
Marital Conflict, Child Emotional Security about Family Relationships and Child Adjustment

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Abstract

Addressing a gap in process-oriented understanding of relations between marital conflict and children's adjustment, propositions of the emotional security hypothesis from a family-wide perspective were tested in a longitudinal research design. Participants were 181 families and their 11–12 year-old-child (115 boys, 76 girls) living in Wales, in the United Kingdom. Relations between marital conflict, children's emotional security about marital conflict and parenting, respectively, and children's adjustment were assessed based on reports by mothers, fathers, and children and videotaped analogue procedures completed by children. Structural equation modelling indicated that children's emotional security about interparental conflict (emotional regulation, cognitive representations and behavioural regulation) mediated the relation between marital conflict and children's security about parenting. Processes pertaining to children's security in multiple family systems (i.e., interparental and parent-child) provided an indirect mechanism through which interparental conflict affected children's symptoms of psychological distress (internalising and externalising problems) assessed 12 months later. Future directions for further tests of comprehensive, theoretically based models for the effects of marital conflict on children are discussed.

Keywords: marital conflict; emotional security; family relationships; child adjustment

Relations between interparental conflict and children's psychological adjustment are well established (e.g., Emery, 1982; Grych & Fincham, 1990; Porter & O'Leary, 1980). That is, marital conflict has been shown to adversely influence children's internalising symptoms (Dadds *et al.*, 1999; Harold, Fincham, Osborne & Conger, 1997); externalising problems (Grych, Fincham, Jouriles & McDonald, 2000; Harold *et al.*, 1997; Johnson & O'Leary, 1987); social competence (Emery & O'Leary, 1984; Gottman & Katz, 1989; Paley, Conger & Harold, 2000); and academic achievement (Forehand & Wierson, 1993; Long, Forehand, Fauber & Brody, 1987). Accordingly, the study of simple bivariate relations between marital conflict and children's adjustment has

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reached a point of diminishing returns, with next steps in research to explore the emotional, cognitive and behavioural processes that underlie these relations (Cummings & Davies, 2002).

Progress on process-oriented directions is indexed by the development of theoretical models to explain why some children exposed to the conditions of marital conflict appear relatively unaffected while other children develop long-term psychological problems. Grych and Fincham (1990) provide a cognitive-contextual framework which emphasizes that children's responses to interparental conflict occur primarily through their cognitive evaluations of the conflict. From a cognitive-contextual perspective, interparental conflict is conceptualised as a stressor that leads to attempts by the child to understand and cope with the expression of negative marital emotion. According to this perspective, children's perceptions of marital discord are an important mechanism by which marital conflict affects their adjustment (Grych *et al.*, 2000; Jouriles, Spillner, Stephens, McDonald & Swank, 2000).

A complementary theory, the emotional security hypothesis (Davies & Cummings, 1994), proposes that children's emotional security about interparental conflict is reflected by three covarying yet conceptually distinct elements. When children are exposed to the conditions of marital conflict, effects are determined through (1) *Emotional regulation*: Children may be activated to feel anger, sadness, fear, relief or happiness depending on how conflict between parents is expressed and managed. The implications for children's functioning are determined by how much a child feels sad or angry or other emotional reactions, and how well the child can regulate the activation of such emotions, (2) *Cognitive representations*: Children assess how much of a problem a given conflict expression constitutes and its potential to adversely influence other family relations. Children from high conflict homes, therefore, would be expected to be more prone to developing insecure internal representations of family relations than others, (3) *Behavioural regulation*: What children do in response to the conflict behaviour demonstrated by parents. For example, children might attempt to regulate exposure to marital conflict by actively intervening, or, alternatively, withdrawing from or otherwise avoiding a destructive conflict setting (see Figure 1).

According to the emotional security hypothesis, therefore, exposure to negative forms of marital conflict compromises children's sense of emotional well-being. Indeed, when exposed to models of negatively expressed and managed marital events, children are motivated to preserve and promote their own sense of emotional regulation, cognitive representations and behavioural regulation in the context of broad family relations. Marital conflict, it is proposed, has its effects on children not so much through the simple occurrence of conflict *per se* but rather through the ways conflictual issues are expressed and managed by parents. Destructively managed issues reduce children's sense of emotional security, mediating effects on children's adjustment (Davies & Cummings, 1998).

The attachment literature has firmly established the importance of emotional security to links between parent-child relations and children's adaptive development (Cummings & Cummings, 2002). However, developmental theory has long called attention to the significance of broader social contexts to children's emotional security and adjustment (Waters & Cummings, 2000), with marital relationships being among the most significant of such influences (Belsky, 1984; Cox & Paley, 1997). Notably, Bowlby (1949) was among the first to call attention to the importance of considering the family in understanding children's distress and security, and considerable research has subsequently demonstrated links between marital conflict and children's

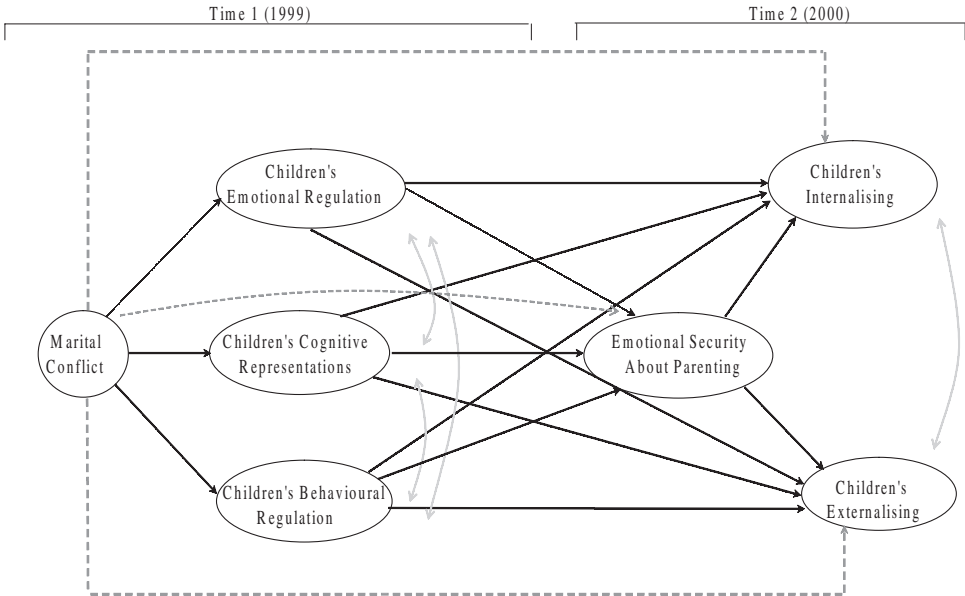


Figure 1. The theoretical model.

security about parenting (Waters & Deane, 1985; Owen & Cox, 1997; Cox, Paley & Harter, 2001). Accordingly, a significant issue is to consider broadly the impact of the quality of marital relations on processes pertinent to children's emotional security about family functioning, and the role of these processes in mediating relations between marital conflict and children's adjustment (see also Byng-Hall, 1999). Indeed, a broader family-wide model for the effects of marital conflict on children's emotional security is implicated by considerable research (Corinne, Steele, Forehand & Armistead, 1996; Davies, Harold, Goeke-Morey & Cummings, 2002; Willhelm, Brownhill & Boyce, 2000).

Assessing the effects of the broader family environment provides a context within which specific family factors such as marital conflict and parent-child problems may be understood or more adequately interpreted in relation to children's adjustment. As Berkowitz (1989) points out, anger expressed in one family relationship will provide a stimulus for anger and irritability to occur in other close relationships. In support of this hypothesis, there is evidence for the possibility of a 'spillover' of negative affect from conflicted marital relations into other family relationships, especially children's relationships with their parents (Cox *et al.*, 2001; Erel & Burman, 1995; Harold & Conger, 1997; Jouriles & Farris, 1992).

