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Marital Conflict, Emotional Security, and Young Children's Social and Emotional Competence

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Marital Conflict, Emotional Security, and Young Children's Emotional and Social

Competence

By

Adam D. Kayfitz, M. A.

A Dissertation
Submitted to the Faculty of Graduate Studies
through the Department of Psychology
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the University of Windsor

Windsor, Ontario, Canada

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Martial Conflict, Emotional Security, and Young Children's Emotional and Social
Competence

by

Adam D. Kayfitz

APPROVED BY:

_____
S. Lollis, External Examiner
University of Guelph

_____
D. Kane
Faculty of Nursing

_____
R. Orr
Department of Psychology

_____
J. Hakim-Larson
Department of Psychology

_____
R. Menna, Advisor
Department of Psychology

_____
K. Calderwood, Chair of Defence
Faculty of Graduate Studies and Research

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ABSTRACT

The present study examined the mediational role of young children's emotional security in relations between destructive and constructive marital conflict, and children's emotional and social competence and psychological adjustment. Participants were 91 mothers and their children aged 3-6 years (52 males and 39 females). Mothers' reports of their destructive and constructive marital conflict were obtained along with their reports of their children's emotional security, psychological adjustment, including internalizing and externalizing symptoms, social competence, including social skills, prosocial behaviour, and aggression, and emotional competence, including emotion regulation and emotion lability/negativity. Children completed tasks that assessed their hostile attributions and their emotion knowledge. Destructive marital conflict was associated with negative child outcomes including higher levels of internalizing and externalizing symptoms aggression, and emotion lability/negativity and lower levels of social skills, prosocial behaviour and emotion regulation. In contrast, constructive marital conflict was associated with positive child outcomes, including lower levels of internalizing and externalizing symptoms, aggression, and emotion lability/negativity and higher levels of social skills, prosocial behaviour and emotion regulation. However, emotional security did not mediate these relations. This null result is discussed within the context of the sensitization hypothesis. Additional analyses, however, indicated that an aspect of emotional security, namely behaviour dysregulation, partially mediated relations between destructive and constructive marital conflict and aspects of children's psychological adjustment, social competence, and emotional competence. These findings suggest the possibility of a developmental pathway for how children express their emotional security concerns and how these are related to

their psychosocial and emotional development. Furthermore, this study provides support for the notion that destructive marital conflict is a risk factor for poor child outcomes while constructive marital conflict may be a protective factor and suggests the need for early intervention and prevention efforts.

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CHAPTER I

Introduction

Study Context and Rationale for the Present Study

Marital conflict can be considered normal between couples because it is inevitable as two people are likely to disagree on a variety of issues in their lives. How marital conflict occurs, however, can differentially impact children's psychosocial development (Cummings, Davies, & Campbell, 2000). Conflicts that are resolved positively can be both helpful and beneficial to parents and their children as children may learn how to handle their own conflicts in adaptive ways with others (Beach, 1995; Davies, 1995). Destructive forms of marital conflict, such as interparental hostility and aggression, have negative effects on children's current and subsequent psychological adjustment (Cummings & Davies, 2002, 2010; Davies, Winter, & Cicchetti, 2006; Holden, Stein, Ritchie, Harris, & Jouriles, 1998).

Children who are exposed to destructive marital conflict have been shown to have higher levels of internalizing (e.g., anxiety and depression), externalizing (e.g., aggression and rule-breaking behaviour), self-esteem, and school performance difficulties (Cummings, Schermerhorn, Davies, Goeke-Morey, & Cummings, 2006; Dadds, Atkinson, Turner, Blums, & Lendich, 1999; Doyle & Markiewicz, 2005; Grych, Fincham, Jouriles & McDonald, 2000; Katz, Hessler, & Annest, 2007; Marks, Glaser, Glass, & Horne, 2000; Ingoldsby, Shaw, Owens, & Winslow, 1999). Repeated exposure to marital conflict has been found to amplify children's negative emotional and behavioural reactions to marital conflict and negatively influence their appraisals about the intactness of their family, their beliefs that their needs will be met even in times of

marital unrest, and their psychological adjustment (Davies et al., 2006). Therefore, the research suggests that children will experience greater risk for psychological adjustment difficulties when exposed to longer periods of marital conflict as opposed to shorter periods (Cummings et al., 2000). More specifically, it is assumed that older children may have more adjustment difficulties than younger children in the face of conflict, because they have been sensitized and exposed to it for longer periods. Davies et al. (2006) found that 7-year old children were more emotionally reactive and had greater negative cognitions about marital conflict than a year earlier. In addition, links between marital conflict and emotional security have been shown to be stronger for children over the age of 11 years than for children younger than 11 years (Cummings et al., 2006). Given the increasingly negative effects of destructive marital conflict on children's adjustment, examining the impact of marital conflict on preschoolers may lead to early intervention and prevention programs to reduce the risk of future mental health problems.

Studies have reported that approximately 18-21% of all children will be diagnosed with a mental health disorder within their lifetime, although these rates tend to vary depending on the methods used to define psychopathology and the age ranges of children represented within the various studies (Carter et al., 2010; Lavigne et al., 1996; McDonnell, & Glod, 2003; Offord et al., 1987; Roberts, Attkisson, & Rosenblatt, 1999). Specifically within the preschool population, studies report that approximately 20% will be diagnosed with a psychiatric disorder (Carter et al., 2010; Lavigne, et al., 1996; McDonnell & Glod, 2003). Given such statistics, it seems apparent that early child mental health services are imperative especially when research suggests that the experiences of preschool children predicts emotional and behaviour problems later in life

(Cummings et al., 2000; Landy & Menna, 2006; Rutter, Giller, & Hagell, 1998; Tremblay, 1999). The goal of early child mental health services is to enhance the well-being of all children and to minimize or avoid behavioural and emotional problems in children (Cohen & Kaufman, 2000). In order for such mental health services to be effective, knowledge of risk and protective factors for poor psychosocial adjustment can promote early intervention and help prevent preschool children from developing further psychosocial difficulties as they mature and as their typical emotional and behavioural responses to situations consolidate (Landy & Menna, 2006; Rutter, 2000).

The purpose of the present study was to examine the relations between destructive and constructive marital conflict, preschool children's appraisal and sense of security about the intactness of their family, and children's emotional competence, social competence, and psychological adjustment. The present study is framed within a developmental psychopathology perspective. According to developmental psychopathology theory, it is assumed that children's psychological functioning acts as a mediator between various individual, parental, and contextual risk and protective factors and child outcomes (Cummings et al., 2000).

The goal of the present study is to increase the understanding of the relations between marital conflict and child adjustment in several important ways. There are few studies that have examined the associations between marital conflict and children's social and emotional competence (Parke et al., 2001) and even fewer that focus on this relation for preschool children. Of the studies examining such a relation, many are focused on more serious and destructive forms of marital conflict, such as physical and verbal aggression as well as domestic violence and their impact on children's aggressive

tendencies, social-problem solving abilities, and popularity (Du Rocher-Schudlich, Shamir, & Cummings, 2004; Lindsey, MacKinnon-Lewis, Campbell, & Frabutt, 2002; Katz, Hessler, & Annest, 2007). In addition to a focus on destructive forms of marital conflict, the present study focuses on the associations between constructive forms of marital conflict and children's social skills, hostile attributions in ambiguous social situations, and emotional knowledge, regulation, and perspective taking. The present study also tests children's emotional security, an appraisal and sense of confidence that their family will remain intact even in the face of family stress, as an explanatory mechanism between marital conflict and social and emotional competence. By focusing on social and emotional competence as an outcome of marital conflict, the present study seeks to extend Emotional Security Theory (EST; Davies & Cummings, 1994), which generally examines children's emotional security as a mediator between marital conflict and broad adjustment indicators such as internalizing and externalizing behaviours.

In the sections that follow, information will be provided about the nature of marital conflict and its influence on children's psychological development. Next, theories that explain why marital conflict influences children's development will be explored, including indirect effects models, such as the role marital conflict plays on parenting and the parent-child relationship, and direct effects models, such as the relations between marital conflict and children's emotional security. Within this discussion will include an in-depth presentation of the Emotional Security Theory and research that supports this theory. Limitations of the research pertaining to the Emotional Security Theory will then be presented and a discussion about children's emotional and social competence within the context of marital conflict will follow. Finally, a discussion that explains the purpose

of the present study, including how the present study will seek to extend the Emotional

Security Theory will be presented along with study hypotheses.

Literature Review

Dimensions of Marital Conflict

Marital conflict is typically viewed as a negative event that has a negative impact

on children. However, the impact that marital conflict has on children's adjustment varies

as a function of the frequency, severity, content of the disagreements, conflict strategies,

and resolution of conflicts (Cummings et al., 2000; Cummings & Davies, 2002, 2010;

Kerig, 1996). Conflict that is frequent and severe can be deemed as *destructive* to

children. For example, Grych and Fincham (1993) found that children had higher levels

of behavioural problems when they perceived their parents' fights as frequent and

intense. While parents may argue about a variety of issues, conflicts that are directly

related to children, such as disagreements about child-rearing, may have a greater impact

on child development than other adult related conflicts (Cummings, 1998; Dadds &

Powell, 1991; Jouriles, Murphy et al., 1991) because children may blame themselves for

the occurrence of conflict (Grych & Fincham, 1990, 1993). Several types of conflict

strategies have been classified as *destructive* such as interparental physical aggression or

violence, nonverbal conflict, withdrawal during marital conflict, interparental verbal

aggression or hostility, aggression by marital partners against objects during marital

conflict, involving the children in the conflicts, and conflicts involving threats to the

intactness of the family, such as threats to leave (Cummings, 1998; Kerig, 1996; Straus,

1979).

Several nonaggressive behaviours and outcomes have been identified as *constructive* forms of marital conflict that may have benefits to parents and to children's social behaviour and problem-solving skills. Collaboration during arguments and disagreements, such as expressing one's thoughts and feelings openly, listening to one's partner's point of view, and understanding the feelings of one's partner, is seen as constructive because it involves joint problem solving to find a solution to a problem that meets the needs of both parents (Cummings & Davies, 2010; Kerig, 1996). Children may benefit from viewing such a form of conflict as they may learn how to effectively solve problems with their peers (Davies & Cummings, 1994; Grych & Fincham, 1993). Other important constructive conflict strategies can include successful conflict resolution, progress towards a resolution of conflict, explanations to children by parents of how conflicts had been resolved, positive parent emotionality at the conclusion of conflict, and even optimistic explanations of non-resolution of conflicts (Cummings, 1998; Cummings & Davies, 2010; Kerig, 1996, Straus, 1979).

Marital Conflict and Children's Psychological Adjustment

A review of the literature reveals that destructive marital conflict influences preschool and school-aged children's internalizing problems, such as anxious and depressive feelings and externalizing problems, such as aggressive and rule-breaking behaviour (Cummings & Davies, 2010; Dadds et al., 1999; Grych et al., 2000; Katz et al., 2007; Marks et al., 2001). Two meta-analyses have also indicated that children who witness domestic violence, a component of marital conflict, have more behavioral and emotional difficulties than children who have not witnessed domestic violence (Kitzmann, Gaylord, Holt, & Kenny, 2003; Wolfe et al., 2003).

The influence of destructive marital conflict on child adjustment has been shown to occur over time for preschool children, school-aged children, and adolescents. For example, marital conflict measured at one point in time has been shown to predict higher levels of internalizing and externalizing problems, as well as difficulties with self-esteem and poor school grades either one or two years following the initial report of marital conflict (Cummings et al., 2006; Doyle & Markiewicz, 2005; Ingoldsby, Shaw, Owens, & Winslow, 1999). In addition, specific forms of marital conflict can have differential influences on child outcomes. Katz and Gottman (1993) observed and coded a marital interaction between parents when their children were five years old and assessed these parent's children's psychological adjustment three years later. They found that interparental hostility was associated with child externalizing symptoms three years later, whereas interparental anger and withdrawal predicted greater internalizing symptoms among children three years later.

While the majority of literature focuses on the negative impact of destructive marital conflict on child adjustment, some research indicates that aspects of constructive conflict can have a positive impact on children. Cummings, Faircloth, Mitchell, Cummings, and Schermerhorn (2008) examined the impact that either a four-session psychoeducational group about marital conflict or a self-study control group had on parent's knowledge of marital conflict, conflict tactics, and their children's psychological adjustment at 6- and 12-month posttest. They found that parents in the treatment group had significantly more knowledge about marital conflict, engaged in less destructive conflict behaviours, and more constructive conflict behaviours at 6- and 12-months following the treatment. Additionally, they found that increases in mothers constructive

conflict behaviour was related to improved child adjustment, as measured on the Child Behavior Checklist (Achenbach, 1991a).

Goodman, Barfoot, Frye, and Belli (1999) assessed the frequency of marital conflict and the tactics that parents use during conflict as well as these parents' school-aged children's social problem solving skills. They found that children were rated to have better social problem solving skills, such as generating more effective and prosocial solutions to hypothetical conflict situations, when their mothers used more verbal reasoning within the context of low to moderate frequency of marital conflict. For example, children in this category may have responded to being bothered by another child when working on a task by politely asking this child to stop so that he/she could complete an important task. In addition, children were rated to have greater social problem solving skills when their fathers reported greater intimacy with their wives following marital conflict.

While previous research has focused on the relation between marital conflict and child adjustment, more recent process-oriented research has attempted to delineate the reasons for such a relation. Two main models are used to explain the link between marital conflict and child adjustment; Indirect effects models and direct effects models (Davies et al., 2006). According to indirect effects models, marital conflict may influence other family, parental, and parent-child relationship factors which subsequently influence child adjustment. Direct effects models posit that marital conflict increases children's vulnerability to poor psychological adjustment by increasing children's distress and reactivity to conflict.

Indirect Effects Models

Given the intense emotional burden that destructive marital conflict has on each of the individuals in the marital subsystem, indirect effects models assume that there can be "spill over" effects into the realm of parenting practices, family cohesion, and parent-child attachment relationships (Cox, Paley, & Harter, 2001; Engfer, 1988). The influence of these factors likely accounts for some of the relations between marital conflict and child adjustment (Fauber & Long, 1991).

Several studies support the "spill-over" hypothesis. For example, marital conflict has been associated with harsh, coercive (Hetherington & Clingempeel, 1992), and rejecting parenting behaviors (Fauber, Forehand, Thomas, & Wierson, 1990). Interparental withdrawal has also been shown to be a significant predictor of lower levels of parental warmth (Davies et al., 2006). Kitzmann (2000) examined the effects that marital discussions about pleasant and conflictual topics had on subsequent parenting. In a laboratory environment, parents' behaviour, such as negativity and tension or positivity and warmth were coded during 5-minute discussions of pleasant and conflictual topics. Following each discussion, parents and their children engaged in a play task in which family cohesion and parenting behaviour were coded. Kitzman found that there was less cohesion in family interactions with children following a conflictual marital exchange than following a non-conflictual marital exchange. In addition, a significant number of parents who showed democratic parenting after a pleasant marital exchange showed disrupted, nondemocratic parenting after the conflictual exchange, highlighting the disruptive effects of conflict, even if it is intermittent, on parenting. Kaczynski, Lindahl, Malik and Laurenceau (2006) suggested that parents may lack the energy or motivation

to interact effectively with their children following conflict or that some parents are consistently ineffective at managing conflict and employ poor conflict management techniques with both their spouse and their children.

The impact that marital conflict has on various aspects of parenting also influences the parent-child attachment relationship. Frosch, Mangelsdorf, and McHale (2000) examined the relation between marital conflict and parental behaviours when children were six months of age on children's attachment security with their parents when children were three years of age. At six months, couples discussed the distribution of child care responsibility for five minutes and parental behaviour was coded, such as destructive conflict or positive engagement. Then parenting behaviours were coded in a semi-structured family play session. This sequence was repeated when children were three years old. Mothers and fathers completed a measure of attachment security, using the Attachment Q-Sort (Waters, 1987) in which parents reported which child behaviours and personality characteristics within the context of the parent-child relationship were like their children or unlike their children. Marital conflict was related to more hostile and less supportive interactions with children when they were six months of age, and this was in turn related to lower levels of secure attachment relationships when children were three years of age. However, when mothers were less hostile and more supportive in their interactions with their preschoolers, children were more secure in their attachment relationship with each parent.

Direct Effects Models

Unlike indirect effects models, direct effects models theorize that marital conflict has effects on children that are directly related to the occurrence of marital conflict, and

that are not accounted for by parenting. Three models commonly used to explain the influence of marital conflict on child adjustment include social learning theory (Bandura, 1973), cognitive-contextual framework (Grych & Fincham, 1990), and emotional security theory (Cummings & Davies, 1994). While each of these models differs in their theoretical tenets, all assume that marital conflict increases vulnerability to adjustment problems by amplifying distress and reactivity to conflict (Davies, et al., 2006).

Social learning theory.

According to social learning theory, children learn behaviours through the modeling of their parents (Bandura, 1973). Within the context of marital conflict, it is assumed that children learn aggressive behaviours from their parents through observational learning. Through modeling, children may directly imitate parents' conflictual behaviours, acquire scripts or rules for engaging in verbal or physical aggression, or have reduced inhibitions about aggression (Cox, Paley, & Harter, 2001; Cummings & Davies, 1995; Emry, 1982; Patterson, 1998). Two specific tenets of social learning theory describe situations in which children are most likely to imitate their parents. First, it is assumed that children are more likely to model behaviour of their parents when they have a warm relationship with a parent (Bandura & Walters, 1959). Thus, social learning theory would predict that children are more likely to model the parent they have a closer relationship with, be that aggressive behaviour or constructive conflict behaviour. Second, children are predicted to model behaviour that is more likely of the same-sex parent as they learn gender scripts (Emry, 1982). Thus, in a social learning perspective children are likely to mimic the positive or negative reactions to conflict of their same-sexed parent, or parent with whom they have a warm relationship.

These reactions, in turn, are predicted to be utilized by children in their relations with others.

Cognitive-contextual framework.

The cognitive-contextual framework explains how children's interpretation and understanding of marital conflict signals concerns over the implications of marital conflict for children's well-being (Grych & Fincham, 1990). As is inherent in its name, the cognitive contextual framework places a great deal of emphasis on cognitive appraisals as implications for children's adjustment. More specifically, in theory, children's appraisals of the threat of conflict for their well-being, and children's belief that they are the cause of the marital conflict (self-blame), mediate the relation between marital conflict and child adjustment. Grych et al. (2000) provided a test of the notion that school-aged children's cognitive appraisals of self-blame and perceived threat of the breakup of the family mediates the association between marital conflict and children's adjustment problems. In the study, 317 boys and girls (aged 10-14) completed questionnaires on their perceptions of marital conflict in the home, their perceived threat and self-blame for the conflict in the home, and their levels of anxiety, depression, and aggression. They found that for boys and girls self-blame and perceived threat of the conflict on the family concurrently mediated the relation between parental conflict and internalizing problems, but not externalizing problems.

Emotional security theory.

According to Cummings and Davies (1996), emotional security is an appraisal made by children that family bonds are positive, safe, and stable even in the face of everyday stressors such as marital conflict. Emotionally secure children expect that

family members will remain responsive and emotionally available for children even in times of stress and expect that their family will remain in tact. Destructive marital conflict may undermine children's security by signaling unhappiness of a parent and raises the possibility of divorce (Cummings & Davies, 2010; Davies Forman, Rasi, & Stevens, 2002).

According to Cummings and Davies (1994), children's emotional security is observed as three interrelated, yet distinct, classes of responses: emotional reactivity, regulation of conflict exposure, and hostile internal representations. Emotional reactivity is measured as prolonged, dysregulated fear, vigilance, and distress. Sadness and anger can still play a role in observing children's emotional security, but fear and vigilance are hypothesized to be the primary emotions activated when security concerns arise. Regulation of conflict exposure is a coping strategy that includes children's involvement, such as taking sides and acting up, or avoidance of the conflict situation as well as strategies to control parent emotionality and behaviours before they escalate and result in more serious problems for the family. Hostile internal representations are children's analyses of the implications and consequences of conflict for the welfare of the self, such as parent availability, and family, including the intactness of the family. Preschool children's emotional security is generally assessed using measures of their emotional reactivity and regulation of conflict exposure (Cummings et al., 2006; McCoy, Cummings, & Davies, 2009) while school-aged children and adolescents emotional security includes the hostile internal representations aspect in addition to emotional reactivity and regulation of conflict exposure (Cummings et al., 2006; Davies et al., 2002).

