Bivariate Correlations among Marital, Parenting, and Youth Variables*

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<th>MC2</th>
<th>C1</th>
<th>C2</th>
<th>R1</th>
<th>R2</th>
<th>A1</th>
<th>A2</th>
<th>PBY</th>
<th>PB1</th>
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<td>.41**</td>
<td>.40**</td>
<td>.70**</td>
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*Note: correlations for girls are above diagonal, boys below diagonal
*p< 0.05. **p<0.01.*
Figure 1. Hypothesized Full Model
Figure 2. Structural Model of Prosocial Behavior

Notes: *p < .01; **p < .001; $X^2 (75, N = 330) = 175.2$, $p < .001$, CMIN/DF = 1.8, CFI = .95, RMSEA = .05