Little research, however, has focused on the hypothesis that negative events in the marital relationship may serve as an 'emotional primer' that undermines children's security about parenting *through* processes reflecting children's emotional security about marital conflict. Indeed, it is unlikely that children's emotional, cognitive and behavioural responses to marital conflict occur in isolation of changes to children's emotional security about other family systems. For example, Owen and Cox (1997) reported that links from marital conflict to children's attachment security were explained through conflict-induced threats to mother-child and father-child security as well as through changes in the quality of parent-child interactions. Lohman and

Jarvis (2000) reported that more congruent adolescent and parent perceptions about each others' stressors and coping strategies were related to a more cohesive family environment and more adaptive coping styles when assessed in the context of family conflict. Willhelm and colleagues (2000) suggested that 'care' between parents was an indicator of the overall quality of the family environment and that care received by a wife from her husband seemed to set the emotional tone for the family. In other words, evidence suggests that the mechanisms through which marital conflict may impact on children's adjustment are (a) directly through their sense of emotional security about the quality of relations *between* their parents, and (b) indirectly through effects on their emotional security about the quality of relations *with* their parents. Recently, Davies and Rasi (2002) reported that relations between marital conflict and child adjustment were only mediated by children's emotional security about inter-parental relationships. However, the impact of conflict between parents on children's emotional security about family relationships may be influenced by children's evaluations of conflict in the broader family environment.

The present study provides a test of a family-wide model of the effects of marital conflict on children's adjustment via children's emotional security about marital conflict and parenting. Building on Davies *et al.* (2002), this paper provides the first longitudinal tests of these relations, and is the first paper to test prospectively direct and indirect pathways as a function of the three component processes of emotional security. Specifically, it is proposed that processes of children's emotional security about marital conflict mediate the relationship between conflict and children's emotional security about parenting, which, in turn, collectively influence children's adjustment directly and indirectly. Marital conflict, therefore, is seen as a stimulus for the activation of emotional, cognitive and behavioural responses that adversely influence children's long-term feelings of security in their relationship with their parents and associated symptoms of psychological distress (see Figure 1).

Using longitudinal data collected across a 12-month period, the present study proposes to test if (1) security about parenting is influenced by dimensions of children's emotional security when considered in the context of marital conflict, and (2) both forms of emotional security about parents' behaviour in the family are related to children's internalising and externalising responses, with processes pertaining to children's emotional security about marital conflict both directly and indirectly (through security about parenting) related to children's adjustment.

Method

Sample

The data for these analyses derive from a longitudinal sample of over 500 children whose parents provided written consent for them to participate in a study focusing on the relationship between children's experiences of family life and their socioemotional development. Of these children, 389 parents successfully completed and returned questionnaires during the first year of the study (71% parental response rate). Eighty-nine percent of families who provided complete questionnaire information at Time 1 (1999) also provided complete information at Time 2 (2000). Preliminary analyses indicated that the families who completed the study at both time points did not significantly differ from families who participated only in the first or second year of the study on any variables measured. A subsample of children provided information on

the videotaped analogue procedures included in the present study. Given the primary focus on interparental conflict, children were included in this study if: (a) the child lived with at least one biological parent and another male or female guardian, and (b) both the parents and children completed all the measures of interparental discord, appraisals of threat, emotional security and child adjustment. These criteria yielded a sample of 181 (105 boys and 76 girls) children and parents across both time points considered. There were no statistically significant differences between measures provided by children who participated in the experimental component of the study compared to those who did not.

Schools were recruited to the study by virtue of the economic and social conditions associated with their 'catchment' area. Catchment area in the United Kingdom requires children living in a specific geographic region to attend one of a prescribed list of schools. Demographic information on families living in a specific school catchment can be accessed by postal code location (Office of National Statistics, UK). England and Wales represent a distinct region within the UK, with Scotland and Northern Ireland comprising the remainder of UK regions. Demographic statistics derived from the present study suggest that the overall sample is representative of British families living in England and Wales with respect to family constitution, parent education and ethnic representation (Social Trends, 2002).

The vast majority of children in the current sample lived with both biological parents (87.0%), with the remaining children living with their biological mother and stepfather (11.3%) or biological father and stepmother (1.7%). Thirty-six percent of mothers and 32.9% of fathers completed secondary or high-school education only, 34.2% of mothers and 29.2% of fathers completed technical or vocational training and 29.8% of mothers and 37.9% of fathers completed university training. The average age of children in the first year of the study was 11.65 years old ($SD = .48$, range 11–12 years old). All of the children included in the present study were White European.

Procedures

Following initial contact with schools, parents were contacted by letter inviting them to participate in a research project focusing on the link between everyday family life and children's psychological well-being. Parents were then further informed about the study at a scheduled parent-teacher evening, given a second letter and a consent form describing the goals and each stage of the project in more detail. No payment was made to families, but parents were informed that a summary booklet outlining key research findings would be distributed to all families upon completion of the study.

Questionnaire Procedures. Children completed questionnaires during the course of the normal school day. They were told that they were participating in a study of how children think and feel about everyday events that may occur between their parents or between them and their parents. Parents received their questionnaires through the post. Questionnaire packets contained a letter with instructions for completion, two packets of questionnaires, and stamped addressed envelopes for each parent to return their questionnaires when completed. Parent questionnaires contained a variety of measures relating to the quality of family interaction, parenting, marital satisfaction, parent and child psychological health, economic conditions and family demographics. Parents were asked to complete their questionnaires independently and a contact number for concerns or queries was provided.

Videotaped Analogue Procedures. A videotaped analogue methodology was used to measure children's responses to marital conflict. Analogue methods have been used in a number of previous studies and have been shown to provide empirically valid information relating to children's appraisals and responses to interparental conflict (e.g., Cummings, Simpson & Wilson, 1993; Cummings, Vogel, Cummings & El Sheikh, 1989). Two actors engaged in hypothetical discussions of conflict issues that children observed and responded to in controlled conditions. The actors were chosen for their dialect and age in an effort to engage the participants fully in the set of analogue scenarios presented. Two scenario sets were presented: discussion about choice of television programme (non-child-related conflict) and discussion about whose turn it was to help the child with their homework (child-related conflict). For the present analyses, only those scenes relating to the television programme scenarios were included so as not to confound child- and non-child-related effects. Each scenario set comprised ten well-defined, brief (30 seconds to 1 minute) conflict episodes: six contained unresolved negative conflict expressions (verbal hostility, non-verbal hostility, physical aggression toward spouse, physical aggression toward object, pursuit and threat to the intactness of the family); three scenes depicted constructive conflict (support, problem solving and affection) and one was neutral (calm discussion). Negative scenarios were followed by a positive or neutral scene in order to minimise the carry over of negative affect across successive scenes. Only responses to the six unresolved negative conflict expressions were included in the following analyses.

With specific reference to the TV scenario, children were asked to imagine that they were in the room with their parents watching TV. They were informed that earlier in the evening their parents had discussed watching a film. The film is about to begin but their mum/dad is watching a programme on a different channel. Children were told the videos to follow represented different ways in which the parents came to a decision about what programme to watch. Children were asked to imagine the actors were their parents, asked if they understood what was required of them, and engaged in a practice scene to confirm understanding. The first conflict episode was then played. Following each analogue presentation, the video was stopped and the participants were asked to fill up the respective page of their booklet. There was no time limit on the task. This continued until the participants had seen all conflict episodes.

The session ended with participants viewing an analogue presentation of parents resolving their differences. Participants also responded to questions related to their sense of emotional security after watching this analogue episode. As part of an overall debriefing, researchers and children discussed the benefits of successfully negotiating and resolving conflicts between individuals. Children were encouraged to speak about how they felt after viewing the videotapes. No concerns were raised by any children participating in the study.