Emotional security theory (EST) is an extension of attachment theory. According to attachment theory, the quality of the parent-child relationship influences children's personality and social development (Ainsworth, 1979; Bowlby, 1969). Attachment theory is based upon a secure base and control systems model. Within the hierarchy of human goals, protection, safety, and security are among the most salient and important (Davies, et al., 2002). Depending on the quality of the parent-child relationship and parents' responsiveness to their children's needs, children develop internal working models about their safety and security as provided by their parents. Children's expectations concerning caregiver responsiveness promotes children's exploration in novel settings as they view their parents as a secure base (Ainsworth, 1979; Bowlby, 1969; Sroufe, & Fleeson, 1986). Secure children are able to explore their social environments because they are confident their parents will protect them if danger arises in the social environment. Insecure children, however, may not explore novel situations because they do not have a belief that their parents will provide safety and security if danger arises in their social environment. Secure children are more likely to be socially active, well liked by teachers and peers, less anxious, and less aggressive than insecure children because they have less security concerns than insecure children (Cohn, 1990; Bohlin, Hagekull, & Rydell, 2000).

A control systems model is another central concept of attachment theory. Control systems are logical structures that integrate information about the environment and the internal state of the individual, relate this information to a set goal, such as security, and engage in behavior in order to establish and maintain an adaptive relation to the environment (Boulanger, 1969). Bowlby (1969) and Ainsworth, Blehar, Waters, and Wall (1978) used control systems theory to explain children's regulatory attachment

behaviour when security concerns arose. Ainsworth et al. developed the strange situation task to observe various regulatory behaviours children had in response to separation from their mothers. She found that upon reunion, secure children approached their mothers, were easily comforted by their mothers and returned to pre-separation levels of play. Upon reunion, insecure-avoidant children showed little or no eye contact to their mothers, had no greeting towards their mothers, and returned to play with little interaction with their mothers. Insecure-ambivalent children were extremely distressed by separation. Upon reunion they acted angry or passive towards their mothers, were difficult to comfort, and did not return to pre-separation levels of play. Ainsworth et al. (1978) concluded that children's behaviour is an indication of how they regulate their security concerns when such concerns, in distress, are activated.

Emotional security and attachment theory are similar because both ascribe to a secure base and control system model. In addition, both share the assumption that the quality of the parent-child relationship can affect children's functioning by enhancing or undermining children's security in the parent-child subsystem which subsequently leads to various regulatory responses and developmental outcomes (Davies, et al., 2006). Unlike attachment theory, EST proposes that maintaining security is relevant beyond the context of the parent-child relationship. EST incorporates aspects of both attachment theory and family systems theory. EST proposes that children's psychosocial functioning is influenced by multiple family relationships such as the marital relationship, in addition to parent-child attachment, which may serve as a source of support or threat to children's well-being (Cummings & Davies, 1994, 1996, 2010).

Consistent with a developmental psychopathology perspective, EST posits that children's sense of security and emotional well-being in a particular social context reflects the interaction of the person to their environment (Cummings & Davies, 1996). Drawing from core notions of attachment theory (Bowlby, 1969), EST posits a control system model in which preserving emotional security is a set-goal that influences children's reactions to marital conflict. That is, children evaluate marital conflict in terms of the set-goal of emotional security, with the emotional security behavioral system activated if that set-goal is threatened as a result of marital conflict. Applying secure base and control systems concepts to the family context, it follows that children's emotional security can be assessed by the organization of regulatory processes or strategies, occurring in the context of marital conflict, that serve the goal of preserving children's emotional security (Cummings & Davies, 1996; Davies et al., 2002). These regulatory processes include children's emotional reactivity, regulation of conflict exposure, including their involvement in the conflict, avoidance of the conflict, or behaviour dysregulation during conflict, as well as attributions children make about the intactness of their family and meaning the conflict has for themselves and their family (Cummings & Davies, 1994, 1996).

While all children seek emotional security, they may display different patterns of emotional reactivity, behavioural dysregulation, and cognitive representations leading to different types or degrees of emotional security. In a similar vein to attachment classifications, Davies and Forman (2002) conducted a cluster analysis of school–aged children's responses to marital conflict to find various emotional security patterns. Children observed a conflict between their mothers and a research assistant. Their

behavioural responses, for example their regulation of exposure to conflict, were coded during this interaction. Following the interaction task, children were asked about their emotional reactions to the conflict and their perceptions of what would happen following the conflict to assess internal representations. Secure children were characterized by low levels of overt emotional distress, avoidance or behavioural interventions, or hostile internal representations. Dismissing children had high levels of overt emotional reactivity, avoidance, and or behavioural intervention. Such children, however, reported low levels of subjective hostility, behavioural intervention impulses, or hostile internal representations. These children defensively downplay marital conflict by not reporting subjective distress. Preoccupied children had high levels of overt and subjective emotional reactivity and insecure internal representations.

According to EST, children's security concerns as a result of marital conflict, as measured by their emotional, behavioural, and cognitive reactions to marital conflict are predicted to influence and contribute to their current and future psychosocial functioning and development. Initially, security concerns may have short term adaptive value for children. For example, the physiological and psychological arousal generated from fear and vigilance may increase coping behaviour such as withdrawal, or behavioural intervention in the marital conflict in an effort to deal with the threats of marital conflict (Saarni, Mumme, & Campos, 1998). Hostile internal representations may prime danger which may initially help children gain a sense of security by enhancing their ability to protect themselves and their family through behavioural interventions such as distracting parents, or through avoidance (Davies et al., 2002).

Continued marital conflict, however, sensitizes children to security concerns which can result in persistent emotional or behavioural dysregulation, and/or negative views of the self and others (Cummings & Davies, 1994, 2010). When the initial adaptive responses of children become rigid ways of being, psychological difficulties emerge (Cole, Michel, & Teti, 1994). Davies et al. (2006) outlined two ways in which continued exposure to destructive marital conflict and subsequent security concerns negatively impacts children. First, the high levels of hypervigilance, distress, and extreme avoiding or intervening by children, developed from marital conflict situations, may function as "scripts" for children when scanning new and threatening social scenes and create behavioural and emotional patterns of responding to challenging social settings and situations. Second, continued emotional, behavioural, and cognitive attempts at regulating emotional security may use considerable biopsychosocial resources that deplete children of the reserves, energy, and attention needed for other developmental goals, tasks, and challenges (Davies et al., 2002). For example, children may have physiological regulation difficulties, such as difficulties focusing their attention and inhibiting responses in their social environment, as biopsychosocial resources are used due to continued emotional security concerns (Posner et al., 2003).

Children who are exposed to destructive marital conflict have increased sympathetic nervous system arousal, a system initiated by the presence of stress, which has been shown to be related to psychological adjustment problems in children (El-Sheikh, 2005). Furthermore, increased emotional security concerns predicts increased sleep disruptions in children (Keller & El-Sheikh, 2011), which can further influence children's difficulties in regulating their biopsychosocial resources. Such depletions in

biopsychosocial resources may prevent children from successfully regulating their emotions or problem solving in appropriate ways. The present study focuses on children's emotional security as an explanatory mechanism between marital conflict and children's psychosocial outcomes.

Model Comparison: Construct Validity of Emotional Security

In an effort to differentiate the importance of emotional security from other models, Davies et al. (2002) conducted a series of studies that directly compared EST to social learning theory, the cognitive contextual framework, and indirect models. In study 1, Davies et al. conducted an analogue study using 327 sixth-grade children that compared EST and social learning theory. Children viewed videos of a man and woman using different conflict tactics pertaining to either child related issues or adult related issues. Children were told to pretend the actors in the videos were their parents. Children saw videos of adults using each of the following conflict tactics: a) physical aggression towards the spouse, b) physical aggression towards an object, c) threats to the intactness of the family, d) verbal hostility, and e) nonverbal hostility. Children's emotional security was measured through interviews. In response to the videos children were asked how they would feel and the degree of emotional reactivity they would experience in relation to the various conflict tactics shown in the videos. Children were also asked what they would have done in the various conflict situations. These answers were coded for either intervention or avoidance, in accordance with EST, as well as the various forms of aggression used in the videos, in accordance with social learning theory. Results indicated that children were more negatively reactive to themes of conflict posing threats to security, such as child related themes, than to equivalent conflict situations that did not

relate to security concerns, such as adult related themes, supporting EST. In addition,

aggressive adult modeling, such as physical aggression, was not more disturbing to

children than less severe forms of conflict that carried enhanced threat to security, such as

threats to the intactness of the family. Children also endorsed more intervention and more

avoidance than imitation for physical aggression towards spouse/object and

verbal/nonverbal hostility. Lastly, children's reports of fear, but not anger, increased as a

function of greater aggression. Results from study 1 were more consistent with EST than

social learning theory because children reported that they would not model the emotions

or behaviours shown in the videos. Instead, children's responses were guided by security

concerns such as feelings of fear as opposed to anger, and behaviours to intervene or

avoid the conflict situation rather than mimic responses in the videos.

Study 2 compared EST to the cognitive contextual model. Through the use of

questionnaires, Davies et al. assessed emotional security and cognitive contextual factors

of perceived threat and self-blame as mediators between marital conflict and school-aged

children's internalizing and externalizing symptoms for 285 families. Internalizing

symptoms were measured by children's self-report on the Children's Depression

Inventory (CDI; Kovacs, 1981) and on the Youth Self Report form of the Child

Behaviour Checklist (YSR; Achenbach, 1991a). Externalizing symptoms were measured

by self (YSR) and teacher reports (TRF; Achenbach, 1991b) of the CBCL. Marital

conflict was assessed at time 1 while emotional security, perceived threat, self-blame, and

psychological adjustment was measured two years later. Marital conflict was not related

to children's adjustment eliminating the possibility of meditational models. However,

emotional security was an intervening variable between marital conflict and

internalizing/externalizing symptoms even when perceived threat and self-blame were included in the model. While perceived threat and self-blame were intervening variables between marital conflict and adjustment when emotional security was not included in the model, they were no longer significant variables when emotional security was included. These results suggest that emotional security, perceived threat, and self-blame are important in predicting children's adjustment in the context of marital conflict. However, emotional security adds additional variance to the model suggesting that the emotional reactivity and regulation of conflict exposure, in addition to cognitive factors, are additional components affected by marital conflict (Davies et al., 2002).

Study 3 compared EST to indirect effects models. Indirect models propose that parenting and parent-child attachment mediate marital conflict and adjustment. EST assumes that emotional security in the context of marital conflict is a variable distinct from parent-child attachment. Thus, emotional security was predicted to mediate the relation between marital conflict and child adjustment after taking into account the effects of parenting and parent-child attachment. Davies et al. measured aspects of marital conflict (verbal/physical aggression and resolution), parenting practices (parental acceptance, monitoring and psychological control), emotional security, parent-child attachment, and internalizing/externalizing symptoms in a sample of 173 school-aged children. Results indicated that emotional security was a mediator between marital conflict and psychological adjustment even after taking into account the effects of parenting difficulties and parent-child attachment. These results suggest that emotional security is a robust, distinct, goal that is separate from parent-child attachment.

When emotional security was compared against social learning theory, the cognitive-contextual framework, and indirect effects models, emotional security either better accounted for the data, or added additional variance to existing models when explaining the relations between marital conflict and psychological adjustment. The results of Davies et al. (2002) support the construct validity of emotional security as a variable that is influenced by marital conflict. Davies et al. did not, however, explore the impact of various types of marital conflict on children's emotional security.

Type of Marital Conflict and Emotional Security

Both destructive and constructive marital conflict can have differential influences on children's emotional security. In addition, different types of destructive conflict can impact various aspects of children's emotional security. Davies et al. (2006) delineated how different types of destructive conflict influence different aspects of emotional security over the course of a year. They found that interparental hostility and withdrawal had a differential impact on six-year old children's emotional security over the course of a year. Interparental hostility, measured when children were six-years old, was a significant prospective predictor of increases in children's overt emotional reactivity to marital conflict over the course of a year. Interparental withdrawal predicted negative internal representations of interparental relationships and increases in subjective negative affect in response to conflict over the year. While different aspects of destructive conflict influence different aspects of emotional security, so do differences in destructive and constructive conflict.

Cummings, Goeke-Morey, Papp, and Dukewich (2002) compared the impact of destructive and constructive marital conflict on children's emotional security. Participants

included 41 couples with children aged 4 to 11 years. Each parent was instructed to record their daily behaviours (constructive and destructive) during conflict as well as perceptions of their own and their partner's emotions. Parents also completed a record of their children's emotions after a marital interaction and children's behaviours during marital conflict, like interfering in conflict, over a six-day period. Mothers reported that their children had increased sadness, negative emotionality, measured by a composite of anger, sadness, and fear, and regulatory behaviours such as, helping out, taking sides, interrupting, comforting, trying to make peace, and avoiding in response to destructive conflict behaviour by fathers. Fathers reported their children had increased anger, sadness, fear, and negative emotionality when mothers engaged in destructive behaviour. In contrast to the emotional insecurity of children when parents engaged in destructive behaviours, mothers reported that their children experienced increased positive emotionality when the mothers engaged in constructive behaviours, such as calm discussions, problem solving, support, humor, affection, compromise, apology, agreement to disagree, agreement to discuss later, and topic changes. Furthermore, mothers reported that mother and father positive emotionality during conflict was related to increased levels of positive emotionality in children, suggesting that positive emotionality increased children's sense of emotional security.

Davies and Forman (2002) provided another test of the differential impact of destructive and constructive marital conflict on the emotional security of 170 school-aged children. Destructive marital conflict was assessed by mother's reports of the frequency of conflict, the escalation of conflict during and after conflict, and physical aggression during conflict. Constructive conflict was assessed by mother-report of the level of

intimacy felt following marital conflict. Emotional security was assessed after children viewed a simulated conflict between their mother and a research assistant in which the mother was accused of arriving late and failing to complete questionnaires. Children's overt emotional responses, including anxiety, fear, sadness, tension, and vigilance, and their behavioural avoidance or involvement in conflict, were coded during and after the simulated conflict. After the simulated conflict, children were interviewed to assess their self-reported emotions and behavioural impulses during the conflict. Lastly, children's internal representations of the conflict, such as their perceived consequences for family functioning, were assessed after children listened to a simulated argument between a man and a woman who they imagined to be their parents. Davies and Forman (2002) found that emotionally secure children who had low levels of overt distress, avoidance, and behavioural intervention or hostile representations, were exposed to high levels of constructive conflict, as measured by parental resolution, and exposed to low levels of destructive conflict. Preoccupied children, who had high levels of overt and subjective emotional reactivity and hostile internal representations, were exposed to higher levels of destructive conflict compared to dismissing children, and especially when compared to secure children.

The results of these studies suggest that children are particularly distressed at marital conflict that signals the possibility of a family break up. As such, they behave in ways to try to regulate this insecurity. In contrast, children feel more emotionally secure when they see their parents work out their differences in constructive ways, which signal that the family will remain intact.

Emotional Security as a Mediator

Given that marital conflict has been shown to be related to both children's emotional security and adjustment problems over time, recent research studies have examined emotional security as an explanatory mechanism for the relation between marital conflict and child adjustment. Prospective, longitudinal studies have been used to show the temporal sequence of how marital conflict influences subsequent child adjustment (Cummings et al., 2006; Davies et al., 2002; Harold Shelton, Goeke-Morey, & Cummings, 2004).

Davies et al. (2002) assessed marital conflict and 285 school-aged children's emotional security at time 1 and assessed these children's internalizing and externalizing symptoms two years later. Marital conflict was assessed by parent-report of interparental distress, as measured by the Short Marital Adjustment Test (Locke & Wallace, 1959), and a measure of overt discord created by the authors of this study. Emotional security was assessed by the Interparental Subsystem Scale (SIS; Davies, Forman et al., 2002), a self-report measure of children's emotional reactivity, avoidance, involvement and cognitive representations in relation to marital conflict. Internalizing symptoms were measured by children's self-report on the Children's Depression Inventory (CDI; Kovacs, 1981) and on the Youth Self Report (YSR; Achenbach, 1991a). Externalizing symptoms were measured by self (YSR) and teacher reports (TRF; Achenbach, 1991b) on the CBCL. Davies et al. found that marital conflict was linked to children's internalizing and externalizing symptoms through its association with children's emotional security.

Harold et al. (2004) also used a longitudinal approach to assess emotional security as an explanatory mechanism for the impact of marital conflict on 181 school-aged

children's (aged 11-12) psychological adjustment. Marital conflict was assessed by mothers' and fathers' reports of marital dissatisfaction, marital hostility, and marital discord. Children also reported their perceptions of marital conflict on the Children's Perception of Interparental Conflict Scale (CPIC; Grych, Seid, & Fincham, 1992). Emotional security was assessed by children's self-reported emotional, behavioural, and cognitive reactions to an analogue video. The video portrayed different conflict strategies used by two adult actors, including destructive, constructive, and neutral strategies to solve an argument over a television program. Internalizing symptoms were measured by child reports on the CDI and YSR. Externalizing symptoms were measured by parent reports on the CBCL and child reports on the YSR. Harold et al. (2004) found that 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 internalizing and externalizing symptoms a year later.

Cummings et al. (2006) provided another longitudinal test of EST by assessing 226 children's (aged 9-18) psychological adjustment two years following the initial assessment of marital conflict and emotional security. Marital conflict was assessed by mothers' and fathers' reports of the frequency of conflict (O'Leary-Porter Scale; Porter & O'Leary, 1980), negative feelings towards one's spouse/marriage (The Negative Marital Quality dimension of the Positive and Negative Quality in Marriage Scale; Fincham & Linfield, 1997), and negative conflict tactics (Conflict Tactics Scale; Straus, 1979). Children also reported their perceptions of marital conflict using the Children's Perceptions of Inteparental Conflict (CPIC; Grych et al., 1992). Mothers reported on their children's emotional security, including their emotional reactivity, behavioural

involvement, and avoidance, after witnessing arguments between their parents using the Security in the Marital Subsystem Scale (SIMS; Davies, Forman et al., 2002). Children's internalizing symptoms were assessed by their reports of depression on the CDI and by parents' reports on the CBCL. Externalizing symptoms were assessed by mother and father reports on the CBCL. Cummings et al. found that emotional security completely mediated the relation between marital conflict and children's psychological adjustment two years later.

The results of Davies et al. (2002), Harold et al. (2004) and Cummings et al. (2006) suggest that destructive marital conflict was related to lower levels of children's emotional security and subsequently greater internalizing and externalizing symptoms. These studies were limited, however, because emotional security assessments were not temporally separated from assessments of marital conflict or child outcome, reducing the extent to which causal relations can be inferred.

Cummings et al. (2006) attempted to modify this issue by using a three wave longitudinal study by assessing marital conflict at time 1, 232 preschool children's (aged 5-7 years) emotional security at time 2, and children's psychological adjustment at time 3. Measures included mother/father reports of the frequency of marital conflict, observation of conflict tactics, maternal report of their preschool children's emotional security, and mother/father/teacher report of children's internalizing and externalizing symptoms. Results indicated that emotional security was an intervening variable between marital conflict and child adjustment. While marital conflict was not related to child adjustment 2 years later, it was related to children's emotional security a year later, which was subsequently related to children's internalizing and externalizing symptoms.

The results from the literature suggest that children's emotional security is an important mediator between marital conflict and child adjustment. However, the magnitude of the mediational role of emotional security between marital conflict and adjustment problems is modest to moderate (Davies et al., 2006). This suggests that there are other factors that can further exacerbate, protect, or contribute to psychological adjustment even though emotional security is an important explanatory variable between marital conflict and psychological adjustment.

Davies, Cummings, and Winter (2004) cluster analyzed various family characteristics, in addition to marital conflict, that may impact children's emotional security and psychological adjustment for 221 families. Cohesive families displayed low levels of spousal hostility, parental disagreements, parental psychological control, and inconsistent discipline. In addition, cohesive families displayed moderate to high levels of spousal affection and parental acceptance. Thus, these families exhibit warm, close, relationships while maintaining appropriate and flexible boundaries between members of the family. Enmeshed families had very high levels of spousal hostility, parental disagreements, psychological control, and inconsistent discipline while having modest to moderate levels of spousal affection and parental acceptance. Thus, these families tend to exhibit high levels of conflict, coercive control, and fused, unclear boundaries between family members. Disengaged families generally reported moderately high levels of spousal hostility, parental disagreements, psychological control and inconsistent discipline. Disengaged families also reported extremely low levels of spousal affection and parental acceptance. These families exhibit boundaries between members that are overly rigid, inflexible, and emotionally cold. Results indicated that emotional security

mediated the relation between membership in enmeshed families and internalizing and externalizing symptoms. In addition emotional security mediated the relation between membership in disengaged families and internalizing symptoms. Children from enmeshed families displayed the greatest levels of emotional insecurity despite being exposed to levels of marital conflict that were similar to disengaged families. These findings suggest that the impact of exposure to marital conflict may differ for children depending on broader aspects of family functioning such as parenting and the overall emotional climate of the family.

