THESIS

CONFLICT APPRAISALS AS A MEDIATOR OF THE ASSOCIATION BETWEEN MARITAL CONFLICT AND RUMINATION IN ADOLESCENTS

Submitted by

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ABSTRACT

CONFLICT APPRAISALS AS A MEDIATOR OF THE ASSOCIATION BETWEEN MARITAL CONFLICT AND RUMINATION IN ADOLESCENTS

A large number of studies have demonstrated that exposure to marital conflict negatively impacts children. Rumination is a cognitive process of children to such exposure that has been found to lead to both internalizing and externalizing behaviors, and may be linked to exposure to marital conflict. In this thesis, I examined whether marital conflict is related to rumination, and whether this association is mediated by adolescent conflict appraisals of marital conflict. One hundred and fifty-three adolescents (ages 11-17) reported on conflict appraisals surrounding marital conflict and cognitive coping strategies. Marital conflict was assessed via parent-report with a partnership questionnaire measuring intensity, frequency, and hostility of parental conflict. Results indicated that marital conflict was related to greater rumination about negative events.

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Introduction

Children raised in high-conflict homes experience long-lasting negative effects such as poor emotional regulation, depressive symptoms, and externalizing behaviors such as emotional outbursts (Cummings & Davies, 2002; Cummings & Cummings, 1988; Ballard, Cummings, & Larkin, 1993). There has been a noticeable change in the field over the past two decades away from investigating the negative outcomes linked to marital conflict toward investigating mediating and moderating variables that play a role in this pathway (Cummings, 1988; Emery, 1982; El-Shiekh, 2001). Theoretically, these negative effects may include chronic worry and thoughts about the negative events of conflict being experienced. As of yet there is no evidence linking marital conflict to this process more formally known as rumination. A ruminative response style is defined as thinking repetitively and passively about negative emotions, focusing on symptoms of distress and worrying about the managing of that distress (Nolan-Hoeksema, 2000). Rumination has been found to cause episodes of depression and anxiety (Just & Alloy, 1997; Roberts, Gilboa, & Gotlib, 1998); as ruminators continue to ruminate, symptoms of depression and anxiety seem to get worse (Nolan-Hoeksema, 2000). In addition, a mediator that the cognitive-contextual framework theory suggests may be particularly important in terms of explaining the effects of conflict on youth is cognitive conflict appraisals. Appraisals have consistently been supported as a mediator of the link between marital conflict and negative psychological outcomes for children (Grych & Fincham, 1990; Grych, Seid, & Fincham, 1992). Therefore, in this study I will examine whether marital conflict is related to rumination and also whether cognitive appraisals mediate this association.

Marital Conflict and Rumination

Marital conflict may predict negative mental health outcomes because of the increased emotional and cognitive stressors associated with coping with conflict (Cummings, Goeke-

Morey, & Papp, 2003). As children adjust and cope with high levels of marital conflict, the emotional and cognitive stress may become a problem. Furthermore, the cognitive processes involved in coping with conflict such as regulation, self-monitoring, interpretation, and threat appraisal may determine what outcomes occur especially for adolescents (Garnefski, Kraaij, & van Etten, 2005). Broadly, when positive cognitive emotional regulation strategies such as acceptance, positive refocusing, and perspective taking are used effectively, adolescents show lower internalizing problem behaviors such as self-blame and rumination (Garnefski, Kraaij, & van Etten, 2005). Of concern for the present study is rumination in particular, which is a cognitive coping strategy in which children cycle through periods of focus on negative events.

Marital conflict may predict higher levels of rumination for three main reasons. First, marital conflict has been shown to reduce levels of effective coping behaviors and strategies in adolescents (O'Brien, Bahadur, Gee, & Balto, 1997). This increase in maladaptive coping has been seen in multiple studies. Three problematic strategies commonly recognized in the cognitive emotional regulation literature are: distancing, involvement in conflict, and using distraction; each of which threaten emotional security and increase risk of developing maladaptive coping strategies (Garnefski, Kraaij, & van Etten, 2005; O'Brien, Bahadur, Gee, & Balto, 1997; Spasojević & Alloy, 2001). When involved in any way in conflict a child's sense of security is reduced, his/her emotional regulation is challenged, and the risk of maladaptive coping mechanisms increases (Cummings et al., 2003; Goeke-Morey et al., 2003). Threats to emotional security may create patterns of perseverative worry about events or actions that may occur. These patterns may then generalize and create maladaptive coping strategies in circumstances other than conflict alone (Davies & Cummings, 1994; Garnefski, Kraaij, & van Etten, 2005). These studies reflect how exposure to marital conflict can create multiple types of

maladaptive cognitions and behaviors in children; however, a clear link to rumination has not yet been shown.