Measures

Marital Conflict. Marital conflict was assessed using three indices of marital discordance that related to overall marital dissatisfaction, marital hostility and marital discord. Marital dissatisfaction was assessed using the Short Marital Adjustment Test (SMAT; Locke & Wallace, 1959). This widely used measure of marital satisfaction reliably discriminates non-distressed spouses from spouses with documented marital problems, has adequate reliability, and correlates with clinicians' judgements of marital discord (Fincham, Beach, Harold & Osborne, 1997). Husbands' and wives'

responses were coded to reflect high levels of marital dissatisfaction. Both sets of responses provided good reliability estimates for the current sample (husbands, $\alpha = .77$; wives, $\alpha = .81$). The measure of marital hostility used in the present study was derived from a subset of items contained in the Iowa Youth and Families Project Rating Scales (Melby *et al.*, 1993). This measure focused on the interpersonal conflict that existed between mothers and fathers and was measured by information received from both sources. Each spouse answered a set of questionnaire items that included questions such as 'During the past month, how often has your spouse gotten angry at you', 'Shouted at you because s/he was angry at you', 'Argued with you whenever you disagreed about something'? Possible responses to these items ranged from 'always' (1) to 'never' (7). Both husbands' and wives' reports were shown to have good reliability (husband, $\alpha = .89$; wife, $\alpha = .90$). The third measure of marital conflict was assessed using a scale specifically developed for this study. The measure consists of ten items reflecting interparental management of conflict (e.g., 'Our arguments end up with one or both of us feeling hurt or angry' and 'Our arguments end with an exchange of insults'). Response alternatives range from (1) 'almost never' to (5) 'almost always'. Husbands' and wives' responses for this measure of marital discord showed good reliability ($\alpha = .86$; $\alpha = .88$). Husband and wife responses were summed for all three respective measures so as to represent composite estimates of parents' marital dissatisfaction ($\alpha = .89$), hostility ($\alpha = .88$), and discord ($\alpha = .90$). Correlations between mother and father reports of these three measures were strong and significant (r ranged from .39 to .69, $p < .01$).

Emotional Security and Marital Conflict. Consistent with the model proposed by Davies and Cummings (1994), emotional security was measured based on analogue responding using three primary theoretical constructs: (1) children's emotional regulation, (2) children's cognitive representations, and (3) children's behavioural regulation. *Emotional regulation* was measured by asking children to respond to two questions that asked 'how they would feel' and 'how much they would feel that way' after viewing each conflict scene. Response options included 'angry', 'sad', 'scared', 'happy' and 'okay', and ranged from 'not at all' (0) to 'a whole lot' (4). *Cognitive representations* were measured by asking children 'how much [they think] the problem has been worked out' and 'how much of a problem [they think] the topic will be later'. Response options ranged from 'not at all' (0) to 'a whole lot' (4). *Behavioural regulation* was measured using a free response option. Children were asked, 'What would you have done if you had been in the room with them?' Responses were coded along two dimensions: (1) mediation in marital conflict, and (2) avoidance of parental conflict. The child's response was coded for severity ranging from 'mild or no response' (1) to 'severely insecure response' (5). Two separate raters were used to code children's responses. Interrater reliability coefficients across conflict scenes for both mediation or avoidance response sets ranged from .91 to .96.

Children's Perceptions of Interparental Conflict. The Children's Perceptions of Interparental Conflict scale (CPIC; Grych, Seid & Fincham, 1992) was used to assess children's evaluation of marital conflict. Children completed the Conflict Properties and Threat subscales by indicating 'true', 'sort of true' or 'false' to items tapping children's perceptions of conflict between their parents. The Conflict Properties subscale comprises 17 questions reflecting the frequency, intensity and resolution of their parents' disagreements. Sample questions include 'I often see my parents

arguing', 'My parents get really angry when they argue' and 'Even after my parents stop arguing they stay annoyed with each other'. Due to concerns raised during the process of obtaining ethical approval for the study, two items, 'My parents have broken or thrown things during an argument', 'My parents have pushed or shoved each other during an argument', were dropped from the intensity subscale. Twelve items comprise the Threat scale and include items tapping children's fears and worries when conflict occurs (e.g., 'When my parents argue I worry what will happen to me') and items reflecting children's confidence in their ability to cope with the conflict (e.g., 'When my parents argue I can do something to make myself feel better'). One item, 'When my parents argue I'm afraid one of them will get hurt', was also omitted from this scale due to concerns raised during the process of receiving ethical approval. Both measures provided good estimates of internal consistency (Conflict Properties, $\alpha = .89$; Threat, $\alpha = .82$) and are consistent with estimates derived from previous studies involving children living outside the United Kingdom (e.g., Grych *et al.*, 2000).

Emotional Security about Parenting. Emotional security about parenting was measured using the Kern's Security Scale (KSS; Kerns, Klepac & Cole, 1996), a child report measure of perceived availability and dependency relating to each respective parent in times of stress. This measure thus provided a general assessment of children's security about parenting (15 items presented for each parent). Items are rated on a 4-point scale using Harter's (1982) 'Some kids . . . Other kids . . .' format. For each sentence, children checked one alternative and the extent to which it was true: 'really true for me' or 'sort of true for me'. For example, alternatives included: (1) 'Some kids wish they were closer to their mum *but* other kids are happy with how close they are to their mum'; (2) 'Some kids are really sure their mum would not really leave them *but* other kids sometimes wonder if their mum might leave them'; (3) 'Some kids feel better when their dad is around *but* other kids do not really feel better when their dad is around'; (4) 'Some kids worry that their dad might not be there when they need him *but* other kids are sure their dad will be there when they need him'. This measure showed good reliability across all subscales: mother availability $\alpha = .83$, mother dependency $\alpha = .81$, father availability $\alpha = .83$ and father dependency $\alpha = .82$.

Children's Psychological Adjustment. Two broad indices were used to assess children's psychological adjustment. Because children tend to be the best reporters of their own internalised states (Achenbach, 1991b), three self-report scales were used to measure internalising problems. The Children's Depression Inventory (CDI; Kovacs, 1981) is a widely used self-report measure of depressive symptoms. One item regarding suicide thoughts was omitted. Because in community samples the CDI correlates highly with other measures of internalising problems (e.g. anxiety), it may be best considered a broad index of dysphoria rather than depression per se (Harold *et al.*, 1997). The two other measures of internalising symptoms used were the depression-anxiety and withdrawn subscales of the Youth Self-Report Form of the Child Behaviour Checklist (YSR; Achenbach, 1991b). These empirically derived subscales contain items such as 'I cry a lot', 'I feel lonely' and 'I have trouble concentrating or paying attention'. Response options range from 'not true' (0) to 'very true' (2). Each of the three measures of internalising used provided good estimates of internal consistency ($\alpha = .86$, $.80$ and $.64$).

The externalising symptoms subscales incorporated parent and child reports of externalising behaviours using the Parent and Youth Forms of the Child Behaviour Checklist (YSR; Achenbach, 1991a, 1991b). The items contained in these subscales include questions such as 'Argues a lot', 'Has a hot temper or throws temper tantrums' and 'Threatens to hurt others'. Good reliability estimates were again provided for these measures of children's adjustment (mother, $\alpha = .83$; father, $\alpha = .85$; child, $\alpha = .82$; Achenbach, 1991a, 1991b). Buss and Durkee's (1957) aggression scale (e.g., When I get angry, I say nasty things; $\alpha = .82$) was used as an additional indicator of externalising problems and may be regarded as a trait measure of antisocial behaviour (Harold & Conger, 1997).

Modelling Emotional Security

Measuring Affect: Continuous Versus Categorical Assessment. Children's responses to the degree of hostility expressed by parents during each analogue expression of destructive interparental conflict were assessed by asking children to identify whether they felt happy, angry, sad, scared or OK and, in a separate question, how much they felt that way (happy and OK responses were excluded in the present analyses). Children identified themselves as belonging to either an angry, sad or scared group. Derived correlations, therefore, represent associations between distinct groups of children rather than associations between each index of emotional affectivity across all children. This posed a challenge for employing a modelling approach to data analysis.