Limitations of Past Research

The majority of research that examines emotional security as an explanatory mechanism between marital conflict and children's psychological adjustment uses school-aged children and assesses broad indicators of psychological adjustment such as overall internalizing and externalizing symptoms (e.g., Cummings et al., 2006; Davies et al., 2006, Harold et al., 2004). Less research focuses on preschool children or examines how other indicators of psychological adjustment, such as emotional and social competence, are related to marital conflict and emotional security. Such a focus is important within the context of prevention and early intervention efforts. In addition, much of the literature on EST leaves a gap of information by mostly focusing on broad adjustment indicators. EST predicts that emotionally insecure children, who have negative emotions, behaviours, and cognitions in the context of witnessing marital conflict, use these scripts when behaving in social situations. Emotionally insecure children also have depleted biopsychosocial resources to meet important developmental goals (Davies et al., 2002). Thus, children may have fewer resources to positively attend

to their social situations or to manage their emotions, because they are preoccupied with security concerns regarding the intactness of their family and the implications that the dissolution of the family might have on them. However, most of the research uses broad adjustment indicators rather than examining other important developmental goals such as emotional and social competence.

Children's Emotional and Social Competence

Emotional competence is an important developmental goal because children who are emotionally competent are more likely to have a sense of subjective well-being and have a greater ability to be resilient and adaptive in stressful situations than children who are not emotionally competent (Saarni, 1997). Emotional competence is defined as a person's capacity and skill to navigate and negotiate through interpersonal exchanges and to regulate their emotional experiences to achieve desired outcomes in emotion-eliciting situations (Saarni, 2000). Three important aspects of emotional competence include emotional expressiveness, emotional knowledge, and emotional self-regulation. Emotional expression is a person's ability to communicate, state, or show their emotions accurately. Emotional knowledge is a person's understanding of their own and other's emotions as well as factors that contribute to various emotions. Emotional regulation is a developmentally acquired process of a person's ability to produce, monitor, and modify emotional reactions appropriate to environmental demands (Denham et al., 2003; Gottman, Katz, & Hooven, 1997, Shields & Cicchetti, 1997, 2001).

Social competence is also an important developmental goal for preschoolers because preschoolers start to relate to peers in groups as opposed to one-to-one relationships (Ishikawa, 2003). Social competence can be defined as a person's

effectiveness in social interactions (Rose-Krasnor, 1997).Various authors have measured components of social competence which include empathy, perspective taking, communication, affect regulation, social skills, social problem solving skills, and sociometric ratings (Crick & Dodge, 1994; Denham, 2006; Eisenberg & Fabes, 1998; Gresham, 1986; Wardern & Mackinnon, 2003).

Further contributing to preschool children's social competence is their developing cognitive skills and abilities. During the preschool years, children's use of symbolic thinking grows, their understanding and use of concepts of themselves and others increases, and mental reasoning and theory of mind emerges (Bruner, 1964; Feldman, 2003; Piaget, 1954). Preschool children become better at representing events internally and draw less dependent on the use of direct sensorimotor activity to understand their world (Feldman, 2003; Piaget, 1954). These new skills allow children to explore their world representationally and the use of play becomes an important avenue for preschoolers to express various feelings, further develop their understanding of concepts and understanding of the mind, and practice their perspective taking skills (Cohen, 2001; Hughes & Dunn, 1997; Leslie, 1987; Piaget, 1951).

This increase in symbolic thinking helps children to develop concepts of themselves and others. Preschool children begin to develop their self-concept, identity, or set of beliefs about what they are like as individuals. They typically describe themselves in terms of concrete, observable characteristics, such as physical characteristics, possessions, or typical activities that they can do (Keller, Ford, & Meacham, 1978). Children younger than 4 years of age seldom mention psychological characteristics in their self-descriptions, in part due to language limitations, although children as young as

3.5 years of age are able to consistently choose psychological evaluative statements that match their thoughts about themselves (Siegler & Wagner-Alibali, 2005). Older preschoolers, however, can include evaluative qualities in their self-descriptions, such as goodness or naughtiness (Stipek, Gralinski, & Kopp, 1990). Preschoolers also begin to develop concepts of other people. Much like their descriptions of themselves, these descriptions tend to focus on external, observable qualities of other people, such as their physical appearance, possessions, and typical activities. While preschoolers also start to explain others' behaviours in psychological terms, these descriptions are generally situation specific and do not refer to enduring dispositions or traits about people. Preschoolers also focus on how others' behaviour relates to themselves (Siegler & Wagner-Alibali, 2005).

Although preschoolers have the tendency towards egocentric thinking and viewing the world from their own perspective (Feldman, 2003; Piaget, 1954), they begin to comprehend that other people have a view of the world different from their own. Wellman, Cross, and Watson (2001) argue that from roughly 3 years of age, children have a naïve theory of how the mind works and how to explain human actions. They describe a belief-desire theory of mind theory in which the central tenant is that internal beliefs, desires, and intentions lead to actions. To achieve a theory of mind requires an understanding that the contents of the mind represent those in the world and that what we think is not necessarily what others think. Four- and five-year old preschool children begin to understand how intentions lead to actions and they can distinguish between intentions from accidents. For example, Shultz (1980) used a reflex hammer on children and asked if the children meant to move their leg. While 3-year old children responded

that they intended to move their leg, 4- and 5- year old children knew that this action was beyond their control. Preschoolers also begin to achieve an understanding of beliefs and how they motivate action (Leslie, 1987). Preschooler's greater understanding of intentions and beliefs are important in terms of their perspective taking skills, emotional knowledge skills, and social skills.

Relations between Emotional and Social Competence

Research indicates that specific aspects of emotional competence are related to aspects of social competence. Denham et al. (2003) found that 3-4 year old children's emotional expressiveness, as measured by observations of preschoolers' emotions during free play, predicted social competence in kindergarten, such as increased social skills as rated by teachers and peer likability. The expression of positive emotions is an important factor related to social competence as it is central to the initiation and regulation of social exchanges. Children who have positive affect tend to respond more prosocially to peer's emotions. Negative affect and anger, on the other hand, can prevent other children's desire to initiate social contact (Denham, McKinley, Couchoud, & Holt, 1990).

Emotional knowledge is also related to social competence. Children who understand their emotions and have an understanding of others' emotions are more prosocially responsive to their peers, have better social skills, better conflict resolution strategies, and are more liked by their peers (Denham et al., 1990; Denham et al., 2003; Dunn & Herrera, 1997; McElwain & Volling, 2002). For example, preschoolers who understand that a peer is sad and not angry may comfort the peer rather than retreat if they perceive them as angry. Children who are more aware of their own and others' emotions may be better able to articulate their feelings with friends, be more skilled at

detecting subtle emotional cues in others, and may be more aware of the impact of their behaviour on others (Katz et al., 2007). Each of these abilities may promote relationship closeness.

Research also supports that emotional regulation is related to social competence. Children's abilities to display and regulate their emotions appropriately are linked to the quality of their friendships with their peers (McDowell, O'Neil, & Parke, 2000). Buckner et al. (2003) indicated that children with good emotional regulation abilities may employ strategies to cope with potential stressors before they evoke negative emotion and lead to negative social consequences. For example, Fabes et al. (1999) conducted an observational study of preschoolers' emotional regulation and social competence. They found that preschoolers who were able to use self-control and regulate their emotions were able to attenuate some of the escalating emotions of a high-activity play situation, avoid aggressive interactions, and respond in socially competent and constructive ways. Preschool children who are less able to regulate their emotions are more oppositional and less liked by their peers (Denham et al., 2003). Preschoolers' emotional regulation has also been shown to predict later social competence. Emotional regulation at age 3-4 predicts social competence and social functioning up to four years later (Denham et al., 2003; Eisenberg et al., 1997).

Relations between Emotional and Social Competence and Psychological Adjustment

Most research that assesses the impact of marital conflict on children's psychological adjustment focuses on broad indicators of adjustment, such as internalizing and externalizing disorders (Cummings et al., 2006; Dadds et al., 1999; Grych et al., 2000; Katz et al., 2007). Such information, however, needs to be complimented by more

specific adjustment variables to identify particular outcomes that might be more proximal to marital conflict than broad indicators of psychological adjustment. While directionality is in question, it is possible that children with poor emotional and social competence may develop internalizing and externalizing disorders. Children with internalizing disorders withdraw from social interaction, while children with externalizing disorders act out. Withdrawal and acting out might impact social acceptance and competence which in turn may further cycle into greater internalizing/externalizing problems (Parke et al., 2001). Thus, emotional and social competence and broad internalizing and externalizing disorders are linked.

Results of various studies suggest that children with internalizing and externalizing problems have difficulties with emotional expression and emotional regulation. For example, children with internalizing difficulties have been found to have lower attentional regulation and are inexpressive in response to negative mood induction (Cole et al., 1996; Eisenberg et al., 2001). Children with externalizing problems also have difficulties with emotional expression and emotional regulation. Such children tend to have lower levels of emotional regulation and have been found to be either inexpressive or highly expressive in response to negative mood induction (Cole et al., 1996; Eisenberg et al., 2001).

Social competence and psychological adjustment are also related. Successful peer interactions such as peer acceptance, prosocial behaviour, and low levels of aggressiveness are predictors of later mental health (Denham & Holt, 1993; Parker & Asher, 1987). However, negative peer interactions and social problems are related to both internalizing and externalizing disorders (Katz et al., 2007).

In summary, a review of the literature reveals that emotional and social competences are important developmental goals that must be continuously developed throughout childhood. Emotional and social competences are related to each other and are also related to current and future psychological functioning. Examining factors, such as marital conflict, that may impede the development of such important goals is imperative. Unfortunately, there is little research that examines the relations between marital conflict and emotional and social competence.

Relations of Marital Conflict and Emotional and Social Competence

There is limited research that examines the association between marital conflict and emotional and social competence. Of the limited research in this area, much of it focuses on domestic violence or harsher, more physical forms of marital conflict. Katz et al. (2007) examined the impact of domestic violence on subsequent emotional competence. They found that preschool children exposed to high levels of domestic violence were less aware of their emotions and less able to regulate their negative emotions when they were school-aged. More specifically difficulties in emotional awareness were indicative of difficulties distinguishing one emotion from another, difficulties describing their emotional experiences, such as the cognitive and physical sensations of emotions, and difficulties knowing the causes of their emotions when compared to children not exposed to domestic violence. The results of this study suggest that exposure to domestic violence is related to the emotional development of children. Domestic violence is also related to children's school loneliness, maternal-report of children's peer difficulties, and general conflict with a best friend (McCloskey &

Stuewig, 2001). Preschool children who have witnessed their mothers being abused have also rated lower on maternal reports of their social competence (Marks et al., 2001).

Less severe forms of marital conflict are also related to lower levels of social competence. Du Rocher Shudlich, Shamir, and Cummings (2004) examined the link between covert and overt forms of marital conflict (as measured on the Conflicts and Problem Solving Scale; Kerig, 1996) and children's, aged 5-8 years, disposition towards peer conflict. A puppet task was used to assess children's conflict strategies among positive, negative, and ambiguous social situations. Children's negative dispositions towards peer conflict and aggressive behaviour in the peer conflict scenarios were associated with more overt conflict behaviours by both mothers and fathers, and more covert conflict behaviours by mothers. Hart, Nelson, Robinson, Olsen and McNeilley-Chouqe (1998) found that marital conflict, as measured by the amount of hostility in the marriage, was related to preschool boys, but not girls, overt and relational aggression.

While destructive marital conflict is related to poor social competence, constructive marital conflict can have a positive impact on children's social competence. Goodman et al. (1999) found that a sample of 57 school-aged children generated more effective alternative solutions to hypothetical social problems when their parents used more reasoning to resolve low and moderate levels of marital conflict. However, when marital conflict was at a high frequency and when parents engaged in more aggressive tactics and had more negative outcomes to conflict, children generated less effective solutions to hypothetical social problems.

At present, it appears as though much of the research linking marital conflict to emotional and social competence focuses on domestic violence and not on less severe

forms of marital conflict such as verbal hostility or withdrawal. There also appears to be little information concerning the relations between constructive marital conflict and preschool children's social and emotional competence. Lastly, research examining the mechanisms explaining the relationship between marital conflict and emotional and social competence is scarce.

Marital Conflict, Emotional Security, and Emotional and Social Competence

To this author's knowledge, there is currently only one study in which emotional security is used as an explanatory mechanism for the link between marital conflict and children's social competence. McCoy et al. (2009) used a three wave longitudinal approach to assess emotional security as an explanatory mechanism for the impact of destructive and constructive marital conflict on 235 children's, aged 5-7 years old, prosocial behaviour. At time 1, marital conflict was assessed by mothers' and fathers' reports of conflict severity and both destructive and constructive conflict tactics, as measured by the CPS (Kerig, 1996). At time 2, emotional security was assessed by the SIS (Davies, Forman et al., 2002). At time 3, children's prosocial behaviour was measured by parent and teacher report on the prosocial subscale of the Child Behavior Scale (CBS; Ladd & Profliet, 1996). While there were no direct relations between constructive and destructive conflict and prosocial behaviour, results indicated that emotional security acted as an intervening variable between destructive and constructive marital conflict and prosocial behaviour.

Additionally, various aspects of emotional security, such as emotional regulation and children's perceptions of marital conflict have been used to explain relations between marital conflict and social competence (Parke et al., 2001). Katz et al. (2007) assessed

parents' reports of their 9-year-old children's emotional dysregulation as a mechanism

for the association between domestic violence and social competence. They found that

children's ability to regulate their emotions mediated the link between domestic violence

and children's negative peer interactions and social problems. Katz et al. concluded that

parents engaged in domestic violence may themselves be emotionally dysregulated and

therefore have difficulty teaching these skills to their children. Thus, children from

domestically violent homes may not develop self-soothing strategies to calm themselves

down and may require external regulators such as parents or teachers. Emotional

regulation, however, was not measured within the context of domestic violence and thus

children's security concerns about the intactness of the family were likely not activated

suggesting that a more global measure of emotional dysregulation was used.

Kim, Parke, and O'Neil (1999) assessed the impact of marital conflict on school-

aged children's self-blame, a component of the cognitive-contextual framework, and

verbal and physical aggression. They found that children in grade 5 who experienced

greater frequency of destructive marital conflict had greater perceptions of self-blame for

the conflict and had more peer and teacher ratings of sadness, peer ratings of physical

aggression, and teacher ratings of excluding behaviour in grade 6. Du Rocher Schudlich

et al. (2004) found that children's internal representations of parent-child interactions, as

measured by a puppet task, partially explained the association between destructive

marital conflict and children's peer-conflict dispositions. These authors found, however,

that children's internal representations of mother-father relationships and mother-father-

child relationships did not explain the relation between marital conflict and the quality of

children's peer-conflict dispositions.

The limited research that explains the association between marital conflict and social competence suggests that emotional security can help explain this association. Exposure to destructive marital conflict raises children's emotional security concerns about the intactness of their family. Continued exposure to destructive marital conflict lowers children's thresholds for emotional regulation, limits children's abilities to attend to important social cues, and may stimulate angry cognitions and feelings of hostility, each of which may be translated into negative peer interactions, particularly when children are concerned about the intactness of their family (Coie & Dodge, 1998; Cole et al., 1994). However, to date, there appears to be no research examining emotional security as an explanatory mechanism between marital conflict and emotional competence. The present study will be the first to examine how both destructive and constructive marital conflict is related to preschoolers' emotional security and emotional and social competence.

The Present Study

The present study is designed to address important knowledge limitations in the literature surrounding preschool children's levels of emotional security and its relation to social and emotional competence within the context of being exposed to constructive and/or destructive marital conflict. The harmful effects that destructive marital conflict has on children's sense of security about the intactness of their family and the implications this has for children concurrently and over time, as well as the various psychological difficulties that children experience as a result has been well documented (e.g, Cummings & Davies, 2010; Cummings et al., 2006; Dadds et al., 1999; Davies et al., 2002; Davies et al., 2006; Doyle & Markiewicz, 2005; Grych & Fincham, 1993;

Grych et al., 2000; Harold et al., 2004; Katz & Gottman, 1993), although more information exists for school-aged children than for young children. While less studied, children exposed to constructive marital conflict have more positive outcomes than those exposed to destructive marital conflict, in part because they are more emotionally secure (e.g., Cummings & Davies, 2010; Cummings et al., 2002; Davies & Forman, 2002; Davies et al., 2004; McCoy et al., 2009).

Much less is known, however, about the impact that both destructive and constructive marital conflict has on preschool children's emotional and social competence. In an attempt to extend EST theory, the present study examines if relations between marital conflict and children's social and emotional competence can be explained through children's levels of emotional security. This information is important given the relations between emotional and social competence and broad psychological adjustment indicators (Cole et al., 1996; Denham & Holt, 1993; Eisenberg et al., 2001; Katz et al., 2007; Parke et al., 2001). It is also important because behavioural, and social emotional responses at a young age predict future responses and psychological well-being (Landy & Menna, 2006; Rutter, 2000).

It is expected that children exposed to higher levels of destructive marital conflict will have lower levels of social and emotional competence and higher levels of psychological difficulties. This is expected because children exposed to destructive marital conflict are likely to make an appraisal that their family will dissolve and that their needs may not be met. Consequently they may experience fear, anxiety, anger, and sadness when their parents fight and are likely to regulate their exposure to conflict to try and maintain their safety by either involving themselves in the conflict or withdrawing

from the conflict. These patterns of thinking, feeling, and behaving within the context of marital conflict are expected to transfer to children's social worlds with peers. These children may develop negative scripts for dealing with conflict, as learned by viewing their parents' conflicts, and also have less psychological resources to engage in behaviours that may facilitate positive social relations because they are preoccupied with security concerns about the intactness of their family. Children exposed to constructive conflict are unlikely to be as preoccupied with security concerns when interacting with peers, and are likely to develop positive scripts for dealing with conflict as well as have the psychological resources to engage in behaviours that may facilitate positive social relations.

Through mother report, the present study assesses various components of destructive and constructive conflict as defined within the literature. Destructive marital conflict is measured by mothers' reports of the frequency of minor and major conflicts, the severity or degree of conflict, and conflict tactics such as avoidance, stalemate/stonewalling, verbal aggression, physical aggression, and the involvement of the child in conflicts. Constructive conflict is assessed by mothers' reports of collaboration with their husbands during conflict, the degree to which they successfully solve problems, and positive outcomes of conflicts. Mothers also report on their children's emotional security by describing their children's emotional and behavioural reactions to witnessing arguments between their parents. Mothers report on their children's involvement in the conflicts or avoidance of the conflicts and their children's level of emotional distress and behavioural dysregulation during marital conflicts. Involvement, avoidance, emotional distress, and behavioural dysregulation are emotional

and behavioural factors used in the literature to assess children's emotional security (Cummings & Davies, 1994, 1996, 2010; Davies & Forman, 2002; Davies et al., 2006).

Social competence is assessed through mother and child report. Mothers rate their children's social skills such as their children's levels of cooperation, responsibility, assertion, and self-control. These various skills have been identified by Rose-Krasnor (1997) as important abilities that children can use to be successful in social situations and to have positive social outcomes. Mothers also rate their children's prosocial behaviour and level of aggression. Children's attributions of others' intent made in response to hypothetical ambiguous social situations are also assessed. Children's interpretation of social cues is an important step in the social-information processing chain that determines which responses children will choose (Crick & Dodge, 1994; Dodge, Pettit, McClaskey, & Brown, 1986). Children who have a tendency to interpret hostile intent in the behaviour in others are more likely to engage in aggressive behaviour (Crick & Dodge, 1994, 1996; Orobio de Castro et al., 2002). Thus, children's attributions of others' intent is important when assessing children's social competence as they are related to levels of aggression.

Emotional competence is assessed through mother and child report. Mothers report on their children's emotion regulation skills as defined by processes that are central to affective/lability, intensity, valence, flexibility and situational appropriateness of emotional expression (Shields & Cicchetti, 1995, 1997). Children's emotion knowledge and emotion perspective taking abilities are assessed. Children are asked to identify the emotion that children in a story were feeling in both expected situations, such as feeling happy when the child received a gift, and unexpected situations, such as feeling

happy when going to the doctor's office. Children who are more emotionally competent should be able to use the additional contextual cues of the unexpected emotion situation to correctly identify the emotion of the child. Both emotion regulation and emotion knowledge are factors that comprise of emotional competence (Denham et al., 2003).

Research Questions and Hypotheses

Based on the review of the literature, the following research questions and hypotheses are proposed:

Research Question 1. Is destructive marital conflict related to children's emotional security, psychological adjustment, and emotional and social competence?