Secondly, parent conflict has been known to spillover in parent child relationships (Stevenson et al., 2014; Liang et al., 2013). Rumination has been shown to be more common among children in conflictual parent-child relationships (Lamis & Jahn, 2013). Family systems theory research posits that marital conflict spillover into parent-child relationships can create poor outcomes based on the reaction to relational conflict (Stevenson et al., 2014; Liang et al., 2013). Furthermore, marital and parent-child relationship quality have been found to be strongly positively linked (Erel & Burman, 1995). Therefore, children exposed to parent-parent conflict may be more likely to develop ruminative patterns.

Third, children exposed to marital conflict frequently display elevated depressive symptoms (Spasojević & Alloy, 2001). There is evidence to suggest that rumination is related to depressive symptoms. More specifically, there is evidence that rumination is a mechanism that explains why experiencing negative life events predicts generalized depressive episodes (Spasojević & Alloy, 2001). Based on the reviewed literature, there are empirical and theoretical reasons to expect that marital conflict predicts greater ruminination in youth. There is, however, a gap in this understanding around whether marital conflict is related to the increased likelihood of rumination directly. One goal of this study was to examine whether marital conflict is related to rumination in adolescents.

Though the frequency, intensity, and hostility of marital conflict is seen as very central in the literature, resolution has also been cited as being important (Grych & Fincham, 1990).

Resolution of marital conflict has been found to positively impact coping strategies in children (Grych et al., 2000). The current study will consider both important dimensions of parental

conflictual interactions. Marital conflict and resolution will be considered separately in relation to rumination because though marital conflict can have very negative effects on children, resolution of conflict can significantly reduce the negative impact on children, including intense emotional conflict (Siffert & Schwarz, 2011).

Theoretical Perspectives: Why Marital Conflict Predicts Negative Youth Outcomes

The two most well-regarded theories that explain how marital conflict is related to poor mental health outcomes are the emotional security hypothesis and the cognitive-contextual framework. The emotional security hypothesis focuses primarily on the emotions and feelings around safety in relation to marital conflict (Davies & Cummings, 1994). The cognitive-contextual framework emphasizes the role of child appraisals about marital conflict and their role in adjustment (Grych & Fincham, 1990). Because of the focus in the current study on adolescents, who have more advanced cognitive capabilities than children (Garnefski, Kraaij, & van Etten, 2005), focusing on cognitive appraisals as a potential mediator of the effects of marital conflict on rumination was most appropriate. Adolescence may be a developmental period in which there is more sensitivity to environmental stressors and negative life events because of continual physiological changes in the body and brain (Peterson et al., 1988). This time period seems most appropriate to study rather than others, such as childhood, because with increased susceptibility to stress interventions may be in higher demand in adolescence more so than childhood (Bickham & Fiese, 1997; Reese-Weber & Hesson-McInnis, 2008).

The Cognitive-Contextual Framework. The cognitive-contextual framework proposes that children's perceptions and interpretations of interparental conflict play a central role in determining the impact of conflict on their adjustment (Grych & Fincham, 1990). Cognitive appraisals are the direct and intuitive evaluations made about the environment in reference to

one's personal well-being (Lazarus & Folkman, 1984). Cognitive appraisals are a personal interpretation; it is how an individual views a situation. There are three dimensions of cognitive appraisals which are often related to child outcomes (Grych et al., 2000). These dimensions are: *Conflict Properties* (frequency, intensity, and resolution of the conflict), *Threat* (how threatened by the conflict children feel and how capable to cope with it they feel), and *Self-blame* (content of the conflict – i.e., whether it's child-centered — and feelings of self-blame for the conflict) (Grych, Seid, & Fincham, 1992).