Previous studies have tended to combine angry, sad and scared responses to represent a single index of children's emotional regulation (Harold, Shelton, Goeke-Morey & Cummings, 2000). The present study proposes that these measures should be considered as separate indicators of an overall latent estimate of emotional regulation. In order to accommodate this goal, several preliminary data analytic conditions specific to the present study required attention. First, skewed distributions for each index of regulation were transformed using square root procedures so as to accommodate the condition of multivariate normalcy necessary for final tests of the proposed theoretical model. Second, the variances around children's angry, sad and scared responses differed in magnitude across all analogue examples of conflict behaviour. Children consistently reported greater variability in how much they felt sad, angry or scared—in that order. In other words, when children felt sad they were more likely to report a greater range of emotion compared to anger, which in turn had a greater range of responses than children who reported feeling scared. Given that 'how much' a child felt affectively aroused (0 = 'not at all' to 4 = 'a whole lot') determined the score given to a child's specific feeling of affective arousal, each of these emotional states became differentially weighted as a function of the likelihood to vary more on feelings of sadness than on feelings of anger or fear. Theoretical expectation, however, would suggest that the impact of each specific index of emotional arousal would be conversely threatening to children's emotional security (scared > sad \geq angry). In order to accommodate this proposal, children's responses were weighted using a constant minus the variance of each variable (i.e., the higher the variance, the lower the weighting). Scared responses, therefore, consistently received greater weights than did angry or sad responses. Derived correlations confirmed that weighted indices of emotional security were positively and significantly associated with each other ($r = .38$ to $.48$, $p < .01$).

Contextualizing Emotional Security. As Grych (1998) points out, it is important to assess children's history of exposure to interparental conflict in order to reliably ascertain their responses when exposed to conflict conditions. Previous studies have utilised the complementary properties of other measures aimed at assessing children's perceptions of interparental conflict in assessing global self-regulation. For example, Harold *et al.* (2000) used the threat and self-blame subscales in company with a composite estimate of children's reports of anger, sadness and fear in response to conflict stimuli. This strategy is useful in that additional measures allow greater reliability of primary theoretical constructs. However, establishing zero-order associations between conceptually similar measures accommodates nothing more than covariation between underlying indicators of any latent estimate. The emotional security hypothesis posits that each theoretical component itself comprises distinct measurement elements. In order to capture the influence of children's actual history of exposure to conflict, the present study incorporates an estimate of this experience across all emotional security components using a process-oriented logic to variable construction.

Using the Children's Perceptions of Interparental Conflict scale (CPIC; Grych *et al.*, 1992), children's self-reports of the conflict properties (the extent to which conflict is frequent, intense and unresolved) and degree of threat (how threatened children feel and their perceived ability to cope with conflict) associated with their parents' arguments were used to specify each construct-specific indicator of emotional security. This was accommodated by centring the conflict properties and threat subscales of the CPIC and creating product terms by multiplying these measures with each respective indicator of children's emotional regulation (anger, sadness, fear), children's cognitive representations (problem now, problem later), and children's behavioural regulation (intervene, avoid). Because children's emotional regulation and cognitive representations of parents' marital conflict are likely influenced by parents' expression of frequent, intense and unresolved conflict, conflict properties were used as the centred estimate to contextualise these latent measures of emotional security. Children's behavioural regulation is most likely influenced by the degree of threat associated with conflict; the threat subscale was therefore used as the centred estimate of each indicator of children's regulation of marital emotion.

Centring Data. Centring data requires that the mean of a given variable is subtracted from that variable so as to reduce the potential for collinearity effects between product term elements (Kenny & Judd, 1984). For the purposes of the present study, the mean was subtracted from each component of children's perceptions of interparental conflict (conflict properties and threat), but not from each indicator of emotional security. Statistically, this permits the emotional security measures to maintain a weighted presence when estimated in the company of children's perceptions of conflict properties and threat. Conceptually, this permits each element of emotional security to be theoretically located in accordance with children's actual experiences of conflict in their own homes. By using this strategy, a template that uses a process-oriented approach to the conceptual and statistical estimation of theoretical links between children's exposure to, experience of, and reactions to marital conflict is provided.

Analysis Overview

In order to assess the proposal that marital conflict influences children's adjustment, a two-stage, 'chain-of-events' hypothesis was tested. First, the role that children's

emotional security about parenting plays in the relationship between conflict and adjustment was tested. Second, the role that children's emotional security about marital conflict plays in the relationship between conflict, security about parenting and adjustment was assessed. Specifically, the present study proposed that children's emotional security about marital conflict mediates relations between marital conflict and children's security about parenting and, therefore, explains why their security about parenting is adversely affected by marital conflict. First, an overview of all zero-order associations linking theoretical indicators of each latent construct included in the model will be provided (correlational analysis). Second, standardised coefficients and goodness-of-fit statistics derived from tests of the proposed theoretical model using SEM will be provided. Finally, an overview of all tests of mediation and consideration of the role of stability in children's symptoms for tests of the proposed theoretical model will be provided.

Results

Correlational Analysis

Correlations for all study variables are provided in Table 1. The correlations across all construct indicators are consistent with the proposed theoretical model. Parent reports of marital conflict were associated with children's emotional regulation, cognitive representations and children's behavioural regulation. Relatedly, zero-order associations are found between each indicator of emotional security and each indicator of children's internalising symptoms. When externalising symptoms are considered, 12 of 14 possible zero-order associations were significant for children's reports. Associations with parents' reports are generally weaker, but, when considered as part of a latent estimate of externalising problems, add sufficient information to allow any associations with this measure to represent something other than common method variance. Associations between each index of emotional security about marital conflict and children's feelings of security about parenting were significant across all zero-order relations. Each of these indicators, in turn, was significantly associated with indices of internalising and externalising symptoms.

The validity of each of the primary indicators of each latent theoretical construct included in the model can be demonstrated by noting the magnitude of specific correlations between construct indicators. For example, parents' reports of marital conflict correlate highly with each other. Indicators of children's reports of emotional regulation, cognitive representations, behavioural regulation, emotional security about parenting and adjustment (internalising and externalising) confirm that each theoretical construct comprises conceptually distinct yet covarying elements.

Modelling Strategy

Structural equation modelling (LISREL 8.30; Joreskog & Sorbom, 1996) using maximum likelihood estimation procedures was used to test all proposed theoretical relations. Consistent with the proposal that marital conflict impacts children's responses through their sense of emotional security about marital conflict and emotional security about parenting, analysis was completed in two stages. First, the effect of marital conflict (Time 1) on adjustment (Time 2) through children's feeling of emo-

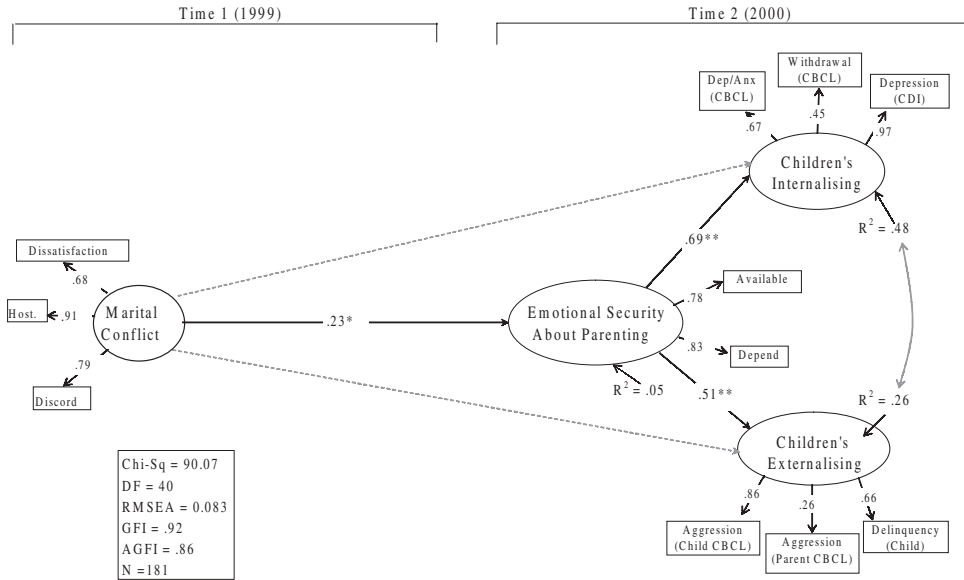


Figure 2. Maximum likelihood estimation of the impact of marital conflict at Time 1 and children’s feelings of security about parenting on symptoms of internalising and externalising problems at Time 2, * $p < .05$, ** $p < .01$.

tional security about parenting (Time 2) was tested (see Figure 2). Second, the full theoretical model concerning the effects of marital conflict (Time 1) on adjustment (Time 2) through children’s emotional security about marital conflict (i.e., the direct pathway; Time 1) and children’s feelings of emotional security about parenting (i.e., the indirect pathway; Time 2) was tested (see Figure 3). As a final step, we tested the implications of initial symptom levels and the stability between symptoms at Time 1 and Time 2 on the pattern of relations outlined in Figure 1.