Hypothesis 1a. Researchers have found that emotional security acts as either a mediating or intervening variable between the relation between destructive marital conflict and children's internalizing and externalizing symptoms, such that destructive marital conflict is related to lower levels of children's emotional security and subsequently greater internalizing and externalizing symptoms (Cummings et al., 2006; Davies et al., 2002; Harold et al., 2004). It is hypothesized that children's levels of emotional security will mediate the relation between levels of destructive marital conflict and children's internalizing and externalizing symptoms. More specifically, (a*) higher levels of destructive marital conflict will be associated with higher levels of children's internalizing and externalizing symptoms, and (b) higher levels of destructive marital conflict will be associated with lower levels of children's emotional security.* Therefore, *lower levels of children's emotional security will be associated with greater levels of children's internalizing and externalizing symptoms* (see Figure 1).
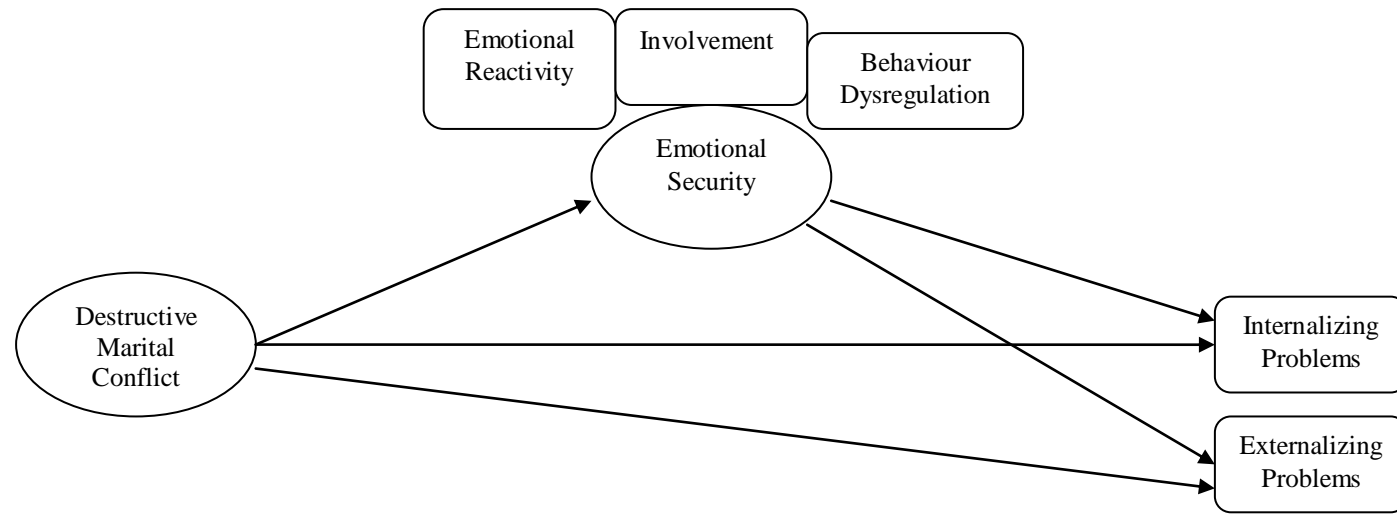
Figure 1. Mediation model of destructive marital conflict, emotional security, and psychological adjustment variables

Hypothesis 1b. The associations between destructive marital conflict and emotional security have been well established (Davies et al., 2002; Davies & Forman, 2002; Davies et al., 2006; Cummings et al., 2002). While somewhat limited in scope, research suggests that higher levels of destructive marital conflict is also associated with lower levels of social competence, such as peer difficulties, aggressive behaviour and prosocial behaviour (Du Rocher-Shudlich et al., 2004; Hart et al., 1998; McCloskey & Stuewig, 2001; McCoy et al., 2009). Also limited in scope is information on relations between emotional security and social competence, although some research suggests that aspects of emotional security, such as difficulties with emotion regulation and children's self-blame, are related to poorer social competence, such as social problems, negative peer-interactions, and aggression (Kim et al., 1999). It is hypothesized that children's levels of emotional security will mediate the relation between levels of destructive marital conflict and children's social competence. Specifically, *(a) higher levels of destructive marital conflict will be associated with lower levels of children's social competence,* and (b) higher levels of destructive marital conflict will be associated with lower levels of children's emotional security. Therefore, *lower levels of childrens' emotional security will be associated with lower levels of children's social competence* (see Figure 2).

Hypothesis 1c. The associations between destructive marital conflict and emotional security have been well established (Davies et al., 2002; Davies & Forman, 2002; Davies et al., 2006; Cummings et al., 2002). While limited in scope, research suggests that higher levels of destructive marital conflict is also associated with lower levels of emotional competence, such as emotion knowledge (Katz et al., 2007). Also limited in scope is
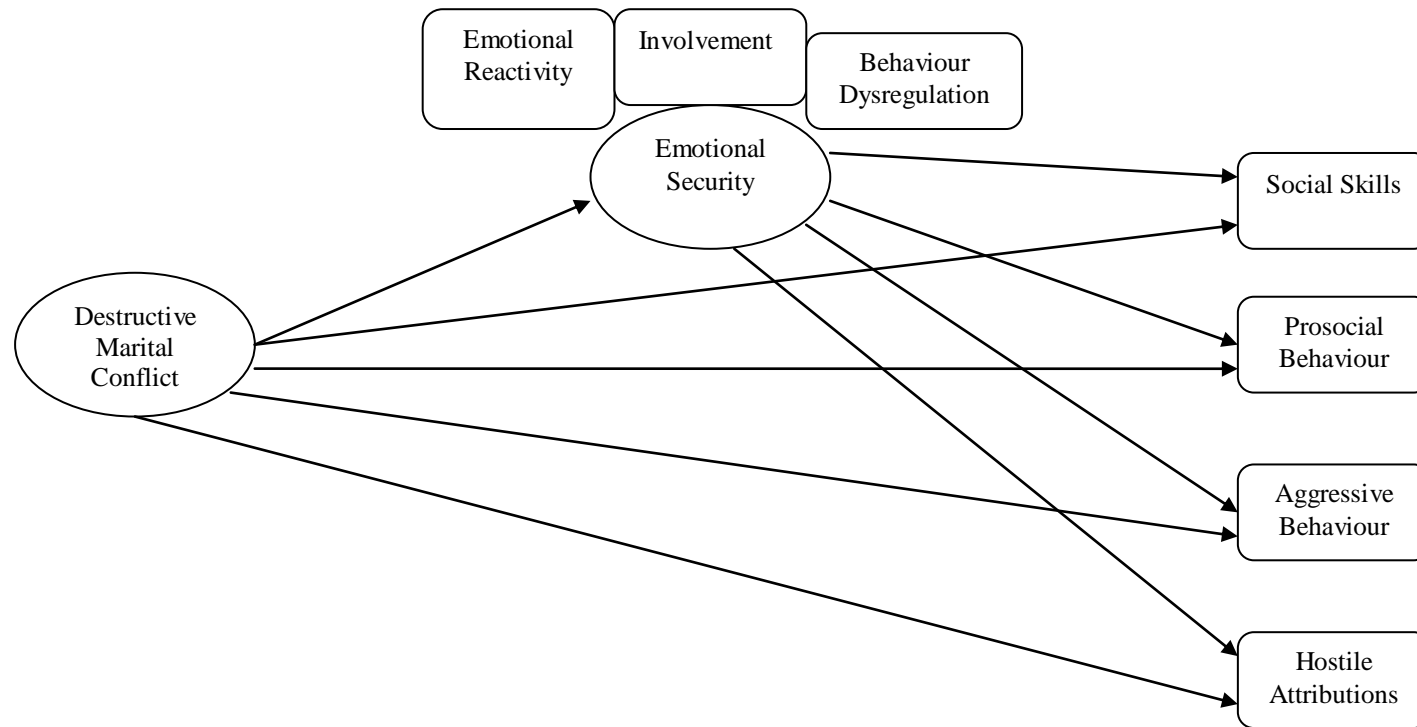
Figure 2. Mediation model of destructive marital conflict, emotional security, and social competence variables

information on relations between emotional security and emotional competence, although

some research suggests that aspects of emotional security, such as difficulties with

emotion regulation and children's self-blame, are related to poorer emotional competence

such as sadness (Katz et al., 2007; Kim et al., 1999). Hypothesis: *Children's levels of*

emotional security will mediate the relation between levels of destructive marital conflict

and children's emotional competence. More specifically, (a) *higher levels of destructive*

marital conflict will be associated with lower levels of children's emotional competence,

and (b) *higher levels of destructive marital conflict will be associated with lower levels of*

children's emotional security. Therefore, *lower levels of children's emotional security*

will be associated with lower levels of children's emotional competence (see Figure 3).

Research Question 2. Is constructive marital conflict related to children's

emotional security, psychological adjustment, and emotional and social competence?

Hypothesis 2a. While few studies have examined the relations between

constructive marital conflict and children's psychological adjustment there is evidence to

suggest the higher levels of constructive marital conflict are associated with better

psychological adjustment (Cummings et al., 2008; Du Rocher Schudlich & Cummings,

2003). Research also suggests that higher levels of constructive marital conflict are

associated with higher levels of children's emotional security (Cummings et al., 2002;

Davies & Forman, 2002; McCoy et al., 2009). Links between children's emotional

security and psychological adjustment have been well established (Davies et al., 2002;

Harold et al., 2004; Cummings et al., 2006). It is hypothesized that children's levels of

emotional security will mediate the relation between levels of constructive marital

conflict and children's internalizing and externalizing symptoms. In particular, *(a) higher*
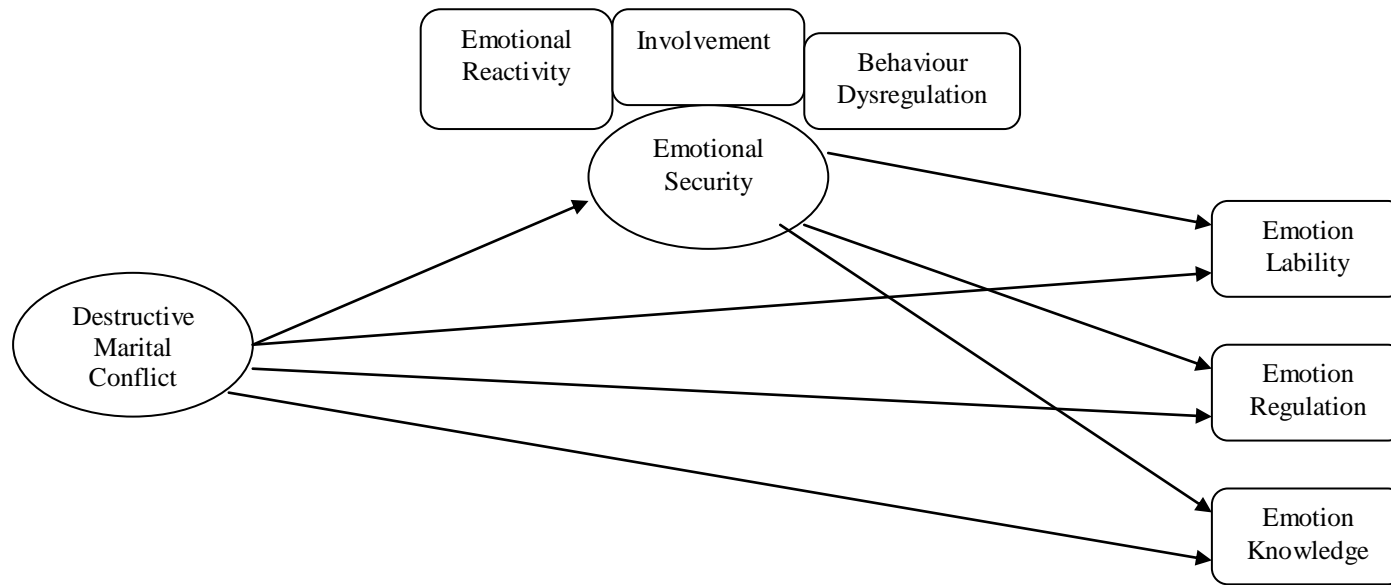
Figure 3. Mediation model of destructive marital conflict, emotional security, and emotional competence variables

levels of constructive marital conflict will be associated with lower levels of children's internalizing and externalizing symptoms, and (b) *higher levels of constructive marital conflict will be associated with higher levels of children's emotional security*. Therefore, *higher levels of children's emotional security will be associated with lower levels of children's internalizing and externalizing symptoms* (see Figure 4).

   Hypothesis 2b. Few studies have examined the relations between constructive marital conflict and children's social competence. Of the limited research, there is some evidence to suggest that constructive marital conflict is related to aspects of social competence, such as increased social problem solving (Goodman et al., 1999). Research also suggests that higher levels of constructive marital conflict are associated with higher levels of children's emotional security (Cummings et al., 2002; Davies & Forman, 2002; McCoy et al., 2009). Research also suggests that aspects of emotional security are related to poorer social competence (Kim et al., 1999). McCoy et al. (2009) also found that emotional security acted as an intervening variable between constructive marital conflict and prosocial behaviour. It is hypothesized that children's levels of emotional security will mediate the relation between levels of constructive marital conflict and children's social competence. More specifically, (a*) higher levels of constructive marital conflict will be associated with higher levels of children's social competence, and (b) higher levels of constructive marital conflict will be associated with higher levels of children's emotional security.* Therefore, *higher levels of children's emotional security will be associated with higher levels of children's social competence* (see Figure 5).

   Hypothesis 2c. To this author's knowledge, no studies have examined the relations between constructive marital conflict and emotional competence. Research
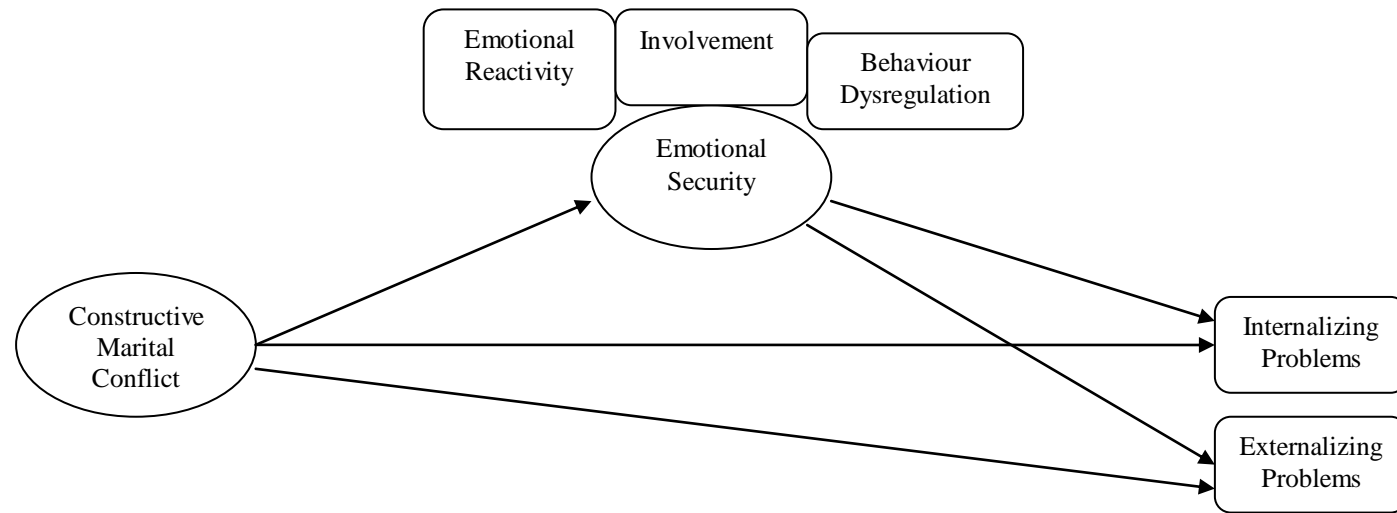
Figure 4. Mediation model of constructive marital conflict, emotional security, and psychological adjustment variables
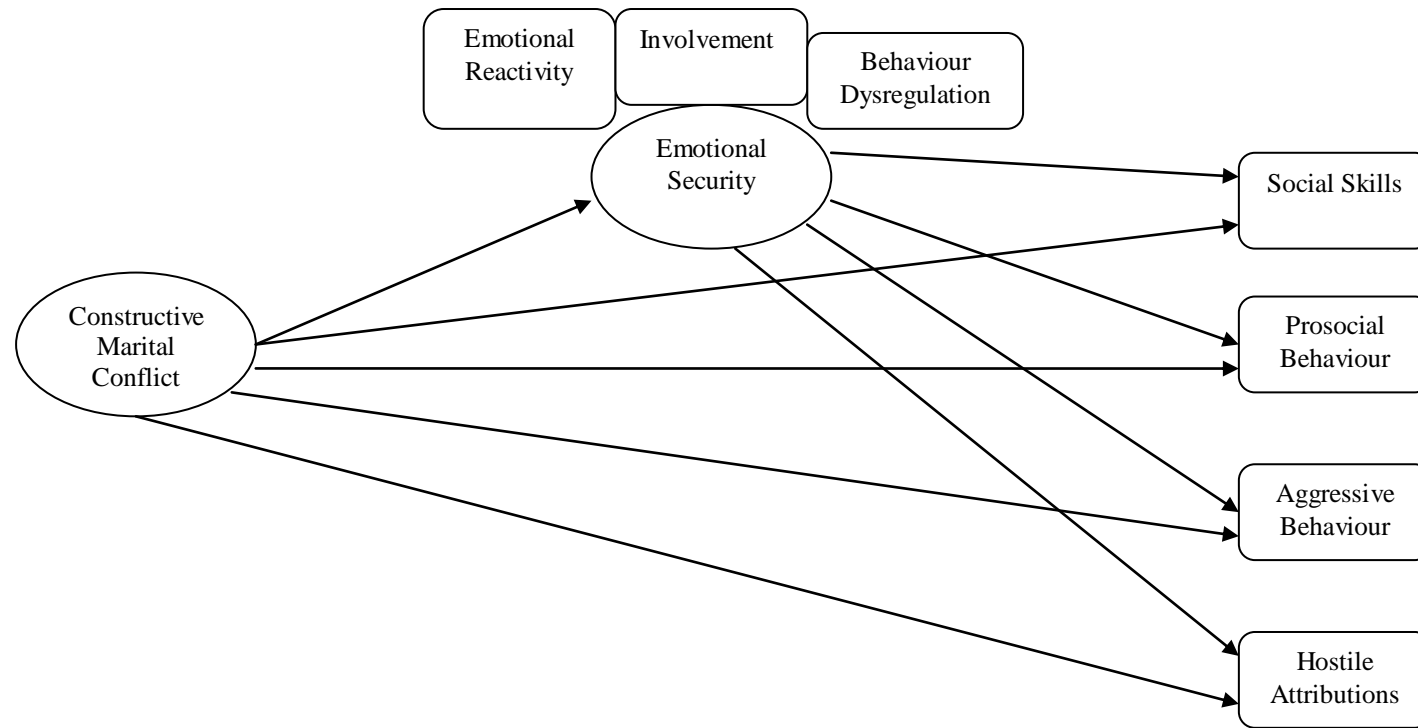
Figure 5. Mediation model of constructive marital conflict, emotional security, and social competence variables

suggests that higher levels of constructive marital conflict are associated with higher levels of children's emotional security (Cummings et al., 2002; Davies & Forman, 2002; McCoy et al., 2009). Research also suggests that aspects of emotional security are related to poorer emotional competence (Katz et al., 2007; Kim et al., 1999). It is hypothesized that children's levels of emotional security will mediate the relation between levels of constructive marital conflict and children's emotional competence. More specifically, (a*) higher levels of constructive marital conflict will be associated with higher levels of children's emotional competence, and (b) higher levels of constructive marital conflict will be associated with higher levels of children's emotional security.* Therefore, *higher levels of children's emotional security will be associated with higher levels of children's emotional competence* (see Figure 6*).
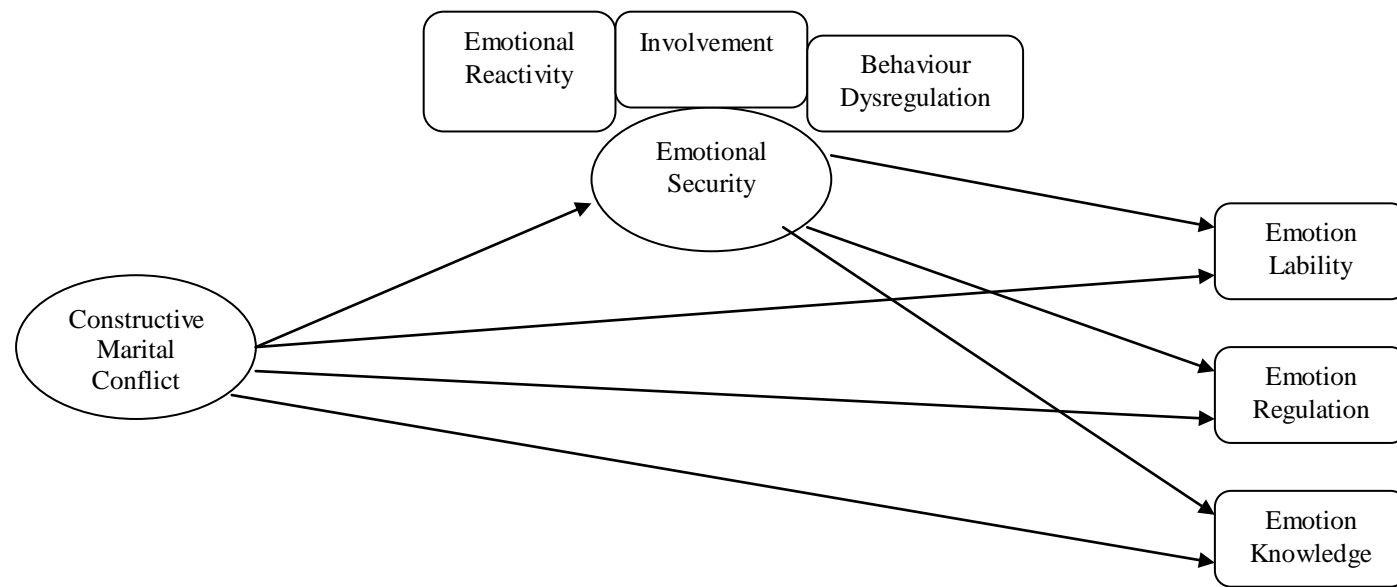
Figure 6. Mediation model of constructive marital conflict, emotional security, and emotional competence variables

CHAPTER II

Method

Participants

Parent-child dyads were recruited from daycare settings, elementary schools, parent resource centers, parenting websites, parenting magazines, flyers, children's community events, through general referral, and the University of Windsor Psychology Research Participant pool. Efforts were made to recruit the fathers of the parent-child dyads, but no fathers chose to complete the study. Participants were 91 children ranging in age from 3.08 years to 6.91 years ($M = 4.95$ years, $SD = 0.88$) and their mothers. There were 52 males, ranging in age from 3.08 years to 6.66 years ($M = 4.90$ years, $SD = 0.92$) and 39 females, ranging in age from 3.50 years to 6.91 years ($M = 5.02$ years, $SD = 0.82$). Males and females did not significantly differ in age $t(89) = -.61, p = .54$. Most of the children attended either Junior Kindergarten (31.9%) or Senior Kindergarten (29.7%). None of the children were reported by their mothers to have any diagnosed psychological disorders, although one child was reported to have a learning disability and another child was reported to have fine motor difficulties. The number of siblings that each child had ranged from 0 to 3 ($M = 1.36, SD = .70$). Demographic information for child categorical variables is presented in Table 1.