Research consistently suggests links between marital conflict and conflict appraisals.

Self-blame, a troublesome cognitive appraisal, is common among children in high conflict homes (Dadds et al., 1999; Grych, Harold, & Miles, 2003). In addition, Grych and Fincham (1993) found multiple types of parental conflict, in content and style, to all illicit negative conflict appraisals in children. Conflicts that are frequent, hostile, poorly resolved, and child-oriented are predicted to be more likely to be perceived as threatening and elicit self-blame and chronic worry. When the content of the argument did not pertain to the child, worry, threat, and distress were commonly found. When the content of a conflict did pertain to the child, self-blame, anger, sadness, and shame were more commonly found in children (Grych & Fincham, 1993).

In addition, how an adolescent appraises any type of negative life event is important in determining what immediate effect that event has on himself or herself. Cognitions that might be most common in predicting negative outcomes are the degree to which an adolescent feels threatened by the conflict, has feelings of blame for the conflict, and feels unable to cope and self-regulate in response to the conflict (Grych & Fincham, 1990, 1993; Grych, Seid, & Fincham, 1992). Children who see the conflict as highly threatening and demonstrate higher levels of self-blame tend to have the highest rates of emotional reactions (Grych, & Fincham,

1993). In addition, Grych, Harold, & Miles (2003) found negative cognitive appraisals of conflict to be positively associated with feelings of helplessness and anxiety. However, feelings of confidence and a positive appraisal of self seems to allow children to decrease distress around conflict (Bandura, 1986).

There is also evidence that appraisals are related to chronic mental and emotional problems. If conflict is frequent, these appraisals are believed to increase children's risk for developing internalizing problems, such as rumination, poor coping, and cognitive dysregulation (Grych & Fincham, 1990; Grych et al., 2000). Furthermore, when the interpretation, or appraisal, of conflict for a child is most often anxiety provoking, negative perceptions became typical for a child, and rumination can likely be predicted (Garnefski et al., 2005). Based on these lines of evidence, it is likely that conflict appraisals may link marital conflict and rumination; however, we do not yet know whether conflict appraisals predict rumination, and whether this connection explains why marital conflict is related to rumination.

The Current Study

In the proposed study, I will examine associations between marital conflict, cognitive appraisals, and rumination. Based on the literature reviewed, I hypothesized that marital conflict would be related to greater rumination about negative events. In addition, I hypothesize that cognitive appraisals mediate the association between exposure to high levels of marital conflict and rumination (figure 1).

Method

Participants

Participants were 153 adolescents from 10-17 years of age (M = 12.92, SD = 2.16) from 98 families. This sample was approximately equal in terms of males and females (52% female). Families with a step-parent were included only if the adults had been married or cohabitating for at least two years (length of relationship M = 15.64, SD = 5.86). For 78% (n = 120), their parents had been married or cohabitating for their entire lives (75 families).

Recruitment was carried out in order to guarantee some variation in ethnicity, socioeconomic status, and living conditions. Local papers and classifieds were used; ads were placed in local magazines and church bulletins. The ethnicity of the adolescents was: non-Hispanic Caucasian (49%), mixed ethnicities (26%), and African American (17%); the final 7% were Asian Americans, American Indian, and Hispanic. In addition, yearly family income ranged from \$3375 to \$450000 (*Median* = \$67750, *SD* \$63879.39). In terms of parent education, on average, both mothers and fathers had completed an Associate's Degree. For mothers, most had completed some college (51%); less frequent was mothers who had obtained less than a college degree (11%) or more than a college degree (24%). For fathers, most had some level of college experience (59%), 20% had less no college experience, and some had more than a bachelor's degree (21%).

Procedure

Families participated in a larger study on family relationships and stress responding in adolescence; only the procedures relevant to the current study are discussed here. As the visits required the presence of the child and both parents, they were primarily scheduled in the summer, evenings, or weekends. All visits were scheduled in the evening to control for diurnal

patterns in cortisol (which was part of the larger research study). After giving informed consent, children and parents were taken to separate, quiet rooms to complete the visit. After participating in tasks not related to the current study, parents and adolescents filled out questionnaires using Audio Computer Assisted Self Interview (ACASI) software that read the questions and answers to participants.