Marital Conflict, Emotional Security about Parenting and Children’s Adjustment

In order to assess the hypothesis that children’s feelings of security in their relationship with their parents acts as a linking variable between marital conflict and children’s psychological distress, a model incorporating both direct and indirect effects through emotional security about parenting was specified. As expected, marital conflict significantly predicted emotional security about parenting, which in turn significantly predicted internalising and externalising problems (Figure 2). Indeed, significant effects existed from marital conflict through children’s feelings of security in their relationship *with* their parents to their symptoms of internalising and externalising, suggesting that conflict induces negative adjustment in children through threats to their feelings of security in the parent–child relationship. Indicator loadings and goodness-of-fit statistics suggest that this model provides a good fit to the data (see Figure 2). The findings derived from tests of this model have received support in previous research (see Cox *et al.*, 2001; Erel & Burman, 1995).

Table 1. Intercorrelations, Means and Standard Deviations Among All Indicators of Theoretical Constructs (N = 181; ^a*p* < .10, **p* < .05, *p* < .01)**

	1	2	3	4	5	6	7
<i>1999</i>							
1 Parent report of marital dissatisfaction	—						
2 Parent report of marital hostility	.62**	—					
3 Parent report of marital conflict	.55**	.72**	—				
4 Children's emotional regulation (angry)	.27**	.31**	.29**	—			
5 Children's emotional regulation (sad)	.18*	.32**	.18*	.36**	—		
6 Children's emotion regulation (scared)	.14 ^a	.31**	.26**	.36**	.43**	—	
7 Children's cognitive representations (problem solved)	.21**	.33**	.29**	.37**	.45**	.65**	—
8 Children's cognitive representations (problem later)	.23**	.42**	.35**	.72**	.64**	.74**	.61**
9 Children's behavioural regulation (intervene)	.16*	.12	.09	.21**	.18*	.15*	.22**
10 Children's behavioural regulation (avoid)	.12	.15*	.13 ^a	.19*	.16*	.25**	.26**
<i>2000</i>							
11 Children's security about parents availability	.09	.16*	.10	.20**	.21**	.32**	.25**
12 Children's security about parents dependability	.15*	.21**	.16*	.30**	.23**	.29**	.16*
13 Child report of anxiety/depression	.06	.05	.07	.11	.17*	.11	.21**
14 Child report of withdrawn behaviour	.01	.03	.00	.03	.08	.01	.08
15 Child report of depression	.02	.11	.01	.12	.21**	.24**	.22**
16 Child report of aggression	.10	.11	.05	.27**	.23**	.19**	.21**
17 Parent report of aggression/hostility	.16*	.23**	.14 ^a	.07	.11	.00	.06
18 Child report of antisocial behaviour	.14 ^a	.16*	.05	.12	.24**	.16*	.14 ^a
Mean	62.39	21.90	40.16	1.02	5.29	7.96	1.90
Standard Deviation	30.81	7.21	10.53	55.01	42.96	60.75	22.11

8	9	10	11	12	13	14	15	16	17	18
—										
.18*	—									
.25**	.71**	—								
.35**	.20**	.25**	—							
.39**	.19*	.17*	.64**	—						
.19**	.05	.09	.34**	.29**	—					
.02	.01	.03	.14 ^a	.20**	.53**	—				
.26**	.26**	.27**	.56**	.55**	.65**	.42**	—			
.35**	.27**	.28**	.28**	.40**	.28**	.21*	.41**	—		
.00	.24**	.19**	.13 ^a	.19*	.05	.00	.30**	.19*	—	
.25**	.17*	.10	.19*	.30**	.06	.03	.28**	.57**	.18*	—
5.54	0.24	0.54	6.09	2.74	6.09	2.74	9.42	9.48	10.70	23.28
64.51	31.95	20.15	4.94	1.89	4.94	1.89	8.00	6.14	7.80	6.73

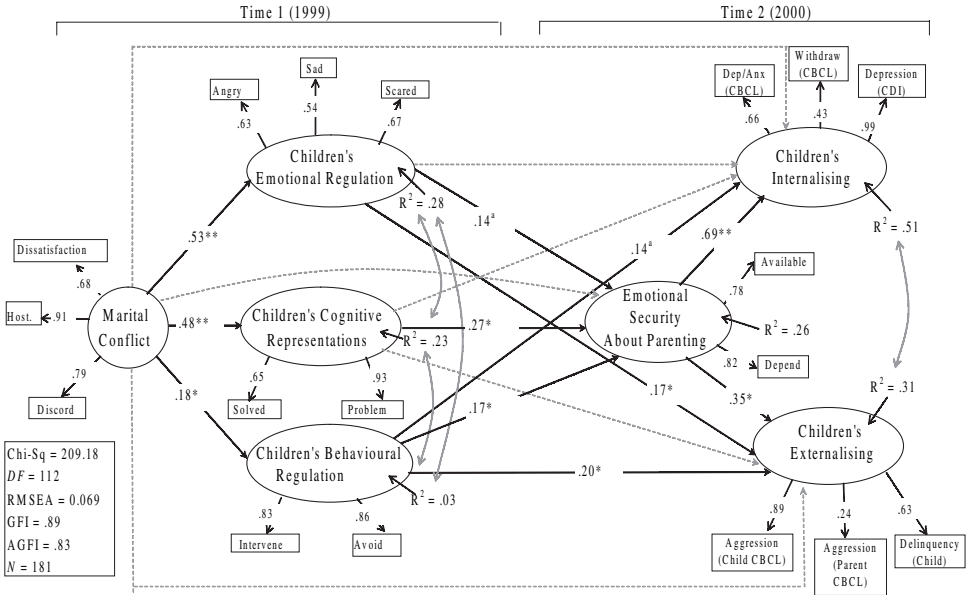


Figure 3. Maximum likelihood estimation of the impact of marital conflict and children's emotional security at Time 1 on feelings of security about parenting and symptoms of internalising and externalising problems at Time 2, ^a $p < .10$, * $p < .05$, ** $p < .01$.

Marital Conflict, Emotional Security about Conflict and Parenting and Children's Adjustment

A competing hypothesis is that children's adjustment in the context of marital conflict may be explained by threats to emotional security as a direct product of conflict between their parents as well as indirect effects on children's emotional security about parenting. Results presented in Figure 3 demonstrate the role of emotional security in multiple family systems as a mechanism through which marital conflict at Time 1 impacts on children's symptoms of psychological distress measured a year later (Time 2). Parents' report of conflict at Time 1 significantly predicted each index of children's emotional security about the marital relationship measured at the same point in time, which, in turn, predicted feelings of insecurity in their relationship with their parents when measured a year later (emotional regulation, cognitive representations, behavioural regulation). Importantly, the direct effect from marital conflict to children's feelings of security about parenting was no longer significant when each index of emotional security about marital conflict was included in the model, supporting the hypothesis that emotional security about marital conflict mediates the link between conflict and children's feelings of security in their relationship with their parents. Feelings of security in the parent-child relationship significantly predicted a concurrent increase in children's symptoms of internalising and externalising problems. In addition, significant direct effects existed from children's emotional regulation at Time 1 to externalising problems at Time 2 and from children's behavioural regulation at Time 1 to symptoms of internalising and externalising problems at Time 2, suggesting that

these indicators of emotional security account for increases in children's symptoms of psychological distress over and above influences of conflict on children's long-term feelings of security in their relationship with their parents. All indicator loadings and goodness-of-fit statistics suggest that this model provides an adequate fit to the data. The indicator loadings for parents' reports of children's externalising problems were statistically significant but lower than the general range of loadings across the model. However, parents' reports of children's behavioural problems were retained to remedy the potential for analyses to be biased by reliance on child reports of all endogenous measures included in the model.