The mothers ranged in age from 25 years to 52 years ($M = 35.22$ years, $SD = 4.89$). Ninety-one percent of mothers were married. Mothers had been living together with their spouses for an average of 9.01 years ($SD = 3.79$). The majority of mothers identified themselves as being Caucasian. The majority of mothers had graduated from college/university. Of the 87 mothers who reported on their family income, 67.8%

Table 1.

Demographic Characteristics of Child Sample

Characteristic	$N=$ (N Percent)
Gender	
Male	52 (57)
Female	39 (43)
Education	
No School Attendance	9 (9.8)
Daycare	5 (5.5)
Preschool	11 (12.1)
Junior Kindergarten	29 (31.9)
Senior Kindergarten	27 (29.7)
Grade 1	10 (11)

reported family incomes of at least $61,000. Demographic information for mother and family categorical variables is presented in Table 2.

Measures

>**Parent measures.**

Background information. Mothers completed a demographic questionnaire on parent, child, and family characteristics (see Appendix A). Mother's reported their gender, age, ethnicity, and level of education. They also reported their child's gender, age, number of siblings, schooling/daycare, and disability and psychological disorder status. Mother's were also asked about their marital status, number of years married, if they endorse being married, and family annual income.

Destructive and constructive marital conflict. Mothers completed the Conflicts and Problem-Solving Scales (CPS, Kerig, 1996). The CPS is a 100 item report measure consisting of a number of subsales associated with destructive and constructive marital conflict that parents engaged in the past year. Destructive marital conflict was measured using the Frequency and Severity subscales, as well as destructive marital conflict tactics or strategies including, Verbal Aggression, Physical Aggression, Stalemate/Stonewall, Avoidance-Capitulation, and Child Involvement.

The Frequency scale (2 items) assesses the number of times parents engaged in minor and major conflicts within the last year on a 6-point ordinal scale. The scale for minor conflicts ranged from *once a* year (scored 1) to *just about everyday* (scored 6). The scale for major conflicts ranges from *once a* year (scored 2) to *just about everyday* (scored 12). Scores on the major conflicts item that increase by a value of two indicate greater severity of major conflicts over minor conflicts. Scores for minor and major

Table 2.

Demographic Characteristics of Mother Sample

Characteristic	$N=$ (*N* Percent)
Marital Status	
Married	83 (91.2)
Living With Spouse	5 (5.5)
Separated	3 (3.3)
Ethnicity	
South Asian	2 (2.2)
East Asian	3 (3.3)
Caucasian	75 (82)
African Canadian	1 (1.1)
Native Canadian	4 (4.4)
Middle Eastern	2 (2.2)
Hispanic	1 (1.1)
Bi Racial	3 (3.3)
Education	
Graduated High School	2 (2.2)
Some College or University	15 (16.5)
Graduated College or University	58 (63.7)
Graduate or Professional School	16 (17.6)

Table 2 (cont.)

Characteristic	$N=$ (N Percent)
Family Income	
Under $30 000	7 (7.7)
30 000-60 000	21 (23.1)
61 000-100 000	30 (33)
101 000-150 000	18 (19.8)
151 000-250 000	11 (12.1)
Over 250 000	0 (0)
Not indicated	4 (4.4)

conflicts were summed to create a total frequency score with scores ranging from 3-18. Higher scores indicate greater frequency of marital conflict within the last year.

The Severity scale assesses the extent to which parents disagree about 20 content areas. Examples of content areas of disagreement include, childrearing issues, money, relationship with in-laws, communication, alcohol/drug use, religion, amount of time spent together etc. Mother's rated each content area from 0 (no problem at all) to 100 (a severe problem). The overall index of severity of problems is the average of these ratings from 0-100 with higher scores indicating greater problem severity.

The frequency of various destructive conflict tactics/strategies was assessed. For each conflict tactic, mothers were asked to rate its frequency of use from 0 (never) to 3 (often). The Verbal Aggression scale (8 items) includes items involving yelling, accusing, insulting etc. Scores range from 0-24 with higher scores indicating greater instances of verbal aggression. The Physical Aggression scale (7 items) consists of items that reflect a tendency to threaten or inflict harm on others in a physical manner such as pushing, striking or threatening to hurt one's partner. Scores range from 0-21 with higher scores indicating greater instances of physical aggression. The Stalemate/Stonewall scale (7 items) reflects items that indicate an impasse in attempting to resolve conflicts that occurred. Examples of items are crying, giving the silent-treatment, withdrawing love, and seeking the counsel of friends and family to support one's own point of view. Scores range from 0-21 with higher scores indicating greater use of stalemate and stonewalling tactics. The Avoidance-Capitulation scale (8 items) assesses strategies that indicated one was trying to avoid the conflict or give up in the conflict. Examples of items are trying to smooth things over, giving in to partner's point of view, avoiding talking about the

problem, changing the subject, and leaving the room. Scores range from 0-24 with higher scores indicating greater avoidance or capitulation of problems. The Child Involvement scale (6 items) measures the extent to which children are involved in the conflict, such as arguing in front of children, involving children in the argument, and confiding in children about the problem. Scores range from 0-18 with higher scores indicating higher levels of children's involvement in marital conflict.

Constructive marital conflict was measured using the Efficacy, Collaboration, and Resolution subscales. The Efficacy scale assesses the extent to which parents were successfully able to resolve each of the problems they reported on the Severity scale from 0 (never resolved) to 100 (always resolved). The overall measure of efficacy was the average of these rating with higher scores indicating greater resolution of disagreements. If no problems were rated on items in the severity scale, no score was entered for the efficacy scale equivalent for that item, as there was no problem that needed to be solved.

The Collaboration scale (8 items) includes strategies that involve joint problem solving to find a solution to a problem that meets the needs of both parents such as expressing thoughts and feelings openly, listening to partner's point of view, and reasoning with one's partner. Mother's were asked to rate the frequency of use of collaboration strategies from 0 (never) to 3 (often). Scores range from 0-24 with higher scores indicating greater degrees of collaboration during conflict.

The Resolution scale is a 13-item scale that measures the frequency of positive, negative, and unclear resolutions or outcomes to marital conflict. Each item was rated from 0 (never) to 3 (usually). The frequency of resolutions was weighted depending on the resolution quality. Highly positive resolutions (3 items) resulting in increased

intimacy (e.g., "We feel closer to one another than before the fight") were multiplied by a weight of two. Unclear or partial resolutions (2 items; e.g. "We don't resolve the issue, but agree to disagree") were multiplied by a weight of one. Highly negative resolutions (8 items) resulting in continued negative emotions (e.g. "We stay mad at each other for a long time") were multiplied by a weight of negative two. Total scores for the Resolution scale range from -48 to 24. Lower scores indicate that negative affect dominates the resolution of conflicts whereas higher scores indicated that positive affect dominates the resolution of conflicts.

Kerig (1996) conducted an exploratory factor analysis to further examine the structure of the CPS. Results indicated that a two-factor solution best fit the data. A constructive conflict factor consisted of the Collaboration, Efficacy, and Resolution scales. A destructive conflict factor consisted of Frequency, Severity, Verbal Aggression, Physical Aggression, Stalemate/Stonewall, Avoidance-Capitulation, Child Involvement, low levels of Collaboration, and low levels of successful Resolution. The present study used both the constructive and destructive marital conflict factors in analyses. To avoid overlapping of scales, the present study did not include low levels of collaboration and low levels of successful resolution on the destructive marital conflict factor.

The internal consistency coefficients for the ten CPS factors range from .70-.98 with a mean coefficient of .83 (Kerig, 1996). Within the present sample, internal consistency coefficients ranged from .42 to .86 with a mean coefficient of .74 (see Table 3). Kerig (1996) conducted a three month test-retest reliability analysis with 48 couples. The coefficients ranged from .53 for Child Involvement to .87 for Severity with a median test-retest correlation of .63.

Kerig (1996) tested for convergent and discriminant validity by correlating the CPS scales with other common scales that assess marital quality such as the Dyadic Adjustment Scale (DAS; Spanier, 1979), the frequency of marital conflict that a child is exposed to, such as the O'Leary-Porter Scale (OPS; Porter & O'Leary, 1980), and marital conflict tactics, such as the Conflict Tactics Scale (CTS; Straus, 1979). Kerig found that the Resolution, Efficacy, and Collaboration scales of the CPS were significantly positively correlated to marital quality as reported on the DAS, suggesting that constructive conflict tactics were related to a higher quality of marriage. Conversely, Kerig found that each of the destructive conflict dimensions or tactics on the CPS were significantly negatively related to marital quality as reported on the DAS, suggesting that destructive forms of marital conflict were related to lower marriage quality. Kerig also found that the Frequency, Severity, and Child Involvement scales of the CPS were significantly positively associated to the OPS, which measures the frequency of marital conflict that children are exposed to. Similar conflict tactics on the CPS and CTS were also significantly related. For example, the Verbal Aggression, Physical Aggression, and Collaboration scales on the CPS were significantly associated with similar scales on the CTS.

Children's emotional security. Mother's completed the Security in the Marital Subsystem Scale – Parent Report Inventory (SIMS-PR; Davies et al., 2002) to assess children's emotional security as measured by children's reactions to witnessing arguments between their parents over the previous year. The SIMS-PR is a 25-item parent report questionnaire. The SIMS-PR was created as an amalgamation between theoretically important items on the SIMS-SR (child-self report; Davies, Forman, et al.

Table 3.

Internal Consistency Coefficients for the CPS Subscales

CPS Subscales	Internal Consistency Coefficients
Frequency	.61
Severity	.86
Efficacy	unable to be calculated
Resolution	.86
Verbal Aggression	.82
Physical Aggression	.86
Collaboration	.71
Stalemate/Stonewall	.73
Avoidance-Capitulation	.83
Child Involvement	.42

Note: The internal consistency of the Efficacy subscale was unable be calculated as participants only rated items on this scale if they rated the presence of problems on items on the Severity scale. Thus, if an item on the Severity scale was endorsed as 0, the participant did not rate the extent to which they solved a problem on the efficacy scale as no problem was present to solve.

2002) and the Home Data Questionnaire-Adult Version (HDQ; Garcia-O'Hearn, Margolin, & John, 1997), a parent report of children's reactions to marital conflict.

Each item on the SIMS-PR consists of a different emotional or behavioural response observed in children within the context of marital conflict, which parents rate on a 5-point ordinal scale from 1 (Not at all like him/her) to 5 (A whole lot like him/her). The items corresponded to four broad scales that are indicative of responses elicited with the occurrence of emotional insecurity including, Emotional Reactivity, Behaviour Dysregulation, Behaviour Involvement, and Avoidance. The Emotional Reactivity scale (8 items) measures children's prolonged, dysregulated expressions of emotional distress (e.g. "Appears frightened", "Still seems upset after we argue"). Scores range from 8-40 with higher scores indicating greater levels of emotional reactivity. The Behaviour Dysregulation scale (5 items) assesses elevated behavioural arousal and lack of self-control (e.g., "Yells at family members", "Causes trouble"). Scores range from 5-25 with higher scores indicating greater levels of behaviour dysregulation. The Behaviour Involvement scale (8 items) assesses children's emotional and behavioural involvement in parental conflicts (e.g. "Tries to help us solve the problem" and "Tells us to stop arguing"). Scores range from 8-40 with higher scores indicating greater levels of behavioural involvement in parental conflicts. The Avoidance scale (4 items) assesses children's attempts to escape marital conflict and avoid the aftermath of conflict (e.g. "Becomes very quiet and withdrawn" and "Goes off by him/herself"). Scores range from 4-20 with higher scores indicating greater levels of avoidance of marital conflict. When the SIMS-PR has been used in other studies, Structure Equation Modeling analyses have been used and as such, the Emotional Reactivity, Behaviour Dysregulation, and

Behaviour Involvement subscales have been used as manifest variables in the latent construct of emotional security and a total emotional security factor score is created for use in their analyses (Cummings et al., 2006; Davies & Forman, 2002; Davies, Forman et al., 2002; Davies et al., 2002; McCoy et al., 2009). For the present study, a total emotional security composite was created using the sum of the Emotional Reactivity, Behaviour Dysregulation, and Behaviour Involvement subscales. The total emotional security composite, as well as the above three scales are analyzed in the present study.

A number of studies have reported reliability information using mothers' reports of both preschool and school aged children (Cummings et al., 2006; Davies & Forman, 2002; Davies, Forman et al., 2002; Davies et al., 2002). Internal consistency coefficients from these studies for the subscales were reported as follows: Emotional Reactivity subscale ranges from .76 to .84; Behaviour Dysregulation subscale ranges from .64 to .71, and Behaviour Involvement subscale ranges from .69 to .83. Internal consistency information for a total emotional security composite is not available from previous studies as their emotional security construct is a factor score derived from the Emotional Reactivity, Behaviour Dysregulation, and Behaviour Involvement subscales. In the present study the internal consistency coefficients for Emotional Reactivity, Behaviour Dysregulation and Behavior Involvement were .83, .75 and .82 respectively. The internal consistency coefficient for the total emotional security scale in the present study was .86.

Evidence of the concurrent and predictive validity of the SIMS-PR has also been reported (Cummings et al., 2006). Cummings et al. found that marital conflict was significantly related to both the Emotional Reactivity and Behaviour Dysregulation subscales of the SIMS, concurrently and one year later, as theoretically expected in the

literature. In addition, Cummings et al. found that Emotional Reactivity, Behaviour Dysregulation, and Involvement subscales were found to be significantly related to both preschool and school aged children's internalizing and externalizing symptoms.

Psychometric information for the Avoidance scale on the SIMS-SR reported low validity as the scale did not mediate the relation between marital conflict and adjustment, which, it theoretically should if it is a valid assessment of emotional security (Davies, Forman et al., 2002). Thus, researchers have not included the Avoidance scale when using the SIMS-PR.

Children's psychological adjustment. Mothers completed the Child Behavior Checklist (CBCL for Ages 1½ -5; Achenbach & Rescorla, 2000 and CBCL for ages 6-18 years; Achenbach & Rescorla, 2001) to assess children's internalizing and externalizing symptoms. The CBCL Parent Report 1½-5 contains 100-items, plus three additional open-ended entries that respondents can use to include problems not already listed. The CBCL/6-18 Parent Report contains 113-items, plus three additional open-ended entries that respondents can use to include problems not already listed. For both questionnaires mothers were asked to rate the degree to which they believe each item was true about their children's behaviour within the past 2 months on a scale from 0 (not true) to 2 (very true or often true).

Items that comprise the Internalizing and Externalizing subscales were used for analysis. The CBCL/1½ -5 is composed of the sum of four internalizing subscales: Emotionally Reactive (9 items; e.g., moody, sulks), Anxious/Depressed (8 items; e.g., sad, nervous), Somatic Complaints (11 items; e.g., aches, nausea), and Withdrawn (8 items; e.g., acts too young, little interest). The CBCL/1½ -5 is also composed of the sum

of two externalizing subscales: Attention Problems (5 items; e.g., can't concentrate, wanders away), and Aggressive Behaviour (19 items; e.g., defiant, hits others). The CBCL/6-18 is composed of the sum of three internalizing subscales: Anxious/Depressed (13 items; e.g., fears, feels worthless), Somatic Complaints (11 items; e.g., nightmares, overtired), and Withdrawn/Depressed (8 items; e.g., enjoys little, shy, timid). The CBCL/6-18 is also composed of the sum of two externalizing subscales: Rule-Breaking Behaviour (17 items; e.g., lacks guilt, steals at home), and Aggressive Behaviour (18 items; e.g., mean, gets in fights).

Raw scores for both the CBCL/1½ -5 and CBCL/6-18 Internalizing and Externalizing scales were converted to T scores based upon age appropriate norms. T-scores between 50 and 64 are considered to fall within the normal range, between 65-69 fall within the borderline clinical range, and above 70 in the clinical range.

The psychometric properties of the CBCL 1½ - 5 are considered to be very good (Achenbach & Rescorla, 2000). Test-retest reliabilities over an 8 day period for the scales comprising the Internalizing scale ranged from .68-.87 with the test-retest reliability of the Internalizing scale being .90. Test-retest reliabilities over an 8 day period for the scales comprising the Externalizing scale ranged from .78-.87 with the test-retest reliability of the Externalizing scale being .87. Internal consistencies for the scales comprising of the Internalizing scale ranged from .66-.80 with the internal consistency of the Internalizing scale being .89. Internal consistencies for the scales comprising of the Externalizing scale ranged from .68-.92 with the internal consistency of the Externalizing scale being .92. Furthermore, Achenbach and Rescorla, (2000) reported that the criterion validity of the CBCL 1½ - 5 can be considered good since they distinguish between

referred and non-referred children and since the DSM scales are highly related to DSM diagnosis. In addition, their concurrent validity is good since they have been correlated with other widely-used behaviour checklists, such as the Toddler Behaviour Screening Inventory (Mouton-Simien, McCain, & Kelley, 1997).

The psychometric properties of the CBCL/6-18 are also considered to be very good (Achenbach & Rescorla, 2001). Test-retest reliabilities over a 7 day period for the scales comprising the Internalizing scale ranged from .82-.92 with the test-retest reliability of the Internalizing scale being .91. Test-retest reliabilities over a 7 day period for the scales comprising the Externalizing scale ranged from .90-.91 with the test-retest reliability of the Externalizing scale being .92. Internal consistencies for the scales comprising of the Internalizing scale ranged from .78-.84 with the internal consistency of the Internalizing scale being .90. Internal consistencies for the scales comprising of the Externalizing scale ranged from .85-.94 with the internal consistency of the Externalizing scale being .94. The criterion validity of the CBCL/6-18 can be considered good since it distinguishes between referred and non-referred children and since the DSM scales are highly related to DSM diagnosis. In addition, their concurrent validity is good since they have been correlated with other widely-used behaviour checklists, such as the Behaviour Assessment System for Children, Second Edition (BASC-2; Reynolds & Kamphaus, 2004).

Social competence. Two parent-report measures were used to assess children's social competence. Mothers completed the Social Skills Rating System (SSRS; Gresham & Elliott, 1990) and the Preschool Social Behavior Scale (PSBS; Crick, Casas, & Mosher, 1997).

The SSRS is a multi-rater assessment of children's social behaviours that can influence their peer acceptance. The preschool children (aged 3-5) and elementary school aged children (grades kindergarten-grade 6) parent-report forms were used. Mothers were asked to report on the frequency of various social behaviours of their children. Frequency ratings reflected how often children engaged in social behaviours from 0 (never) to 2 (very often).

Each of the behaviours reported load onto one of four broad social skills: Cooperation, Assertion, Responsibility, and Self-Control. The Cooperation subscale subscale (10 items) measures behaviours such as helping others, sharing materials, and complying with rules and directions. The Assertion subscale (10 items) measures initiating behaviours, such as asking others for information, introducing oneself, and responding to the actions of others. The Responsibility subscale (10 items) measures behaviours that demonstrate the ability to communicate with adults and regard for property or work. The Self-Control subscale (10 items) measures behaviours that emerge in conflict situations, such as responding appropriately to teasing, and in non-conflict situations that require taking turns and compromising. Raw scores on each of the subscales range from 0-20 with higher scores indicating greater mastery of the stated social skills. The parent-report form for both preschool and elementary students includes an assessment of all four social skills subscales. A Total Social Skills score is comprised of the sum of each item and ranges from 0-80. The Total Social Skills score is converted to a standard score that ranges from 0-130 with higher standard scores indicating greater levels of overall social skills. Standard scores that range from 90-110 are considered to be in the average range when compared to similar aged children (Gresham & Elliott, 1990).