Measures

Marital conflict. Parents first answered the Conflict subscale from the Braiker-Kelly Partnership Questionnaire (Braiker & Kelly, 1979); this subscale measures frequency and intensity of conflict with five questions (e.g., "How often do you and your partner argue with one another," "When you and your partner argue, how serious are the problems or arguments"). Responses are rated on a 9-point scale from "not at all" to "very much." Conflict scores were created as a representation of the mean of each participant's responses to these questions (Mothers: Cronbach's alpha: .82; Fathers, Cronbach's alpha: .76).

Parents then rated how each of the 13-item Kerig Conflict and Problem-Solving Scale (Kerig, 1996) described the resolution of their disagreements. Answer choices are "Never," "Rarely," "Sometimes," and "Usually." The resolutions range from highly positive to highly negative, and are proportionally weighted accordingly. Using the full scale, Kerig (1996) demonstrated adequate test-retest reliability and agreement between husbands and wives, as well convergent and discriminant validity of this scale.

Marital conflict and resolution were examined separately in terms of their relation to rumination and conflict appraisals. For each, the average of mothers and fathers scores was calculated and used in the analyses.

Rumination. Cognitive coping strategies in children were assessed with the Cognitive Emotion Regulation Questionnaire (CERQ; Garnefski, Kraaij, & Spinhoven, 2001). The CERQ was used for adolescents 12 and older; the kids version (CERQ-k; Garnefski, Rieffe, Jellesman, Terwogt, & Kraaij, 2007) was used for younger children. Both measures are reliable and valid (Garnefski et al., 2007). The CERQ and CERQ-k assess what children think after the experience of negative life events. There are nine subscales; each item is rated from "(almost) never" to "(almost) always." The subscales are: a) refocus on planning; b) rumination; c) putting into perspective; d) catastrophizing; e) positive refocusing; f) positive reappraisal; g) acceptance; h) self-blame; and, i) other blame. For the purposes of the current study, I only examined the rumination subscale (e.g., "I am preoccupied with what I think and feel about what I have experienced"; Cronbach's alpha = .98).

Conflict appraisals. The Children's Perception of Interparental Conflict Scale (CPIC) was used to measure youth conflict appraisals, including self-blame, threat, coping efficacy, and perceived stability of the causes of conflicts. The CPIC is a valid, reliable and internally consistent measure of interparental conflict (Grych et al., 1992) that has also been validated for childhood and adolescence (Grych et al., 1992; Bickham & Fiese, 1997; Reese-Weber & Hesson-McInnis, 2008). The CPIC is a 49-item questionnaire that assesses nine dimensions of interparental conflict: frequency (e.g., "They may not think I know it, but my parents argue or disagree a lot"), intensity (e.g., "My parents get really mad when they argue"), resolution (e.g., "When my parents have an argument, they usually work it out"), threat (e.g., "When my parents argue I worry about what will happen to me"), coping efficacy (e.g., "When my parents argue I can do something to make myself feel better"), content (child or non-child related; e.g., "My parents' arguments are usually about something that I did"), stability (e.g., "The reasons my

parents argue never change"), self-blame (e.g., "I'm not to blame when my parents have arguments"), and triangulation, or the likelihood of the conflict involving the child (e.g., "I feel caught in the middle when my parents argue"). Answer choices are "true," "sort of true," and "false" (scored from 1-3) and appropriate items are reverse scored so that higher scores reflect more-negative conflict appraisals. Measures of each of the three dimensions of interparental conflict (conflict properties, Cronbach's alpha = .91; threat = Cronbach's alpha = .83; self-blame, Cronbach's alpha = .66) were calculated using guidelines in Bickham & Fiese (1997). For the current study these nine dimensions were arranged into three higher order dimensions: conflict properties, which is comprised of frequency, intensity, and resolution of parental conflict; threat, which is comprised of threat and coping efficacy; and finally self-blame, which is comprised of content, self-blame, and triangulation.

Control variables. Adolescents reported their racial/ethnic background; for the purposes of the current study, ethnicity was represented as White vs. non-White. Parents reported their yearly family income and also their depressive symptoms (CESD, Radloff, 1997).