The Role of Emotional Security about Marital Conflict as a Mediator of the Relationship Between Exposure to Conflict and Security about Parenting

In order to assess the hypothesis that children's emotional security about marital conflict mediated the relationship between exposure to conflict *between* parents and children's feelings of security in their relationship *with* their parents, a series of hierarchically related, or nested, models were tested. Nested models permit an opportunity to compare a theoretically interesting model against a set of alternative models so as to evaluate the relative contribution of a specific parameter or set of parameters to the overall 'fit' of the proposed theoretical model. Figure 4 presents the results of a nested modelling comparison of the effects of marital conflict on children's security about parenting. Model 1 represents a constrained model whereby the indirect effects between marital conflict and children's security about parenting through their (a) emotional regulation, (b) cognitive representations and (c) behavioural regulation are constrained to zero. This model represents a $3 \text{ (a, b, c above)} \times 2 \text{ (paths)} = 6$ degrees of freedom (*df*) difference in comparison to the full theoretical model (Model 5). Models 2 (emotional regulation), 3 (cognitive representations) and 4 (behavioural regulation) represent models whereby paths through each respective element of emotional security are freely estimated in relation to the effects of marital conflict on children's security about parenting. Results for all models tested show the chi-square (χ^2) and associated degrees of freedom (*df*) for each model as well as the standardised beta coefficient (β) and *t*-value for the path between marital conflict and security about parenting (see Figure 4). As we progress from the constrained model to a model that freely estimates each index of emotional security, a significant difference in chi-square is apparent across all models tested (emotional regulation, cognitive representations, behavioural regulation). These results permit insight into the relative contribution of each index of emotional security as mediating elements in the link between marital conflict and children's security about parenting. Children's cognitive representations and emotional regulation differ from the constrained model at the $p < .005$ level, whereas the model assessing the role of children's behavioural regulation differs from the constrained model at the $p < .01$ level. In addition, the magnitude and statistical significance of the standardised path coefficient linking marital conflict and children's security about parenting varies as we progress from Model 1 to Model 4. When cognitive representations and emotional regulation are considered, this relationship is reduced to non-significance for both models. However, when children's behavioural regulation is considered, the initial relationship, although reduced, remains statistically significant. Finally, the change in chi-square as we move from Models 2, 3 and 4 to Model 5 (the theoretical model) represents the difference between a model that freely estimates one component of emotional security while constraining the remaining two.

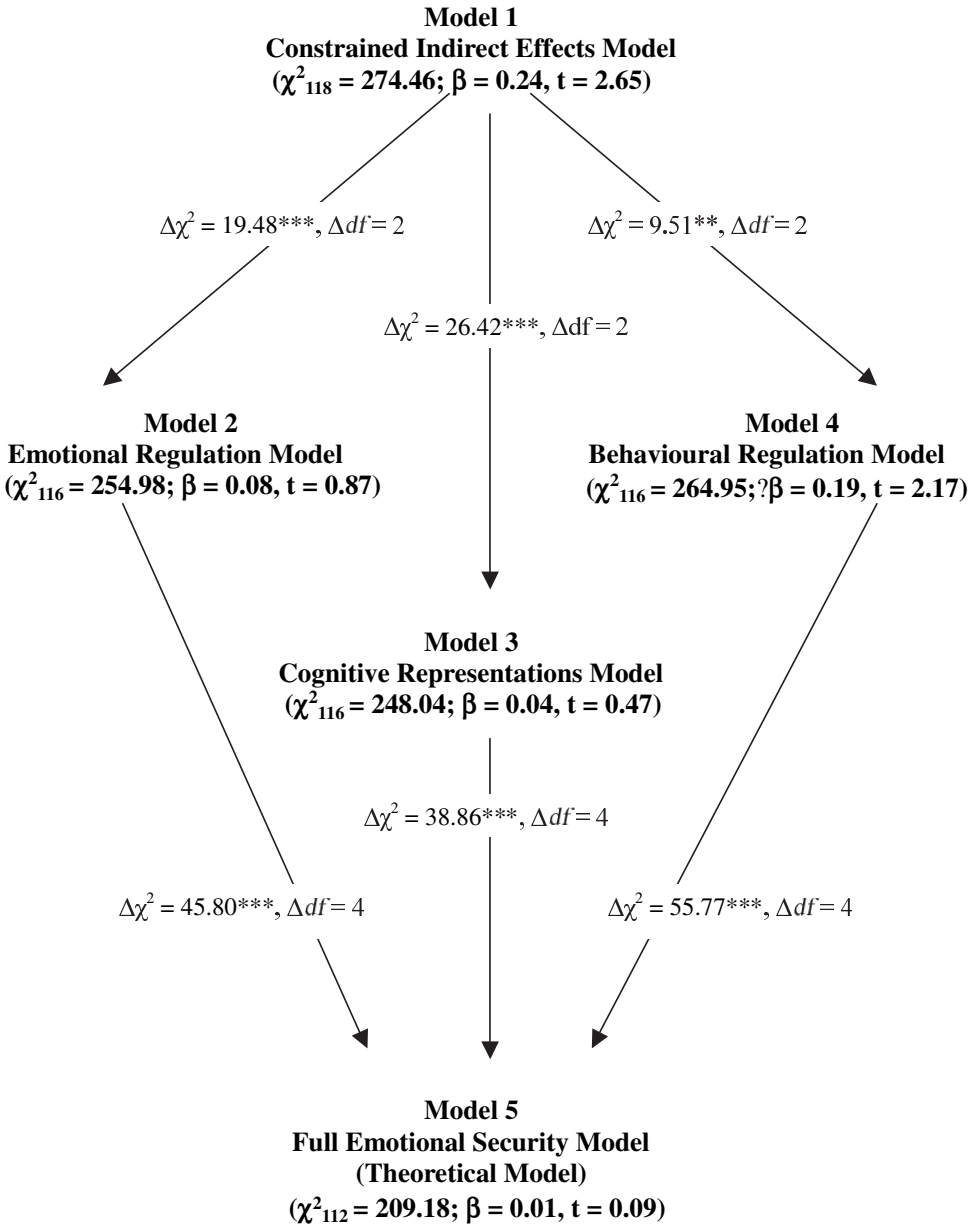


Figure 4. Schematic representation of hierarchically related models assessing the mediational role of children’s emotional security about marital conflict, *** $p < .005$, ** $p < .01$.

In this instance, derived statistics represent the deficit in chi-square if we compare the theoretical model to a model that includes one index of emotional security but excludes the remaining two. Once again, we can see that the models including children’s cognitive representations, emotional regulation and behavioural regulation significantly differ from the proposed theoretical model, suggesting that excluding any component

results in a significant decrease in the overall fit of the model. Using a nested modelling strategy and statistical criteria for testing mediational hypotheses outlined by Baron and Kenny (1986), these results collectively suggest that children's emotional security about marital conflict mediates the relationship between marital conflict and their feelings of security with their parents, with children's emotional regulation and cognitive representations making a stronger contribution to mediating this relationship than children's behavioural regulation.

*Marital Conflict, Emotional Security, Security about Parenting and Adjustment:
The Role of Symptom Stability*

Previous studies have tested the role of emotional security as a mediator of the effects of interparental conflict on children directly and indirectly (through parent-child relations) using cross-sectional data (Davies & Cummings, 1998; Davies *et al.*, 2002). While cross-sectional data are informative with respect to the pattern of relations linking conflict, emotional security, parent-child relations and children's adjustment, conclusions relating to the 'causal' pattern of relations that exist between these measures cannot be established. Collecting prospective data improves the confidence with which one can infer cause-and-effect relations. Harold and his colleagues (Harold & Conger, 1997; Harold *et al.*, 1997) employed such designs in the study of interparental conflict and child adjustment (see also Hetherington, Henderson & Reiss, 1999). These studies examined the role of children's perceptions of interparental and parent-child conflict in accounting for the impact of marital conflict and parent-child hostility on concurrent symptoms of internalising and externalising as well as symptoms measured 12 and 24 months later. Harold and his colleagues found that interparental conflict was not directly associated with later adjustment but had indirect effects on adjustment that operated through parents' and observers' report of hostility toward the adolescent and through adolescent awareness of the frequency of interparental conflict (Harold & Conger, 1997; Harold *et al.*, 1997). More recently, Harold, Shelton, Goeke-Morey and Cummings (2002) assessed the impact of interparental conflict on children's long-term adjustment through their concurrent appraisals of threat, self-blame and emotional insecurity. Support was found for the covarying role of children's social cognitions and threats to emotional security as intervening variables in the link between interparental conflict and later adjustment (internalising, externalising), having again controlled for earlier distress levels. Longitudinal evidence, therefore, supports the direction of effects hypothesised in the proposed theoretical model. An important question remains, however, as to the pattern of relations that may exist in the present data when the stability in symptoms is considered across time. A final set of analyses was therefore conducted whereby initial symptoms levels were included in the proposed theoretical model.