Internal consistency reliability information for preschool children was based on ratings of children made by a sample of 200 parents, while internal consistency information for elementary students was based on the ratings of children made by 1027 parents (Gresham & Elliott, 1990). The coefficient alphas for the parent-report form for preschool and elementary students range from .65-.90 (Gresham & Elliott, 1990). Test-retest reliability was assessed by having 45 parents from the elementary standardization sample re-rate their previous assessments four weeks following their first assessment. Test-retest correlations ranged from .77-.87.

The SSRS has been shown to be a valid assessment of children's social skills. Correlations between the SSRS-PF and the Child Behaviour Checklist (CBCL) parent-report form indicate that the SSRS subscales and total scale scores are negatively related to externalizing and internalizing behaviour problems (Gresham & Elliot, 1990). The stronger correlations between the SSRS and Externalizing Problems compared to Internalizing Problems on the CBCL is further evidence of the construct validity of the SSRS as it is theoretically expected that aggressive, antisocial and under controlled behaviours characteristic of externalizing problems impact children's social environment more than internalizing difficulties. Gresham and Elliot also assessed convergent validity through correlations between parent and teacher ratings on the SSRS subscales and total scale for both preschool and elementary students. The correlations between similar subscales and the total scale of the preschool version ranged between .16 and .25 with a median correlation of .18. The correlations between similar subscales and the total scale of the elementary version ranged between .26 and .36 with a median correlation of .30. Validity was also assessed through group differences between typical children, children

with learning disabilities (LD), and children with behaviour disorders (BD). Using the parent form for elementary students, the typical children group had more social skills than the LD group or BD group (Gresham & Elliot, 1990). In the present study, the total social skills standard score was used in analyses to provide an overall assessment of children's social skills.

The Preschool Social Behavior Scale (PSBS; Crick, et al., 1997) is a 23-item measure that assesses children's overt aggression (8 items; e.g., "This child kicks or hits others"), relational aggression (8 items; e.g., "This child tries to get others to dislike a peer"), prosocial behaviour (4 items; e.g., "This child is helpful to peers"), and depressed affect (3 items; e.g., "This child looks sad"). There are two versions of the questionnaire, a teacher-report and a peer-report version. For this study, the teacher-report version was adjusted and administered as a parent-report measure (O'Neil, 2008). Parents are asked to report how characteristic each item is of their child on a 5-point Likert scale ranging from 1 (never or almost never true) to 5 (always or almost always true). Scores on the PSBS for both the Overt Aggression and Relational Aggression subscales range from 8 to 40 with higher scores indicating higher levels of overt or relational aggression. The PSBS Total Aggression composite score is composed by summing the Overt Aggression and Relational Aggression items. Scores ranged from 16 to 80 with higher scores indicating greater overall aggression. The total aggression composite score is used in the present study. Scores on the Prosocial Behaviour subscale ranged from 4 to 20 with higher scores indicating greater levels of prosocial behaviour. The Prosocial Behaviour subscale was also used in analyses.

Research has provided support for the psychometric properties of the PSBS among teachers. Internal consistency reliability ratings for the overt aggression, relational aggression, and prosocial behaviour scales range from .88 to .96 (Crick et al., 1997; Hart et al., 1998). In the present study the internal consistency reliability rating was .77 for the overt aggression subscale, .62 for relational aggression subscale, .78 for total aggression scale, and .82 for the prosocial behaviour subscale. Ostrov and Keating (2004) found support for inter-rater reliability as they found significant correlations between primary and assistant teachers for ratings of overt and relational aggression. Convergent and discriminant validity have also been established. Both overt and relational aggression in preschool children between the ages of 3.5 years to 5.5 years, as measured on the PSBS, are significantly correlated to measures of peer rejection and to teachers reports of their students prosocial behaviour (Crick et al., 1997). The overt and relational aggression scales also significantly differentiate between boys and girls as expected in the literature. Preschool boys score significantly higher than girls on the overt aggression scale whereas girls score significantly higher than boys on the relational aggression scale (Crick et al., 1997; Ostrov & Keating, 2004).

Emotional competence. The Emotion Regulation Checklist (Shields & Cicchetti, 1995, 1997) is a 24-item parent report measure that assesses both positive and negative aspects central to children's emotion regulation, such as emotionality, affectivity/lability, intensity, valence, flexibility, and situational appropriateness to emotional expression. Parents report how characteristic each item is of their children on a 4-point Likert scale ranging from 1 (never) to 4 (almost always).

Research using factor analysis (Shields & Cicchetti, 1997, 1998) has found that items load onto one of two factors: Lability/Negativity and Emotion Regulation. The Lability/Negativity scale (15 items) assesses children's mood swings, angry reactivity, emotional intensity, and dysregulated positive emotion (e.g., is prone to angry outbursts, and can recover quickly from episodes of distress). Scores on this scale range from 15-60 with higher scores reflecting greater levels of negativity and emotional dysregulation. The Emotion Regulation factor (8 items) captures responses, such as adaptive regulation, equanimity (emotional stability and composure), emotional understanding, and empathy (e.g., displays appropriate negative emotions and seems sad). Scores on this scale range from 8-32 with higher scores reflecting greater emotion regulation and positive expressions of emotions.

Internal consistency reliabilities for both preschool (Blandon, Calkins, Keane, & O'Brien, 2008) and school aged-children (Shields & Cicchetti, 1997) range from .84-.96 for the Lability/Negativity scale and from .59-.83 for the Emotion Regulation scale. A composite total for all 24 items is .89 (Shields & Cicchetti, 1997). Both the Lability/Negativity and the Emotion Regulation scale are significantly correlated between parent and teacher reports indicating inter-rater agreement (Blandon et al., 2008). In the present sample, the internal consistency was .84 for the Lability/Negativity scale and .59 for the Emotion Regulation scale. Due to the low internal consistency of the Emotion Regulation scale, one item was deleted (i.e., "Displays appropriate negative emotions"). Following this item deletion, the internal consistency of the Emotion Regulation scale increased to .70. This seven item Emotion Regulation scale was used in analyses.

Convergent and discriminant validity for the ERC has been demonstrated. The ERC has been shown to be significantly correlated to observations of children's emotion regulation abilities during semi-structured play situations (Shields & Cicchetti, 1997). In addition both ERC scales have discriminated between maltreated and nonmaltreated children such that maltreated children had more difficulties with emotional lability/negativity and were less likely to have adaptive emotion regulation when compared to nonmaltreated children (Shields & Cicchetti, 1998, 2001).

Child measures.

Social competence. The Social-Information Processing Measure (SIP) assesses children's hostile attributions to hypothetical ambiguous social situations. A puppet technique based on a procedure originally developed by Eder (1990) and adapted by O'Neil (2008) was used to facilitate children's responses to ambiguous social situations. First, children were familiarized with this puppet technique as it was their mode of responding to the ambiguous stories. They were introduced to two puppets and told that these puppets always disagree. Children witnessed an argument between the two puppets and were then asked which puppet they agree with. In this familiarization exercise one puppet said, "I don't like candy," and the other puppet said, "I like candy." The researcher then asked the participants if they liked candy and then asked the participant to point to the puppet they agreed with. Then the puppet who did not like candy said, "I have a TV," and the puppet who did like candy said, "I don't have a TV." The researcher then asked the participants if they had a TV and asked the participant to point to the puppet they agree with. If children did not correctly point to the correct puppet, such as responding that they like candy, but pointing to the puppet who does not like candy, the

familiarization procedure was repeated using different statements until children comprehended the task.

Once children were familiarized with the puppet procedure, they listened to eight pre-recorded vignettes and looked at corresponding pictures to the vignettes on a computer screen. O'Neil (2008) adapted vignettes used by Crick, Grotpeter, and Bigbee (2002) to include more representation of ambiguous relational situations. These adapted vignettes by O'Neil (2008) were used in the present study. The vignettes contain social situations in which some form of harm is caused to the protagonist. Children were asked to pretend that they were the person in the story. The stories, however, were ambiguous as it was unclear if the harm was caused on purpose. Half of the vignettes contained situations in which the possibility of physical aggression occurs. The other half of the vignettes contained situations in which the possibility of relational aggression occurs. The order that the vignettes were presented to participants was randomized.

Children were shown black and white pictures of the stories while listening to the vignettes. In order to facilitate children's identification with the main character, there were four picture versions depending on the sex and skin colour of the children. Male children looked at pictures depicting male characters in the main role. Female children looked at pictures depicting female characters in the main role. Children who had light skin look at pictures in which the characters in the vignettes had light skin. Children who have darker skin looked at pictures in which the characters in the vignettes had darker skin. These different picture versions were made by O'Neil (2008) as research suggests that children hold biases towards people of other races in ambiguous situations (e.g., Brown & Bigler, 2005; Margie, Killen, Sinno, & McGlothlin, 2005).

After hearing the vignettes, one of the puppets said "I think that is mean," and the other puppet said, "I don't think that is mean." To assess for children's level of hostile attributions, children were asked to point to the puppet they agreed with. Children who pointed to the puppet with the point of view that the action in the story is mean received a score of 1. Children who pointed to the puppet with the point of view that the action in the story was not mean receive a score of 0. Scores for each of the stories were summed and ranged from 0-8 with higher scores indicating greater hostile attributions. For the present study, internal consistency of children's hostile attributions was .80.

The order of the puppets' statements was randomized so that sometimes the first puppet said "I think that is mean" and other times the first puppet said "I don't think that is mean." The puppets' point of view was randomized to prevent response bias on the part of the participants. That is, each of the puppets expressed a view that some of the stories were mean and some of the stories were not mean.

Emotional competence. Children's emotion knowledge was assessed using an affective perspective-taking task. The task was reported by Werner, Cassidy, and Juliano (2006)**,** based on an adaptation of a paradigm originally created by Denham (1986). First, children were asked to correctly identify four emotions (happy, sad, angry, and afraid) by placing a felt facial expression of each emotion on a puppet. This affective labeling task assessed children's receptive knowledge of emotions. Children who correctly labeled an emotion received a score of 1 for each emotion whereas children who incorrectly label an emotion received a score of 0. Children were corrected until they could correctly identify each of the four emotions although they only received a point if they answered correctly on their first trial.

Children were also presented with eight stories and were asked to correctly label how the protagonist of the story felt. Half of the stories contained instances, of each of the four emotions, when the protagonist feels the way that most people would feel in a particular situation. For example, in an expected emotion vignette, the protagonist felt angry because his/her sister ate a chocolate bar after promising to share with the protagonist. Half of the stories contained instances, of each of the four emotions, when the protagonist felt the opposite of what is typically expected in that situation. For example, in an unexpected emotion vignette, the protagonist felt happy about going to get a shot from a doctor because he/she received a gift that he/she liked each time he/she had a doctor's appointment.

To assess children's receptive knowledge of emotions, children were presented with the four face options and asked to place the appropriate emotion that the puppet felt on the puppet's face for each of the eight stories. Children who correctly labeled the emotion received a score of 2. Children who incorrectly labeled the emotion, but correctly identified the emotion valence (e.g., answer afraid when the correct answer is sad) received a score of 1. Children who incorrectly labeled the emotion and the valence received a score of 0 (e.g. answer happy when correct answer is sad). Scores range from 0-16 with higher scores indicating greater receptive affective perspective taking.

Children's expressive knowledge of emotions was also measured by asking the children to expressively state why the protagonist in each of the eight stories felt the way they felt. Correct responses received a score of 1 and incorrect responses received a score of 0.

A total emotion knowledge score was created by summing children's scores from each of the affective labeling, receptive affective perspective taking, and expressive affective perspective taking tasks. Scores range from 0-28 with higher scores indicating higher levels of emotion knowledge. For the present sample, the internal consistency of the total emotion knowledge composite was .81.

A summary of parent and child measures, the specific scales of these measures used in analyses, and their associated variable are presented in Table 4.

Procedure

The present study was part of a larger study investigating the relations between parenting practices, quality of the parent-child relationship and young children's social behavior and overall adjustment (Dr. R. Menna, Primary Investigator; Grant # 807374, University of Windsor Social Science and Humanities Research Grant). Permission to conduct this study was obtained from the Research Ethics Board (REB) at the University of Windsor. Children who had been diagnosed with developmental disabilities (e.g., PDD, FASD) were not eligible to participate in the study.

In order to be eligible to participate in the present study, mothers had to have been married or cohabitated with their current spouse for at least three years prior to participating in the study, following procedures of Cummings et al. (2006). Special exception to this criterion was made for three mothers who reported they had separated from their spouses two weeks or less from the start of their participation in this study. These mothers and their children were included in the present sample. Adopted children were excluded from the study as their experiences prior to being adopted may have constituted as a confound to the results.

Table 4.

Summary of Parent and Child Variables and Measures

Measure	Study Variable
Parent Measures	
Conflicts and Problem Solving Scales (CPS)	
Destructive Marital Conflict	Destructive Marital Conflict
Constructive Marital Conflict	Constructive Marital Conflict
Security in the Marital Subsystem Scale (SIMS)	Emotional Security
Emotional Reactivity	
Behaviour Dysregulation	
Behaviour Involvement	
Total Emotional Insecurity	
Child Behaviour Checklist (CBCL)	Psychological Adjustment
Internalizing subscale	
Externalizing subscale	
Social Skills Rating System (SSRS)	Social Competence
Total Social Skills	
Preschool Social Behaviour Scale (PSBS)	Social Competence
Total Aggression	
Prosocial Behaviour	
Emotion Regulation Checklist (ERC)	Emotional Competence
Lability/Negativity	
Emotion Regulation	

Table 4 (cont.)

Measure	StudyVariable
Child Measures	
Social Information Processing (SIP)	Social Competence
Hostile Attributions	
Affective Perspective Taking Task (APT)	Emotional Competence
Total Emotion Knowledge	

Prospective participants were contacted by phone, or electronic mail, and provided information on the study, including a brief description of the study aims, the activities and time required to participate (for both parent and child), and compensation for participation. As a token of appreciation, children were allowed to choose a small prize, such as stickers or a toy, after completion of each session and mothers received $10 for transportation costs and a $5 gift card to a popular coffee chain for participating in the study. Mothers who were enrolled in a psychology course at the University of Windsor were also eligible to receive 3 bonus marks toward one psychology course of their choice. Participants who were unable to complete the study, either by choice or lack of availability, were still offered compensation for any time contributed to the study.

Participating mothers and their children came to a laboratory at the University of Windsor on two occasions as part of the larger study. Each session was approximately 1.5 hours in duration. Parents completed a consent form (see Appendix B). Assent to participate in the study was obtained from each child. During the first visit, children and their mothers engaged in a play-based task activity, an activity not included in the present study. During the second half of the first session, mother's completed a battery of questionnaires administered in a random order, while children completed a variety of language and cognitive tasks (not part of the present study) and the child measures reported in the present study, including the hostile attribution task and affective perspective taking task with the researcher or a research assistant. During the second session, mothers completed the remaining questionnaires from the larger study and the children completed the remaining tasks they did not complete during the first session. The order in which tasks were completed was randomized so as to avoid confounding

effects based on the sequence of instruments. Questionnaires and tasks were completed by the mother and child separately. Mothers were asked to complete the questionnaires, which were given in a random order to control for ordering effects, in the waiting area of the lab.

The ERC was included in the testing battery approximately a third through data collection. Data were unavailable on this variable for 26 participants. Children worked individually with the researcher or trained graduate student research assistant to complete the social information processing task and the affective perspective taking task. Graduate research assistants were Master's and doctoral level students in the Clinical Psychology program.

CHAPTER III

Results

Data Screening and Preparation

All statistical analyses, including data screening and preparation, were examined

through Predictive Analytics SoftWare Statistics, Version 18 (PASW 18). A Missing

Value Analysis was conducted to examine the pattern of missing data and to determine if

data was missing in a random or non-random fashion. All variables, with the exception of

the total score for children's hostile attributions, were missing less than 5% of cases.

Little's MCAR Chi-Square statistic was found to be non-significant, $X^2(118) = 118.11$, p

$= .48$, indicating that values were missing in a random fashion. Tabachnick and Fidell

(2001) suggest that variables missing less than 5% of cases in a random fashion can be

dealt with any procedure used for handling missing data. When variables were

constructed from a set of items and there was missing data on some of these items, case

mean substitution was used and a total variable score was calculated. When there was

missing data on norm-referenced variables, such as the SSRS and the CBCL, these cases

were not included in analyses involving these variables. Data were unavailable on the

emotion negativity/lability and the emotion regulation subscales for 26 participants.

These variables were not included in the Missing Value Analysis as it was known why

these cases were missing, and these cases were not included in analyses involving these

variables. Children's hostile attributions total score had missing values for 5.4% of cases.

As participants with missing values on this variable did not significantly differ on any of

the predictor or mediator variables from participants with value points on this variable,

this variable was included in the analysis of main hypotheses, but cases with missing value points were not.

The assumptions of normality, absence of outliers, linearity, and homoscedasticity were examined. Exploring the distributions of the main variables revealed that nine variables displayed significant skew and/or kurtosis, violating the assumption of normality, and that six of these variables also contained univariate outliers. Normality was assumed to be violated at a level of $p < .01$ if the skewness and kurtosis statistic, assessed by the skewness and kurtosis value divided by their standard error was equal to or greater than 2.58, and violated at a level of $p < .001$ if the skewness and kurtosis statistics were in excess of 3.29 (Field, 2005). Variables that displayed departures from normality and/or that contained univariate outliers were transformed based on recommendations by Tabachnick and Fidell (2001) and Field (2005). A square root transformation was applied to destructive marital conflict to improve moderate positive skew. Reflection and square root transformations were applied to constructive marital conflict and emotion regulation to improve moderate negative skew. These variables were reflected back to their normal direction following the transformation to maintain the intended directional interpretation of the variables (i.e., higher scores indicated higher constructive marital conflict and greater emotion regulation). To improve significant positive skew, logarithmic transformations were applied to total aggression and all subscales of the SIMS, including the behaviour dysregulation subscale, the emotional reactivity subscale and the behavioural involvement subscale. Reflection and logarithmic transformation was applied to total emotion knowledge to improve significant negative skew. This variable was reflected back to its normal direction following the

transformation to maintain the intended directional interpretation of the variable (i.e., higher scores indicated greater emotion knowledge). Square root and logarithmic transformations were applied to hostile attributions, but such transformations did not improve upon either skewness or kurtosis.

Transformations eliminated univariate outliers for the constructive marital conflict and total emotion knowledge variables, whereas outliers remained for the other variables despite improvements in normality. Standardized *Z* scores were calculated for these univariate outliners and none were found to be in excess of 3.29, the criterion recommended by Tabachnick and Fidell (2001). Thus, these outliers were left in the dataset. No univariate outliers were identified on variables that were otherwise normal. Pairwise linearity and homoscedasticity was checked using bivariate and residual scatterplots and was found satisfactory.

Planned Analyses

Preliminary analyses. Means, standard deviations, and ranges for the measures are presented in Table 5. Bivariate correlations and t-tests were conducted to examine relations between demographic variables and the independent, mediator, and dependent variables to clarify the characteristics of the sample and to determine if any demographic variables needed to be controlled for in analyses examining the main hypotheses. A summary of these correlations appears appear in Table 6. Child age was significantly positively correlated with children's hostile attributions and emotion knowledge. Number of years married/living together was significantly positively correlated with children's emotion regulation and emotion knowledge. Number of siblings was significantly positively correlated with children's hostile attributions. In terms of gender differences, *t-*

Table 5

Description of Main Variables

Variable	n	*M*	*SD*	Range
Destructive Marital Conflict	91	54.53 7.19[a]	24.74 1.71[a]	9-123.5 3-11.11[a]
Constructive Marital Conflict	91	106.05 6.88[a]	28.71 2.16[a]	7-145 1-11.79[a]
SIMS Total Emotional Insecurity	91	35.84	11.67	21-62
SIMS Emotional Reactivity	91	13.22 1.09[a]	5.37 .15[a]	8-28 .90-1.45[a]
SIMS Behaviour Dysregulation	91	6.70 .80[a]	2.67 .14[a]	5-18 .70-1.26[a]
SIMS Behaviour Involvement	91	15.92 1.16[a]	6.67 .19[a]	8-29 .9-1.46[a]
CBCL Internalizing Symptoms	89	52.04	10.91	33-76
CBCL Externalizing Symptoms	89	49.51	9.74	28-74
SSRS Total Social Skills	91	101.99	15.54	67-130
PSBS Prosocial Behaviour	89	16.60	2.34	10-20
Hostile Attributions	86	5.64	2.37	0-8
PSBS Total Aggression	89	22.20 1.34[a]	4.85 .08[a]	16-39 1.20-1.59[a]
ERC Lability/Negativity	66	29.03	6.90	17-46
ERC Emotion Regulation	66	24.34 2.56[a]	2.96 .08[a]	16-28 1-3.61[a]
Total Emotion Knowledge	89	21.58 1.58[a]	4.65 .34[a]	10-27 1-2.26[a]

[a]Transformed.