Analyses

Variables were examined for skewness; all variables were approximately normally distributed. To test hypotheses, Generalized Estimating Equation (GEE) models were conducted to adjust for the clustering of youth within families. These models are regression-based (e.g., Ballinger, 2004); a series of analyses were conducted (Baron & Kelly, 1986). All regression analyses controlled for ethnicity, family income, and parental depression (because of links in past research of these constructs with the primary variables of interest). In the first model, I examined the association between marital conflict and rumination (which tested hypothesis 1). In the second model, I examined the association between marital conflict and the three dimensions

of conflict appraisals. In the third model, I examined the association between both marital conflict and conflict appraisals in relation to rumination. Together, these steps were used to demonstrate whether conflict appraisals mediated the association between marital conflict and rumination.

Results

Descriptive statistics for the main variables of interest as well as simple bivariate correlations among the main variables of interest and possible confounding variables are presented in Table 1. Consistent with previous research, marital conflict and conflict resolution were significantly and negatively associated (see Table 1); similarly, conflict appraisal dimensions were positively related to marital conflict, and negatively related to conflict resolution. In contrast, marital conflict and rumination were positively related, whereas conflict resolution and rumination were negatively related. Furthermore, none of the conflict appraisal dimensions was significantly related to rumination.

Next, multivariate analyses were conducted controlling for family income, parent depression, and ethnicity; these analyses were conducted to test the mediational hypotheses. The first hypothesis was that marital conflict is related to greater rumination about negative events; this hypothesis was supported by the multivariate results. More marital conflict was significantly related to more rumination (see Table 2, Model 1). However, conflict resolution was not related to rumination.

The second hypothesis was that adolescent conflict appraisals (i.e., conflict properties, self-blame, and threat) mediate this association between marital conflict and rumination.

Therefore, after establishing an association between marital conflict and rumination, I examined whether marital conflict was related to conflict appraisals. Results indicated that in Table 3, for every 1.0 point increase in marital conflict there is an overall slight increase in conflict appraisals, with a significant .038 increase in conflict properties. Marital conflict was not significantly related to self-blame or threat, though the increase in conflict properties was significant.

The final step was examining the association between marital conflict and rumination after controlling for conflict properties (the only appraisal variable revealed as a possible mediator in the previous step). As can be seen in Table 2 (Model 2), when both marital conflict and conflict properties were included together as predictors of rumination, the association between marital conflict and rumination remained significant; the association between conflict properties and rumination remained non-significant. This demonstrates that conflict properties did not mediate the association between marital conflict and rumination.

Discussion

The present study examined whether marital conflict is related to adolescent rumination, as well as whether adolescent conflict appraisals mediate this association. This study contributes to the body of growing literature on how cognitive and emotional processes may explain links between family relationships and child outcomes. This study aimed to demonstrate that conflict appraisals mediate the relationship between parental marital conflict and rumination. The major findings of this study suggested that children of parents who have more frequent, intense, and hostile conflict report higher levels of rumination. However, based on the results of this study, conflict appraisals did not mediate this association. This finding implies that there are other critical variables that may explain the link between marital conflict and adolescent rumination.

More specifically, the first hypothesis guiding this study was that marital conflict is related to greater rumination about negative events; this hypothesis was supported. Parents who reported experiencing more frequent, intense, and hostile marital conflict had adolescents who experienced higher levels of rumination about negative events. This finding is influential in that the current study is the first to directly examine links between marital conflict and rumination. This finding is also consistent with past literature describing how conflict could lead to greater rumination in children (O'Brien, Bahadur, Gee, & Balto, 1997). Reasons for this link suggested by past research are that marital conflict is broadly related to less effective coping and rumination, a less effective coping strategy in children (Cummings, Goeke-Morey, & Papp, 2003). This less effective coping strategy, rumination, is also common in conflict-filled parent-child relationships, and spillover from marital conflict to parent-child conflict is common (Erel & Burman, 1995). Finally, children exposed to marital conflict often display more depressive

symptoms than those with little exposure, and those symptoms are related to rumination (Vousoura, Verdeli, Warner, Wickramaratne, & Baily, 2012).