While a full structural equation model employing latent variable estimation offers a number of distinct advantages over more traditional autoregressive analytic techniques (e.g., improved measurement properties of primary theoretical constructs), sample size and the associated parameter-to-N implications limit the potential application of these procedures in every instance. Indeed, because of the limited sample size in the present study, tests of a full structural equation model with latent estimates of adjustment at both time points were not possible. Indicators of each latent construct were therefore summed in these analyses to represent composite measures of each theoretical construct. While not ideal, insight into the effects of marital conflict on

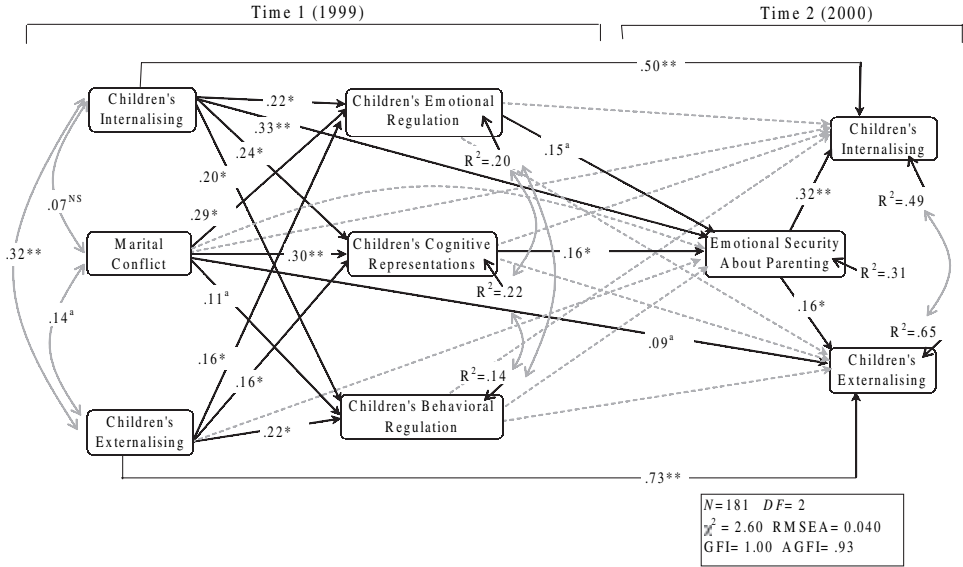


Figure 5. Maximum likelihood estimation of the impact of marital conflict, internalising and externalising problems and children's emotional security at Time 1 on feelings of security about parenting and symptoms of internalising and externalising problems at Time 2, ^a*p* < .10, **p* < .05, ***p* < .01.

children's security about marital conflict and their long-term security in parenting and associated symptoms of adjustment, while controlling for initial symptom levels, is provided (see Figure 5).

Results generally support the findings derived from our earlier tests of the proposed theoretical model. Parents' report of marital conflict significantly predicted each index of children's emotional security about the marital relationship. Children's emotional regulation and cognitive representations, but not behavioural regulation, predicted feelings of insecurity in their relationship with their parents when measured a year later. Feelings of security in the parent-child relationship, in turn, significantly predicted a concurrent increase in children's internalising and externalising symptoms. Initial symptom levels significantly predicted each index of emotional security, with internalising but not externalising symptoms predicting security in the parent-child relationship. Stability coefficients, as expected, were strong and significant for each index of adjustment. Interestingly, a marginally significant direct effect emerged between parents' reports of marital conflict at Time 1 and children's externalising problems at Time 2, suggesting an element of suppression in the link between conflict and externalising when initial symptom levels are not considered. In addition, the direct effects from children's behavioural regulation to their emotional security about parenting and their internalising symptoms at Time 2 did not appear statistically significant when internalising symptoms at Time 1 were considered. In addition, the direct effect from emotional regulation to externalising at Time 2 was not significant when the stability between symptoms was considered. Goodness-of-fit statistics suggested that this model provided a good fit to the data.

Collectively, results conducted across all analyses affirm the mediating role that children's emotional regulation and cognitive representations play in the link between marital conflict and children's security about parenting and further highlight the interplay between these measures in accounting for the effects of marital conflict on children's long-term symptoms of psychological distress.

Discussion

The present study represents the first longitudinal test of the emotional security hypothesis from a family-wide perspective. Results suggest that children's security about marital and parent-child relationships are important components of the emotional architecture underlying their specific responses to interparental conflict. Guided by the proposal that marital conflict influences children's psychological responses through the activation of a 'chain-of-events' process, this study assessed the role of children's emotional security in multiple family systems as determinants of the impact and implications of conflict between parents for their long-term symptoms of psychological distress. Findings support the hypothesis that children's responses to marital conflict are guided by their sense of emotional security stemming from exposure to conflict *between* their parents and the impact of such exposure on their feelings of emotional security *with* their parents measured 12 months later. In addition to demonstrating these effects in the context of a prospective longitudinal research design, new ground is broken in showing interrelations between emotional security about marital conflict and parenting, including links between specific processes of emotional security about marital conflict and children's general constructions of security about parent-child relationships.

Results presented in Figure 2 confirm that marital conflict negatively influences children's symptoms of psychological distress through adverse effects on their feelings of emotional security stemming from marital conflict which, in turn, adversely influence their feelings of security in their relationship with their parents. Several reviews have marshalled evidence that when parent-child problems are considered in the context of marital conflict, parent-child problems at least partially mediate the effects on children's adjustment (Buchanan & Heiges, 2001; Erel & Burman, 1995; Krishnakumar & Buehler, 2000). However, as Harold *et al.* (1997) point out, problems in the marital relationship and the parent-child relationship are unlikely to occur in isolation of each other (see also Cox *et al.*, 2001). Indeed, marital conflict has repeatedly been shown to serve as a catalyst for children's experiences of conflict in other family relationships, including the parent-child relationship (Erel & Burman, 1995). Harold *et al.* (1997) have gone one step further and shown that children's perceptions of interparental conflict inform their representations of parent-child relations which, in turn, affect their adjustment. Davies and Rasi (2002) working specifically from an emotional security perspective, considered the broader family context in which interparental conflict occurs, by examining how emotional security in relation to the marital and parent-child relationship influenced internalising and externalising symptoms. Results suggested that emotional security in relation to the marriage influenced concurrent symptoms over and above the effects of parenting difficulties and parent-child attachment insecurity. This study used a cross-sectional design however, thus limiting any conclusions relating to the direction of effects between conflict, emotional security processes and adjustment.

The present report contributes assessment of emotional security based on analogue procedures and differentiates each component of emotional security as predictors of outcomes, while also considering the role of children's security about relations with their parents, using a prospective longitudinal design. Findings support the hypothesis that emotional security about marital conflict directly and indirectly, relates to children's internalising and externalising symptoms, suggesting elements of unique and overlapping emotional processing underlying links between children's exposure to interparental conflict, security about relations with their parents and adjustment. Consistent with previous studies, these findings suggest that children's appraisals of marital conflict and of parent-child relations both involve evaluations of relationships in the family that may simultaneously contribute to children's 'working models' of relationships (e.g., Owen & Cox, 1997). Although bi-directional causation is to some extent likely to be the case (Cox *et al.*, 2001), Harold *et al.* (1997) provide evidence that children's perceptions of marital conflict are more likely to influence their perceptions of parent-child relations than the converse. This result is consistent with proposals by Cummings & Davies (1994) suggesting that children witnessing hostile exchanges between their parents may interpret *parent-child* conflict as being more hostile or threatening than children who have not witnessed such conflict between parents. From this perspective, children's appraisals of marital conflict may provide a context within which the qualities of parent-child relations are interpreted (Osborne & Fincham, 1996). Results presented in Figure 3 provide support for this hypothesis.