Table 6

Correlations between Study Variables and Demographic Characteristics (*N* =91)

	Child Age	Child Education	Mother Age	Number Years Married	Family Income	Number of Siblings
Destructive Marital Conflict[a]	-.08	.13	-.06	-.19	-.13	.12
Constructive Marital Conflict[a]	-.01	-.02	.0	.14	.18	-.17
SIMS Total Emotional Insecurity	-.03	.03	.13	-.09	-.20	-.02
SIMS Emotional Reactivity[a]	-.04	.03	.07	-.05	.21	-.04
SIMS Behaviour Dysregulation[a]	-.09	.06	.14	-.13	-.02	.05
SIMS Behaviour Involvement[a]	.01	0	.11	-.06	-.19	0
CBCL Internalizing Symptoms	-.06	.06	-.04	-.05	-.06	.03
CBCL Externalizing Symptoms	.06	.05	.05	-.05	.10	.07
SSRS Total Social Skills	.16	-.02	.14	.03	-.01	-.05
PSBS Total Aggression[a]	.05	0	.01	.01	.07	-.03

Table 6 (cont.).

	Child Age	Child Education	Mother Age	Number Years Married	Family Income	Number of Siblings
PSBS Prosocial Behaviour	-.12	-.02	-.10	-.03	-.10	0
Hostile Attributions	.29**	-.08	-.10	.20	.01	.22*
ERC Lability/Negativity	-.02	.19	-.14	.02	-.01	-.14
ERC Emotion Regulation[a]	-.01	-.13	.13	.30*	.14	.08
Total Emotion Knowledge[a]	.60***	-.13	.20	.33**	.16	.08

[a] = Transformed, * $p < .05$, ** $p < .01$, $p < .001$

tests revealed that males were reported to have significantly higher levels of externalizing

symptoms, total aggression, and emotional lability than females (see Table 7). No

significant correlations were found between demographic variables and destructive

marital conflict, constructive marital conflict, total emotional insecurity and its subscales,

internalizing symptoms, social skills, and prosocial behaviour.

Main Analyses: Examination of Direct Effects

Bivariate correlations were conducted to examine relations between the main

independent variables, destructive and constructive marital conflict, the mediator

variables, total emotional insecurity and its subscales, and the main dependent variables.

Findings for non-transformed and transformed data appear in Tables 8 and 9,

respectively. A comparison of Table 8 and Table 9 reveals no difference in the pattern of

results. As a result of the violations of normality on several variables within the study,

transformed data, where appropriate, was used for all analyses that follow. Results

indicated that mothers who reported higher levels of destructive marital conflict reported

lower levels of constructive marital conflict. Associations to outcome variables were

similar for both destructive and constructive marital conflict. Destructive marital conflict

was positively related to total emotional insecurity and its subscales, including SIMS

emotional reactivity, SIMS behaviour dysregulation, and SIMS behaviour involvement.

Destructive marital conflict was positively associated with internalizing symptoms,

externalizing symptoms, total aggression, and emotional lability/negativity, and

negatively associated with social skills, prosocial behaviour, and emotion regulation.

Constructive marital conflict was negatively related to total emotional insecurity

(lower scores on the SIMS are indicative of greater emotional security), emotional

Table 7.

Comparison of Variable Scores for Males and Females

Measure	Males	Females	
	M (*SD*)	*M* (*SD*)	*t*
	N = 52	*N* = 39	
Destructive Marital Conflict[a]	7.16(1.61)	7.22(1.85)	-.15
Constructive Marital Conflict[a]	6.99(2.02)	6.74(2.35)	.53
SIMS Total Emotional Insecurity	35.02(10.94)	37.03(12.50)	-.81
SIMS Emotional Reactivity[a]	1.08(.16)	1.11(.16)	-.67
SIMS Behaviour Dysregulation[a]	.80(.14)	.81(.13)	-.20
SIMS Behaviour Involvement[a]	1.15(.18)	1.18(.19)	-.83
CBCL Internalizing Symptoms	52.16(11.01)[1]	51.90(10.92)	.11
CBCL Externalizing Symptoms	51.60(9.63)[1]	46.82(9.31)	2.35*
SSRS Total Social Skills	101.88(17.71)	102.12(12.30)	-.07
PSBS Prosocial Behaviour	16.25(2.55)[2]	17.05(1.99)[3]	-1.60
Hostile Attributions	5.66(2.27)[1]	5.61(2.53)[4]	.09
PSBS Total Aggression[a]	1.35(.09)[2]	1.31(.08)[3]	2.19*
ERC Lability/Negativity	30.93(6.41)[5]	26.80(7.37)[6]	2.41*
ERC Emotion Regulation[a]	2.48(.72)[5]	2.67(.62)[6]	-1.10
Total Emotion Knowledge[a]	1.51(.35)[1]	1.65(.33)	-1.82

[a]Transformed. [1] *n* = 50. [2] *n* = 51. [3] *n* = 38. [4] *n* = 36. [5] =39. [6] *n* = 27.

*p < .05

Table 8.

Inter-Correlations between Independent and Dependent Variables (untransformed data; N = 91)

Variable	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Destructive Marital Conflict	-.71**	.50**	.49**	.39**	.33**	.39*	.37*	-.39**	.24*	-.23*	.00	.41**	-.42**	-.06
2. Constructive Marital Conflict		-.24*	-.28*	-.23*	-.10	-.32**	-.32**	.42**	-.21*	.28**	-.07	-.37**	.35**	.01
3. SIMS Total Emotional Insecurity			.82**	.56**	.85**	.17	.12	-.05	.13	.01	-.15	.18	-.07	-.07
4. SIMS Emotional Reactivity				.40**	.48**	.21	.03	-.16	.07	.06	-.09	.16	-.19	-.03
5. SIMS Behaviour Dysregulation					.25*	.41**	.33**	-.01	.22*	-.05	-.17	.40**	-.09	-.15
6. SIMS Behaviour Involvement						-.04	.04	.03	.09	-.02	-.12	.00	.07	.02
7. CBCL Internalizing Symptoms							.59**	-.39**	.23*	-.27*	-.07	.69**	-.57**	-.09
8. CBCL Externalizing Symptoms								-.40**	.48**	-.37**	-.05	.73**	-.36**	-.15
9. SSRS Total Social Skills									-.26*	.54**	-.04	-.43**	.68**	-.01
10. PSBS Total Aggression										-.40**	.01	.52**	-.21	-.11
11. PSBS Prosocial Behaviour											-.01	-.32**	.41**	.06
12. Hostile Attributions												-.12	.13	.16
13. ERC Lability/Negativity													-.50**	-.30*
14. ERC Emotion Regulation														.14
15. Total Emotion Knowledge														

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

Table 9.

Inter-Correlations between Independent and Dependent Variables (*transformed data*; *N* = 91)

Variable	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Destructive Marital Conflict[a]	-.71**	.51**	.48**	.41**	.39**	.39**	.40**	-.39**	.30**	-.27*	-.01	.41**	-.42**	-.06
2. Constructive Marital Conflict[a]		-.29**	-.28**	-.27**	-.17	-.31**	-.34**	.45**	-.25*	.31**	-.02	-.36**	.39**	.05
3. SIMS Total Emotional Insecurity			.86**	.59**	.87**	.16	.12	-.05	.15	.01	-.15	.18	-.08	-.05
4. SIMS Emotional Reactivity[a]				.46**	.57**	.19	.02	-.17	.10	.04	-.11	.16	-.21	-.02
5. SIMS Behaviour Dysregulation[a]					.32**	.41**	.33**	-.01	.24*	-.02	-.19	.39**	-.12	-.15
6. SIMS Behaviour Involvement[a]						-.05	.03	.03	.09	-.02	-.11	.00	.10	.01
7. CBCL Internalizing Symptoms							.59**	-.39**	.24*	-.27*	-.07	.69**	-.57**	-.09
8. CBCL Externalizing Symptoms								-.40**	.50**	-.37**	-.05	.73**	-.36**	-.16
9. SSRS Total Social Skills									-.27*	.54**	-.04	-.43**	.68**	-.04
10. PSBS Total Aggression[a]										-.39**	.00	.52**	-.19	-.13
11. PSBS Prosocial Behaviour											-.01	-.32**	.41**	.01
12. Hostile Attributions												-.12	.14	.19
13. ERC Lability/Negativity													-.50**	-.29*
14. ERC Emotion Regulation[a]														.09
15. Total Emotion Knowledge[a]														

[a] Transformed. *p* < .05. **p* < .01

reactivity and behaviour dysregulation. Constructive marital conflict was negatively associated with internalizing symptoms, externalizing symptoms, total aggression, and emotional lability/negativity, and positively associated with social skills, prosocial behavior, and emotion regulation.

In summary, total emotional insecurity was not significantly related to any of the psychological adjustment, social competence, or emotional competence measures. However, the behaviour dysregulation subscale of SIMS was positively related to internalizing symptoms, externalizing symptoms, total aggression, and emotional lability/negativity. Given these associations, supplementary analyses were run to test the mediational role of behaviour dysregulation and the outcome variables. Neither children's hostile attributions nor total emotion knowledge were related to destructive or constructive marital conflict, total emotional insecurity or its subscales. Thus, these variables were not used in subsequent mediation analyses.

Main Analyses: Examination of the Mediation Model

Mediation analyses were conducted to examine the main study hypotheses based on recommendations presented by Shrout and Bolger (2002) for testing mediation effects with small sample sizes. A pictorial example of the various regression paths that were tested is presented in Figure 7. Mediation was investigated by testing the significance of the indirect effect of the independent variable (IV) on the dependent variables (DV), through a mediator (M), quantified as the product of the effect of the IV on M, *a*, and the effect of M on the DV when the effect of the IV is partialled out or controlled for, *b*. Paths *a* and *b* are quantified with unstandardized regression weights. Path *c'* represents the direct effect of the IV on the DV, which is calculated as the difference between the total effect
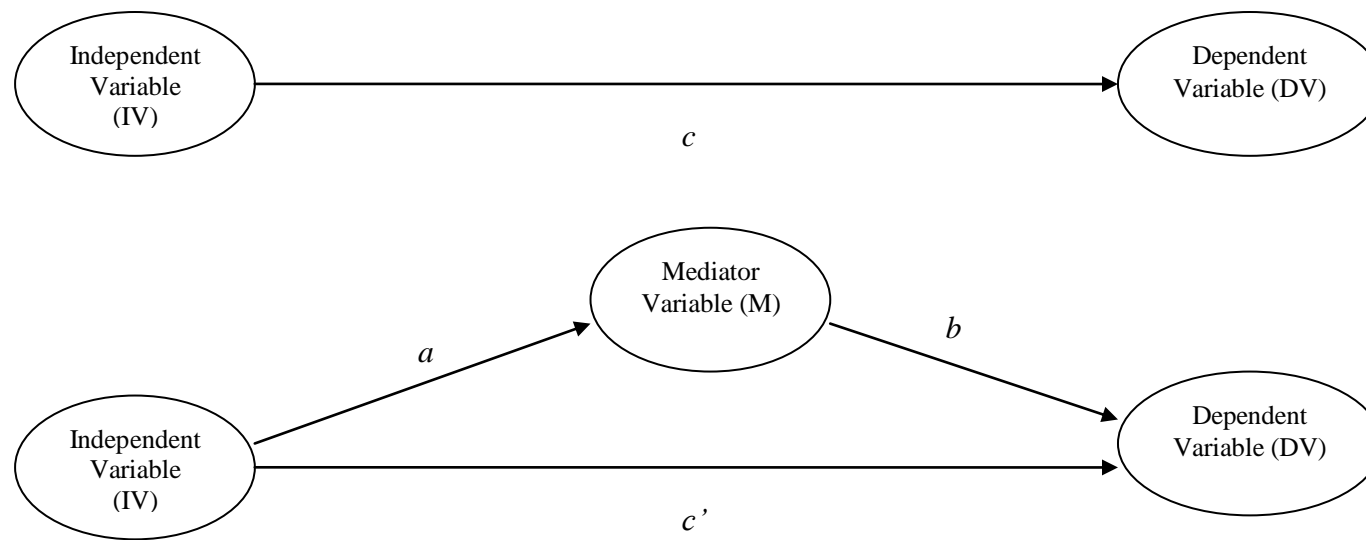
Figure 7. Mediation model depicting direct (weight c') indirect (sum of *a* x *b* weights), and total effects (*c*)

of the IV on the DV when M is not included in the analysis (c), and the indirect effect of the

IV on the DV through M. Path c' is also quantified with unstandardized regression weights.

Full mediation is supported if the direct effect is nonsignificant when a significant indirect

effect is found. This situation suggests that the relations between the IV and the DV can be

fully explained through M. Partial mediation is supported if the direct effect is significant

when a significant indirect effect is found. This situation suggests that the relations between

the IV and the DV can only be partially explained through M, and that other variables remain

important in explaining such a relation (Preacher & Hayes, 2004; Shrout & Bolger, 2002)

As recommended for small samples, a bootstrapping analysis was used to test the

significance of indirect effects, or the mediational role of emotional insecurity (Preacher

& Hayes, 2004; Preacher, Rucker, & Hayes, 2007). Bootstrapping is a nonparametric

resampling procedure where a large number of samples are drawn with replacement from

the full data set. This approach makes no assumptions about the shape of the distributions

of the variables or the sampling distribution of the statistic, which are often not normal

with small sample sizes (Efron & Tibshirani, 1993; Mooney & Duval, 1993). Especially

in small samples, it is possible that either the a or the b coefficient, or both, may be

nonsignificant only because of low statistical power (Preacher & Hayes, 2004), which

increases the amount of Type II error. Thus, the bootstrapping approach has been

suggested as a way of circumventing the power problem introduced by nonnormality of

the sampling distribution of ab (Bollen & Stine, 1990; Lockwood & MacKinnon, 1998;

Shrout & Bolger, 2002) and produces a test that is not based on large-sample theory,

meaning it can be used with increased confidence to small samples.

Practically speaking, bootstrapping involves the repeated extraction of samples (5000 samples were taken in the present study) with replacement from the data set and the estimation of the indirect effect (*ab*) in each resampled data set. Preacher and Hayes (2008) recommend at that least 1000 samples are taken with increased precision in the bootstrap sampling distribution occurring with increased samples. The increased use of samples can reduce the effects of random sampling error. A point estimate of the indirect effect was derived from the mean of the 5000 estimates of *ab* statistic. The totality of all the estimated indirect effects permits the construction of a 95% confidence interval by using the cut-offs for the 2.5% highest and lowest scores of the empirical distribution for the purpose of hypothesis testing of the effect of the indirect effects. Indirect effects, as measured by the point estimate or mean of *ab,* were considered significant, and that mediation had occurred, when the bias corrected and accelerated confidence interval did not include zero. Bias corrected and accelerated confidence intervals were used as they adjust for both bias and skewness in the bootstrap distribution (Efron, 1987). Given that specific hypotheses were made with respect to the direction of correlations, one-tailed tests were applied to determine significance. See Table 7 for relevant means, standard deviations, and ranges, Table 9 for correlations among these variables, and Table 10 for a summary of mediation analyses for both destructive and constructive marital conflict models.

Hypothesis 1a. It was hypothesized that children's levels of emotional insecurity would mediate the relation between levels of destructive marital conflict and children's internalizing and externalizing symptoms.

Table 10.

Summary of Mediator Model Analyses of Marital Conflict, Emotional Insecurity, and Outcome Variables (5000 bootstraps)

Independent variable (IV)	Mediating variable (M)	Dependent variable (DV)	Effect of IV on M (*a*) B (*SE*)	Effect of M on DV (*b*) B (*SE*)	Direct Effect (*c'*) B (*SE*)	Indirect Effect (*a x b*) 95% CI Point est.(*SE*)	Total Effect (c) B (*SE*)
DMC[a]	SIMS Total	CBCL INT[1]	3.52 (.62)***	-.04 (.11)	2.62 (.74)***	-.15 (.38) (-.92, .63)	2.48 (.63)***
		CBCL EXT[1b]	3.52 (.62)***	-.08(.09)	2.54 (.63)***	-.29 (.33) (-1.02, .32)	2.25 (.54)***
		Social Skills[2]	3.51 (.61)***	.27 (.15)	-4.48 (1.02)***	.93 (.54) (-.11, 2.01)	-3.55 (.89)***
		Total Aggression[1ab]	3.67 (.63)***	0 (0)	.02 (.01)*	0 (0) (-.01, .01)	.02 (.01)**
		Prosocial Behaviour[1]	3.67 (.63)***	.04 (.02)	-.52 (.17)**	.15 (.10) (-.02, .38)	-.37 (.14)**
		Lability/Negativity[3b]	3.41 (.75)***	.02 (.07)	1.78 (.52)**	.05 (.26) (-.42, .61)	1.83 (.45)***
		Emotion Regulation[3a]	3.48 (.75)***	.01 (0)	-.29 (.05)***	.03 (.03) (-.01, .10)	-.17 (.04)***

B = Unstandardized Coefficiants; SE = Standard Error; Point est. = Point Estimate*;* CI = Confidence Interval; DMC = destructive marital conflict; CMC = constructive marital conflict; SIMS = Security in the Marital Subsystem; CBCL INT = Child Behavior Checklist Internalizing Symptoms; CBCL EXT = Child Behavior Checklist Externalizing Symptoms. [a]Transformed. [b] gender controlled. [1]n=89. [2]n=91. [3]n=66. *p <.05. **p <.01. ***p <.001.

Table 10 (cont.)

Independent variable (IV)	Mediating variable (M)	Dependent variable (DV)	Effect of IV on M (*a*) *B* (*SE*)	Effect of M on DV (*b*) *B* (*SE*)	Direct Effect (*c'*) *B* (*SE*)	Indirect Effect (*a x b*) 95% CI Point est.(*SE*)	Total Effect (c) *B* (*SE*)
CMC[a]	SIMS Total	CBCL INT[1]	-1.45 (.55)*	.08 (.10)	-1.48 (.53)**	-.12 (.17) (-.57, .13)	-1.60 (.51)**
		CBCL EXT[1b]	-1.44 (.56)*	.04 (.09)	-1.50 (.46)**	-.05 (.14) (-.39, .19)	-1.55 (.44)***
		Social Skills[2]	-1.53 (.54)**	.10 (.13)	3.35 (.71)***	-.15 (.23) (-.72, .21)	3.19 (.68)***
		Total Aggression[1ab]	-1.68 (.58)**	0 (0)	-.01 (0)*	0 (0) (-.01, 0)	-.01 (0)*
		Prosocial Behaviour[1]	-1.69 (.56)**	.02 (.02)	.38 (.11)**	-.04 (.04) (-.15, .03)	.34 (.11)**
		Lability/Negativity[3b]	-1.40 (.64)*	.08 (.07)	-1.10 (.37)**	-.12 (.12) (-.50, .02)	-1.22 (.34)**
		Emotion Regulation[3a]	-1.46 (.64)*	0 (0)	.12 (.04)**	0 (.01) (-.03, .02)	.12 (.04)**

B = Unstandardized Coefficiants; SE = Standard Error; Point est. = Point Estimate*;* CI = Confidence Interval; DMC = destructive marital conflict; CMC = constructive marital conflict; SIMS = Security in the Marital Subsystem; CBCL INT = Child Behavior Checklist Internalizing Symptoms; CBCL EXT = Child Behavior Checklist Externalizing Symptoms. [a]Transformed. [b] gender controlled. [1]n=89. [2]n=91. [3]n=66. *p <.05. **p <.01. ***p <.001.

Internalizing symptoms. As Table 10 shows, the analysis revealed that destructive marital conflict was significantly associated with emotional insecurity, such that higher levels of destructive marital conflict was related to higher levels of emotional insecurity (Path *a*). Emotional insecurity was not significantly related to internalizing symptoms (Path *b*). Given this lack of association, the indirect effect of destructive marital conflict to internalizing symptoms through emotional insecurity (*ab)* was nonsignificant as zero was included within the 95% confidence interval. Both the direct effect (c') and total effect (*c*) of destructive marital conflict to internalizing symptoms were significant. Overall, these results suggest that emotional insecurity did not explain the significant positive relations between destructive marital conflict and internalizing symptoms.

Externalizing symptoms. Gender was controlled for analyses involving externalizing symptoms as a result of the significant difference between males and females on this variable. Gender significantly predicted scores on externalizing symptoms, $B = -4.65$ ($SE = 1.87$), $t(88) = -2.48$, $p < .05$. As presented in Table 10, destructive marital conflict was significantly associated with emotional insecurity, such that higher levels of destructive marital conflict was related to higher levels of emotional insecurity (Path *a*). Emotional insecurity was not significantly related to externalizing symptoms (Path *b*). Given this lack of association, the indirect effect of destructive marital conflict to externalizing symptoms through emotional insecurity (*ab*) was not significant as zero was included within the 95% confidence interval. Both the direct effect (c') and total effect (*c*) of destructive marital conflict to externalizing symptoms were significant. Overall, these analyses suggest that emotional insecurity did not explain

significant positive relations between destructive marital conflict and externalizing symptoms.