Although the frequency, intensity, and hostility of marital conflict was related to rumination, resolution of marital conflict was not found to be related to rumination. Past research suggests possible reasons why marital conflict but not resolution was related to rumination. Conflict resolution techniques in parents have been linked to other child outcomes, including externalizing problems such as anger and school behavior problems (Katz & Gottman, 1993). It may be that conflict resolution is important more broadly for child development even though it is not related to rumination. In addition, the resolution techniques parents use have also been shown to have long-term links to internalizing problems in children. Katz and Gottman (1993) found poor resolution to affect children as long as three years later. Perhaps the current study would have found a stronger relationship between resolution and rumination if there would have been a longer period of measurement connecting the resolution of conflict to different points of internalizing behaviors in adolescents. A single assessment point might have led to data that was unable to account for enough of the effects of resolution on adolescent rumination.

In regards to the second hypothesis, there was no evidence that conflict appraisals acted as a mediator in the association between marital conflict and rumination. Based on the findings, conflict properties was the only possible mediator as self-blame and threat were not related to marital conflict in the multivariate analyses. These outcomes are not consistent with past literature findings that self-blame and threat can significantly mediate the association between conflict and negative adolescent outcomes such as negative affective responses (Grych, & Fincham, 1993; Grych, Harold, & Miles, 2003). It may be that there are more likely to be individual differences in feelings of responsibility and threat than in appraisals of conflict

properties. For instance, Jouriles, Vu, McDonald, & Rosenfield (2014) found self-blame in school-age children to only be present with specific instances of conflict (when the level of aggression displayed by parents was perceived by children as justified or reasonable). Similarly, in another study, Siffert and Schwarz (2011) found perceived threat to mediate the association between conflict resolution styles and children internalizing problems only when intrusive thoughts and inner distress were already present.

Although marital conflict was related to conflict appraisals in the multivariate analyses, conflict property appraisals were not shown to mediate the relationship between marital conflict and rumination because the association between marital conflict and rumination did not change controlling for conflict property appraisals, nor were these appraisals related to rumination. O'Brien et al. (1997) make a case for complex individual differences being the reason why conflict appraisals do not always mediate the relationship between interparental conflict and rumination. For example, they found that children who responded to conflict negatively, with avoidance, worry, self-blame, were more likely to become depressed. However, O'Brien et al. (1997) discuss how some coping skills such as resiliency may be protective in terms of developing externalizing behaviors but can come with a cost to other processes such as internal functioning and self-worth in some children. These researchers posited that one system or isolated coping mechanism can mediate the association between marital conflict and negative outcomes. However, other emotions and coping strategies such as self-confidence, resilience, self-soothing, feelings of parental love, and withdrawal could all also play a role in mediating the association between interparental conflict and negative child outcome pathway and should be explored further (O'Brien et al., 1997). In relation to the current study, perhaps, as O'Brien et al.

(1997) suggest, individual differences in coping strategies might have influenced this association more than the current study was able to account for.

There are several additional possible explanations for the finding that cognitive appraisals did not mediate the association between marital conflict and rumination. First, mediation is best tested using a longitudinal design. Several past studies where cognitive appraisals mediated the relationship between marital conflict and child outcomes were longitudinal studies (Dadds et al., 1999; Grych, Harold, & Miles, 2003). The interpretation of conflict as dangerous or harmful to oneself may be based on a pattern of conflicts and resolutions rather than one-time events. The current study assessed for patterns of conflict and resolution with self-report questionnaires; however, perhaps using momentary assessment techniques of conflict appraisals, rather than global assessments, would have yielded different findings. Momentary assessments would allow for examination of how specific instances of intense negative appraisal are related to adolescent outcomes, rather than relying on a global assessment of the conflict appraisal some time after. In addition, it is also possible that emotional security (Davies & Cummings, 1994), rather than cognitive conflict appraisals (Grych & Fincham, 1990), may mediate the association between marital conflict and rumination better because it accounts for feelings about safety, emotional needs, and security in response to conflict. These dimensions may be more strongly related to rumination.