Collectively, these results suggest that any effects of marital conflict on children's long-term psychological adjustment need to be considered in relation to children's general feelings of emotional security. Contrary to previous reports (e.g., Erel & Burman, 1995), however, threats to children's feelings of security with their parents do not derive solely from exposure to conflict between parents. Rather, effects are determined by the emotional, cognitive and behavioural foundations underlying children's feelings of emotional security when exposed to the adverse conditions associated with negatively managed marital conflict. Furthermore, emotional security about the marital relationship acts as a mediator of the long-term effects on children's feelings of security with their parents while also continuing to provide a direct influence on their long-term adjustment. Emotional security derived from exposure to conflict *between* parents, therefore, acts as one determinant of children's feelings of security *with* their parents, which together influence their long-term symptoms of psychological distress.

In this model, marital conflict and children's emotional security about marital conflict are measured a year earlier than children's emotional security about parenting and indices of adjustment. Children's emotional regulation and behavioural regulation influence children's externalising symptoms directly, while indirect effects exist from each of these measures as well as from children's representations of marital conflict through feelings of security in the parent-child relationship to both internalising *and* externalising symptoms. In sum, marital conflict activates children's emotional, cognitive and behavioural responses in a way that impacts their evaluations of other family relationships when measured a year later, which, in turn, affects their symptoms of psychological distress. Findings from a recent study, however, suggest that effects may not occur solely through representations of marital conflict and other family relationships (Shamir, DuRocher Schudlich & Cummings, 2001). Rather, it has been proposed that they may also be determined by children's regulation of emotions and behaviours in the context of conflict. Results from the present study suggest that marital conflict

does have effects on children's adjustment that are mediated by children's cognitive representations, but that these effects occur only indirectly through children's emotional security about parenting (see Figure 3). In support of this finding, DuRocher Schudlich, Shamir and Cummings (2004) recently reported that effects of marital conflict on children's representations of peer relationships were mediated by children's representations of mother-child and father-child relationships.

As a final test of the propositions outlined in the proposed theoretical model, the implications of initial symptom levels on children's concurrent feelings of security in the marital relationship and long-term security in the parent-child relationship, as well as the stability between symptoms at both time points, was assessed (see Figure 5). Derived results support initial findings suggesting that children's emotional regulation and cognitive representations are important process elements underlying the link between marital conflict, security about parenting and children's long-term adjustment problems. Interestingly, when symptom levels were considered at Time 1, initial effects from (1) emotional regulation to externalising problems, (2) behavioural regulation to internalising problems and (3) behavioural regulation to security about parenting no longer appeared statistically significant. Several factors may contribute to these findings when compared to findings noted in Figure 3. The magnitude of the stability coefficients linking each index of adjustment likely accounts for the lack of effects from self-regulation and behavioural regulation to externalising and internalising problems, respectively. The lack of an effect from behavioural regulation to security about parenting when internalising symptoms are considered at Time 1, on the other hand, poses an interesting theoretical prospect. Children's internalising symptoms may have important implications for their long-term feelings of security in the parent-child relationship by adversely influencing children's expectations relating to the availability and dependability of their parents. The presence of this effect may therefore limit the potential for a measure representing deliberate action in the context of conflict *between* parents to influence children's long-term feelings of security in their relationship *with* their parents. Additionally, measurement of behavioural regulation in this particular set of analyses is at the manifest rather than latent level. Coding this measure along intervene-avoid dimensions and then collapsing these indicators into a single construct may confound the underlying attributes that these behaviours represent. The improved measurement properties of this construct in Figure 3 may therefore account for the disparity in findings relating to the effect of behavioural regulation on children's long-term security about parenting. Irrespective, these findings have important implications for the measurement of this construct in future tests of the emotional security hypothesis.

Collectively, results derived from the present study extend past empirical work on the emotional security hypothesis by indicating that pathways via emotional and behavioural regulation on children's adjustment can be both direct and indirect (see Figure 3). These results thus further argue for the importance of a family-wide model in order to understand the complete set of possible mechanisms underlying the effects of marital conflict on children (see Davies & Cummings, 1994; Davies *et al.*, 2002).

Overall, these results suggest that marital conflict may best be seen as a catalyst for significant processes pertaining to children's emotional security about family relationships, including processes relating specifically to the role of parents in the family (Cummings, Goeke-Morey & Graham, 2002). Consistent with the emotional security hypothesis (Davies & Cummings, 1994, 1998), significant processes include the way in which children evaluate how they feel in the context of conflict, what the conflict

means for the quality of other family relations, and children's regulation of exposure to conflict between parents. These responses are pertinent to how children feel about their relationship with their parents in the long term, which, in turn, influence their internalising symptoms and externalising problems. It should be noted, however, that positive or constructive conflict processes might, alternatively, have positive effects on children, although such forms of conflict are not assessed in this study (Goeke-Morey, 1999; Goeke-Morey, Cummings, Harold & Shelton, 2003).

Limitations and Implications

Several limitations need to be considered. First, development of procedures to assess the construct of emotional security remain in their infancy, particularly in relation to cross-cultural coding of children's responses to interparental conflict (US vs. UK). A particular question relating to this procedure is whether watching simulated interactions is a valid technique for assessing children's reactions to marital conflict. A number of previous studies support the use of analogue procedures across a variety of empirical contexts. For example, highlighting the usefulness of experiments in family research (see Cummings, 1995; Cummings & Davies, 2002), the impact of children's history of exposure to interparental conflict on their symptoms of psychological distress (e.g., J. S. Cummings, Pelligrini, Notaricus & Cummings, 1989; Grych, 1988), has been successfully demonstrated using analogue procedures. Second, although the sample size is larger than has previously been reported in tests of the emotional security hypothesis (Davies & Cummings, 1998), the parameter-to-N ratio when the sample is separated according to child gender is limited in relation to possible subgroup comparison tests. Gender, however, has been shown to be an important factor in accounting for children's responses to conflict (Davies & Lindsay, 2001; Laumakis, Margolin & John, 1998). Third, the measure of emotional security about parenting is a general index of emotional security processes (Waters & Cummings, 2000), and is not intended to represent patterns of parent-child attachment per se. Moreover, such measures of attachment patterns between parents and children might well be expected to capture aspects of attachment relationships between parents and children not assessed in the current study. Fourth, the labelling of terminology for dimensions of emotional security about marital conflict deviates slightly from the labelling of terminology by Davies and Cummings (1994, 1998), reflecting the particular package of assessments available in this study. Behaviourally- and observationally-based assessments of these dimensions may well yield an even richer characterisation of these variables in the future and pathways of influence may be even more complex with the assessments of other aspects of contexts of family functioning (e.g., parental adjustment).

Notwithstanding these limitations, these results are unique in several respects. First, the study measures pathways of influence of marital conflict in the context of a prospective longitudinal design through multiple distinct processes, including pathways of effect through emotional security about multiple family systems. Second, effects reported represent data collected from a culturally diverse sample—Welsh parents and their children. Previous tests have relied primarily on samples derived from the United States. Third, the study replicates several previous studies utilising a 'process-oriented' approach to understanding the role appraisals of conflict and representations of parent-child relations play in accounting for the link between marital conflict and children's symptoms of psychological distress (e.g., Davies & Cummings, 1998; Harold &

Conger, 1997; Harold *et al.*, 1997). Fourth, the study represents a ‘multi-method’ approach to data collection in that correlational and experimental methodologies as well as multiple reporters of children’s adjustment are used.

Although further investigation and replication is needed, the findings of the present study are consistent with previous work highlighting the importance of assessing the effects of interparental conflict on children’s psychological adjustment from the perspective of the child and build on the empirical foundation for emotional security as a mediating mechanism for the impact of marital relations on children’s representations of relations with their parents and their symptoms of psychological distress (Davies & Cummings, 1998; Grych *et al.*, 2000; Harold & Conger, 1997). Indeed, the present study provides a further step toward clarifying the manner by which children’s previous experience and subsequent emotional security during instances of marital discord affect their psychological functioning. The findings thus encourage additional study of the family-wide effects of marital discord on the developing child.

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