Limitations and Future Directions

Although the current study provides worthwhile insight into the possible mediators in the association between interparental conflict and rumination, there are certain limitations that should be acknowledged. The nature of the assessment process and questionnaires may not be optimal for evaluating rumination patterns and immediate conflict appraisal processes. The self-

report questionnaires may limit the immediacy and validity of the actual thoughts and feelings associated with rumination and conflict appraisals for these children. As patterns of emotion rarely remain static, but can be maintained in patterns (Bai & Repetti, 2015), it stands to reason that rumination would either worsen or diminish overtime, further evidence that an immediate response study with multiple response periods could have yielded more accurate findings in the current study.

Further work should investigate the other possible mediators of the marital conflictrumination pathway. Future work could be focused on how to best assess for rumination in an
organic way, with momentary assessment techniques and new valid rumination assessments.

Approaching the current rumination self-reports and creating new ones that assess for both the
internal and time sensitive nature of rumination could illicit new understandings of the mediators
of the conflict rumination pathway. This approach would allow researchers to feel more
confident in the results being based on current feelings of rumination rather than on
remembrances of situations later in a lab setting. If more longitudinal studies were to be carried
out investigating the meditational variables in patterns of poor outcomes of children, the field
could significantly benefit from the findings both theoretically and clinically.

Overall, the results of the current study provide support for the association between interparental conflict and rumination; in general, children experienced higher levels of rumination when higher levels of interparental conflict were reported. Although children of parents who reported more intense, frequent, and hostile conflict also reported more negative properties of their parents' conflict, conflict appraisals did not mediate the association between marital conflict and rumination.

Table 1
Descriptive Statistics for and Correlations between Main Variables of Interest

	1	2	3	4	5	6	7	8	9
1. Marital conflict	X								
2. Conflict resolution	56**	X							
3. Rumination	.26**	17	X						
4. Conflict properties	.52**	39**	.09	X					
5. Threat	.19*	21*	.17	.50**	X				
6. Self-blame	.19*	21*	01	.48**	.41**	X			
7. White (1) vs. non-White	13	.26**	15	33**	13	29**	X		
8. Family Income	13	.15	09	18*	14	03	.02	X	
9. Parental Depression	.39**	37**	.09	.42**	.10	.19*	16	21*	X
M	-1.09	3.89	1.78	1.64	1.58	1.29	.45	76129.9	9.68
SD	5.89	5.12	.98	.45	.38	.29	.50	58631.3	6.84

p < .05 ** p < .01 *** p < .00

Table 2
Generalized Estimating Equation Models Predicting Rumination. Presented are unstandardized coefficients (with standard errors in parentheses).

	Model 1	Model 2
Marital conflict	.20(.10)*	.23(.10)**
Conflict resolution	.01(.02)	.01(.02)
Conflict properties		83(1.0)
Family income	16(.24)	19(.25)
Parent depression	10(.28)	05(.29)
White (1) vs. non-White (0)	25(.19)	30(.20)

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

Table 3
Generalized Estimating Equation Models Predicting Conflict Appraisals. Presented are unstandardized coefficients (with standard errors in parentheses).

	Conflict Properties	Threat	Self-blame
Marital conflict	.038(.008)*	.01(.01)	.01(.01)
Conflict resolution	.00(.002)	00(.00)	.00(.00)
Family income	041(.024)	05(.02)	02(.02)
Parent depression	.065(.027)*	.00(.03)	.04(.02)
White (1) vs. non-White (0)	045(.017)*	01(.02)	04(.02)

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

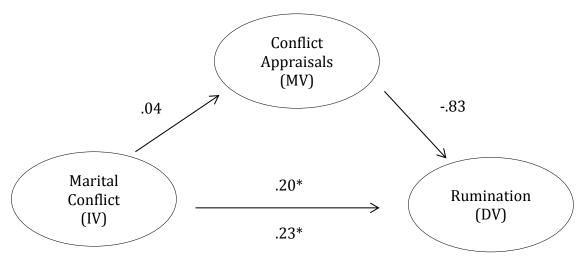


Figure 1. Mediation model in which conflict appraisal mediate the association between marital conflict and rumination. The coefficient above the marital conflict to Rumination pathway represents the direct effect without mediation, the coefficient below the line represents the mediation model.

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