Hypothesis 1b. It was predicted that children's levels of emotional insecurity would mediate the relations between levels of destructive marital conflict and children's social competence.

Social skills. The analyses revealed that destructive marital conflict was significantly associated with emotional insecurity, such that higher levels of destructive marital conflict was related to higher levels of emotional insecurity (Path *a*). Emotional insecurity was not significantly related to social skills (Path *b*). The indirect effect of destructive marital conflict to social skills through emotional insecurity (*ab)* was nonsignificant as zero was included within the 95% confidence interval. Both the direct effect (c') and total effect (*c*) of destructive marital conflict to social skills were significant (see Table 10). Overall, these findings suggest that emotional insecurity did not explain the significant negative relations between destructive marital conflict and social skills.

Total aggression. Gender was controlled for analyses involving total aggression and significantly predicted scores on total aggression, $B = -.04$ ($SE = .02$), $t(88) = -2.24$, $p < .05$. Higher levels of destructive marital conflict were significantly associated with higher levels of emotional insecurity (Path *a*). Emotional insecurity was not significantly related to total aggression (Path *b*). Given this lack of association, the indirect effect of destructive marital conflict to total aggression through emotional insecurity (*ab*) was not significant as zero was included within the 95% confidence interval. Both the direct effect (c') and total effect (*c*) of destructive marital conflict to total aggression were

significant. The findings suggest that emotional insecurity did not mediate the significant positive association between destructive marital conflict and total aggression.

Prosocial behaviour. As shown in Table 10, destructive marital conflict was significantly related to emotional insecurity, such that higher levels of destructive marital conflict was related to higher levels of emotional insecurity (Path *a*). Emotional insecurity was not significantly related to prosocial behaviour (Path *b*). Given this lack of association, the indirect effect of destructive marital conflict to prosocial behaviour through emotional insecurity (*ab)* was nonsignificant as zero was included within the 95% confidence interval. Both the direct effect (c') and total effect (*c*) of destructive marital conflict to prosocial behaviour were significant. These analyses suggest that emotional insecurity did not explain the significant negative relations between destructive marital conflict and prosocial behaviour.

Hypothesis 1c. It was hypothesized that children's levels of emotional insecurity would mediate the relations between levels of destructive marital conflict and children's emotional competence.

Emotional lability/negativity. In this set of analyses, gender was included as a covariate for emotional lability/negativity as a result of the significant difference between males and females on this variable. Gender significantly predicted scores on emotional lability/negativity, $B = -4.65$ ($SE = 1.57$), $t(65) = -2.96$, $p < .05$. Destructive marital conflict was significantly related to emotional insecurity, such that higher levels of destructive marital conflict was associated with higher levels of emotional insecurity (Path *a*). Emotional insecurity was not significantly related to emotional lability/negativity (Path *b*). As zero was included with in the 95% confidence interval,

the indirect effect of destructive marital conflict to emotional lability/negativity through emotional insecurity (*ab*) was nonsignificant. Both the direct effect (c') and total effect (*c*) of destructive marital conflict to emotional lability/negativity were significant (see Table 10). Overall, these analyses suggest that emotional insecurity did not mediate the significant positive relations between destructive marital conflict and emotional lability/negativity.

Emotion regulation. As presented in Table 10, the analyses revealed that destructive marital conflict was significantly associated with emotional insecurity, such that higher levels of destructive marital conflict was related to higher levels of emotional insecurity (Path *a*). Emotional insecurity was not significantly related to emotion regulation (Path *b*). Given this lack of association, the indirect effect of destructive marital conflict to emotion regulation through emotional insecurity (*ab)* was nonsignificant as zero was included within the 95% confidence interval. Both the direct effect (c') and total effect (*c*) of destructive marital conflict to emotion regulation were significant. These findings reveal that emotional insecurity did not explain the significant negative relations between destructive marital conflict and emotion regulation.

Hypothesis 2a. It was hypothesized that children's levels of emotional insecurity would mediate the relation between levels of constructive marital conflict and children's internalizing and externalizing symptoms.

Internalizing symptoms. As shown in Table 10, the analyses revealed that higher levels of constructive marital conflict was significantly related to lower levels of emotional insecurity (Path *a*). Emotional insecurity was not significantly related to internalizing symptoms (Path *b*). Given this lack of association, the indirect effect of

constructive marital conflict to internalizing symptoms through emotional insecurity (*ab)* was nonsignificant as zero was included within the 95% confidence interval. Both the direct effect (c') and total effect (*c*) of constructive marital conflict to internalizing symptoms were significant. Overall, these analyses suggest that emotional insecurity did not explain the significant negative relations between constructive marital conflict and internalizing symptoms.

Externalizing symptoms. When examining externalizing symptoms, gender was included as a covariate in these analyses and significantly predicted scores on externalizing symptoms, $B = -5.06$ (*SE* $= .44$), $t(88) = -2.64$, $p < .05$. As presented in Table 10, constructive marital conflict was significantly associated with emotional insecurity, such that higher levels of constructive marital conflict were related to lower levels of emotional insecurity (Path *a*). Emotional insecurity was not significantly related to externalizing symptoms (Path *b*). Given this lack of association, the indirect effect of constructive marital conflict to externalizing symptoms through emotional insecurity (*ab)* was nonsignificant as zero was included within the 95% confidence interval. Both the direct effect (c') and total effect (*c*) of constructive marital conflict to externalizing symptoms were significant. Overall, these findings suggest that emotional insecurity did not explain significant negative relations between constructive marital conflict and externalizing symptoms.

Hypothesis 2b. It was hypothesized that children's levels of emotional insecurity would mediate the relation between levels of constructive marital conflict and children's social competence.

Social skills. As presented in Table 10, constructive marital conflict was significantly negatively associated with emotional insecurity (Path *a*). Emotional insecurity was not significantly related to social skills (Path *b*). As zero was included within the 95% confidence interval, the indirect effect of constructive marital conflict to social skills through emotional insecurity (*ab)* was nonsignificant.. Both the direct effect (c') and total effect (*c*) of constructive marital conflict to social skills were significant. Thus, emotional insecurity did not explain the significant positive relations between constructive marital conflict and social skills.

Total aggression. Gender was controlled for analyses involving total aggression. Gender significantly predicted scores on total aggression, $B = -.04$ ($SE = .01$), $t(88) = -2.38$, $p < .05$. Constructive marital conflict was significantly associated with emotional insecurity, such that higher levels of constructive marital conflict was related to lower levels of emotional insecurity (Path *a*). Emotional insecurity was not significantly related to total aggression (Path *b*). The indirect effect of constructive marital conflict to total aggression through emotional insecurity (*ab*) was nonsignificant as zero was included within the 95% confidence interval. Both the direct effect (c') and total effect (*c*) of constructive marital conflict to total aggression were significant (Table 10). Overall, these findings reveal that emotional insecurity did not mediate the significant negative relations between constructive marital conflict and total aggression.

Prosocial behaviour. As shown in Table 10, the analyses found that constructive marital conflict was significantly associated with emotional insecurity, such that higher levels of constructive marital conflict were related to lower levels of emotional insecurity (Path *a*). Emotional insecurity was not significantly associated with prosocial behaviour

(Path *b*). Given this lack of association, the indirect effect of constructive marital conflict to prosocial behaviour through emotional insecurity (*ab)* was nonsignificant as zero was included within the 95% confidence interval. Both the direct effect (c') and total effect (*c*) of constructive marital conflict to prosocial behaviour were significant. Overall, emotional insecurity did not explain the significant positive relations between constructive marital conflict and prosocial behaviour.

Hypothesis 2c. It was hypothesized that children's levels of emotional insecurity would mediate the relation between levels of constructive marital conflict and children's emotional competence.

Emotional lability/negativity. Gender was controlled in the analyses involving emotional lability/negativity. Gender significantly predicted scores on emotional lability/negativity, $B = -.4.87$ (*SE* = 1.60), $t(65) = -3.08$, $p < .05$. Constructive marital conflict was significantly associated with emotional insecurity, such that higher levels of constructive marital conflict was related to lower levels of emotional insecurity (Path *a*). Emotional insecurity was not significantly related to emotional lability/negativity (Path *b*). Given this lack of association, the indirect effect of constructive marital conflict to emotional lability/negativity through emotional insecurity (*ab*) was nonsignificant as zero was included within the 95% confidence interval. Both the direct effect (c') and total effect (*c*) of constructive marital conflict to total aggression were significant. Overall, the analyses suggest that emotional insecurity did not explain significant negative relations between constructive marital conflict and emotional lability/negativity.

Emotion regulation. Constructive marital conflict was significantly associated with emotional insecurity, such that higher levels of constructive marital conflict was

related to lower levels of emotional insecurity (Path *a*). Emotional insecurity was not significantly related to emotion regulation (Path *b*). The indirect effect of constructive marital conflict to emotion regulation through emotional insecurity (*ab)* was nonsignificant as zero was included within the 95% confidence interval. Both the direct effect (c') and total effect (*c*) of constructive marital conflict to emotion regulation were significant. Overall, these analyses revealed that emotional insecurity did not explain the significant positive relations between constructive marital conflict and emotion regulation.

Summary: Hypothesis 1 and 2

The analyses indicated that both destructive and constructive marital conflict were significantly associated with emotional insecurity. Destructive marital conflict was related to higher levels of emotional insecurity, whereas constructive marital conflict was related to lower levels of emotional insecurity. Additionally, both destructive and constructive marital conflict was significantly associated with each of the mother rated outcome variables. Destructive marital conflict was associated with more internalizing symptoms, externalizing symptoms, total aggression, and emotional lability/negativity, and less social skills, prosocial behaviour, and emotion regulation. Constructive marital conflict was associated with less internalizing symptoms externalizing symptoms, total aggression, and emotional lability/negativity, and higher levels of social skills, prosocial behaviour, and emotion regulation. However, emotional insecurity was not significantly related to psychological adjustment variables, including internalizing and externalizing symptoms, social competence variables, including social skills, aggression, and prosocial behaviour, or emotional competence variables, including, emotional lability/negativity

and emotion regulation. Emotional insecurity did not emerge as mediating variable between destructive or constructive marital conflict and the outcome variables as indirect analyses were not significant.

Additional Analyses

While the total emotional insecurity measure was unrelated to outcome variables, the behaviour dysregulation subscale of the SIMS was significantly associated with internalizing symptoms, externalizing symptoms, total aggression, and emotional lability/negativity (see Table 9). Thus, for these variables, additional analyses were conducted to examine the mediational role of behaviour dysregulation. A summary of mediation analyses for both destructive and constructive marital conflict models with behaviour dysregulation as the mediating variable are presented in Table 11.

Destructive marital conflict models.

Internalizing symptoms. Destructive marital conflict was significantly positively associated with behaviour dysregulation (Path *a*) and behaviour dysregulation was significantly positively associated with internalizing symptoms (Path *b*). Findings of indirect effects indicated that behaviour dysregulation mediated the significant positive association between destructive marital conflict and internalizing symptoms (see Figure 8) evidenced by zero not being included within the 95% confidence interval. Despite the significant mediation, the direct effects (*c'*) remained significant suggesting that behaviour dysregulation partially mediated the relations between destructive marital conflict and internalizing symptoms. Squared partial correlations indicated that behaviour dysregulation accounted for 9% of the variance in internalizing symptoms when destructive marital conflict was controlled whereas destructive marital conflict accounted

Table 11.

Summary of Mediator Model Analyses of Marital Conflict, Behaviour Dysregulation, and Outcome Variables (5000 bootstraps)

Independent variable (IV)	Mediating variable (M)	Dependent variable (DV)	Effect of IV on M (*a*) B (*SE*)	Effect of M on DV (*b*) B (*SE*)	Direct Effect (*c'*) B (*SE*)	Indirect Effect (*a* x *b*) Point est.(*SE*)	95% CI	Total Effect (c) B (*SE*)
DMC[a]	SIMS BD[a]	CBCL INT[1]	.03 (.01)***	23.56 (8.05)**	1.67 (.66)*	.79 (.33)*	(.23, 1.66)	2.47 (.63)***
		CBCL EXT[1b]	.03 (.01)***	14.30 (7.11)*	1.80 (.59)**	.48 (.28)	(-.05, 1.07)	2.25 (.54)***
		Total Aggression[1ab]	.03 (.01)***	.10 (.06)	.01 (.01)*	0 (0)	(-.01, .01)	.01 (.01)**
		Lability/Negativity[2b]	.04 (.01)***	13.40 (5.47)*	1.36 (.47)**	.47 (.22)*	(.01, 1.20)	1.83 (.45)***
CMC[a]	SIMS BD[a]	CBCL INT[1]	-.02 (.01)*	27.38 (7.66)***	-1.13 (.51)*	-.47 (.24)*	(-1.10, -.10)	-1.60 (.51)**
		CBCL EXT[1b]	-.02 (.01)*	18.17 (6.76)**	-1.25 (.44)**	-.30 (.17)*	(-.76, -.04)	-1.55 (.44)***
		Total Aggression[3ab]	-.02 (.01)*	.17 (.07)*	0 (0)	0 (0)*	(-.01, -.001)	-.01 (0)**
		Lability/Negativity[2b]	-.02 (.01)*	15.86 (5.22)**	-.95 (.35)**	-.28 (.17)*	(-.79, -.04)	-1.22 (.35)***

B = Unstandardized Coefficients; *SE* = Standard Error; Point est. = Point Estimate; CI = Confidence Interval; DMC = destructive marital conflict; CMC = constructive marital conflict; SIMS BD= Security in the Marital Subsystem behavior dysregulation; CBCL INT = Child Behavior Checklist Internalizing Symptoms; CBCL EXT = Child Behavior Checklist Externalizing Symptoms. [a]Transformed. [b]gender controlled. [1]n=89. [2]n=66. [3]n=88. *p* <.05. **p* <.01. ***p* <.001.
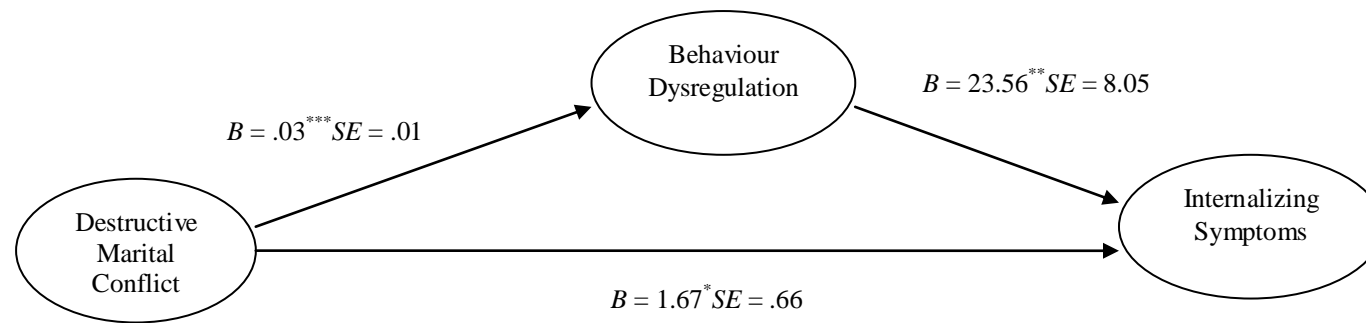
Figure 8. Mediation of the relations between destructive marital conflict and internalizing symptoms by behaviour dysregulation
*p < .05, **p < .01, ***p < .001

for approximately 7% of the variance in internalizing symptoms when behaviour dysregulation was controlled.

   Externalizing symptoms. Gender was controlled for analyses involving externalizing symptoms as a result of the significant difference between males and females on this variable. Gender significantly predicted scores on externalizing symptoms, $B = -.4.82$ ($SE = 1.83$), $t(88) = -2.63$, $p < .05$. Destructive marital conflict was significantly positively related to behaviour dysregulation (Path a) and behaviour dysregulation was significantly positively related to externalizing symptoms (Path b). However, results of indirect effects indicated that behaviour dysregulation did not mediate the significant positive association between destructive marital conflict and externalizing symptoms. While no mediation occurred, examination of Table 11 indicated that the direct effects unstandardized beta weight was smaller than the total effects unstandardized beta weight indicating that there was a trend that behaviour dysregulation reduced the amount of variance in externalizing symptoms explained by destructive marital conflict. When examining the total effects, destructive marital conflict accounted for 15.60% of the variance in externalizing symptoms. Squared partial correlations indicated that destructive marital conflict accounted for 9.67% of the variance in externalizing symptoms when behaviour dysregulation and gender were controlled. Squared partial correlations also indicated that behaviour dysregulation accounted for 4.53% of the variance in externalizing symptoms when destructive marital conflict and gender were controlled.

   Total aggression. Gender was included as a covariate in the analyses involving total aggression and significantly predicted scores on total aggression, $B = -.04$ ($SE =$

.02), $t(88) = -2.29$, $p < .05$. Destructive marital conflict was significantly positively

associated with behaviour dysregulation (Path *a*). However, behaviour dysregulation was

not significantly related to total aggression (Path *b*). Results of indirect effects indicated

that behaviour dysregulation did not mediate the significant positive association between

destructive marital conflict and total aggression.

Emotional lability/negativity. Gender was controlled for analyses involving

emotional lability/negativity. Gender significantly predicted scores on emotional

lability/negativity, $B = -4.64$ ($SE = 1.48$), $t(65) = -3.13$, $p < .05$. Destructive marital

conflict was significantly positively associated with behaviour dysregulation (Path *a*) and

behaviour dysregulation was significantly positively association with emotional

lability/negativity (Path *b*). As shown in Figure 9, results of indirect effects revealed that

behaviour dysregulation mediated the significant positive relations between destructive

marital conflict and emotional lability/negativity evidenced by zero not being included

within the 95% confidence interval. However, behaviour dysregulation only partially

mediated the relations between destructive marital conflict and emotional

lability/negativity because the direct effects (*c'*) remained significant. Squared partial

correlations indicated that behaviour dysregulation accounted for 8.82% of the variance

in emotional lability/negativity when destructive marital conflict and gender were

controlled and destructive marital conflict accounted for 11.26% of the variance in

emotional lability/negativity when behaviour dysregulation and gender were controlled.

Constructive marital conflict models.

Internalizing symptoms. As presented in Table 11, constructive marital conflict

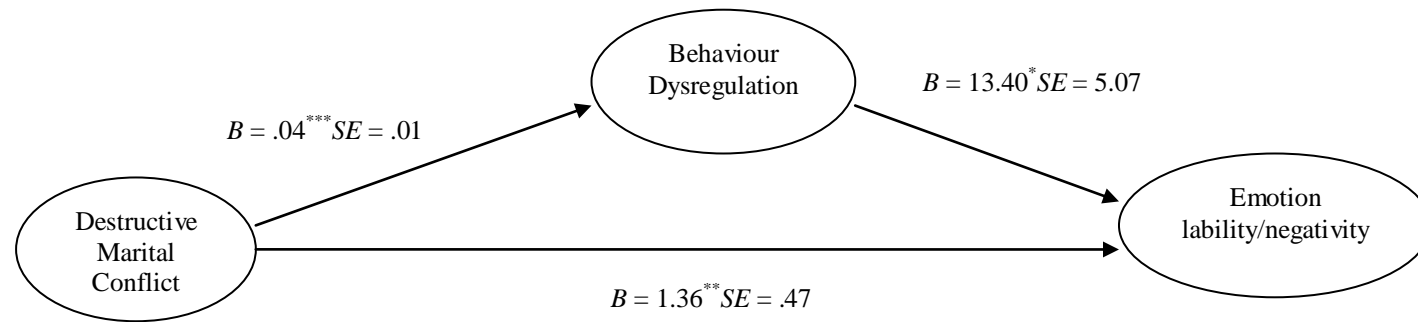was significantly associated with behaviour dysregulation, such that higher levels of

Figure 9. Mediation of the relations between destructive marital conflict and emotion lability/negativity by behaviour dysregulation
*p < .05, **p < .01, ***p < .001

constructive marital conflict was related to lower levels of behaviour dysregulation (Path

a). Behaviour dysregulation was significantly positively related to internalizing

symptoms (Path *b*). Results of indirect effects indicated that behaviour dysregulation

mediated the significant negative association between constructive marital conflict and

internalizing symptoms evidenced by zero not being included within the 95% confidence

interval (see Figure 10). Behaviour dysregulation partially mediated the relations between

constructive marital conflict and internalizing symptoms as the direct effects (*c'*)

remained significant Squared partial correlations indicated that behaviour dysregulation

accounted for 12.96% of the variance in internalizing symptoms when constructive

marital conflict was controlled and that constructive marital conflict accounted for 5.66%

of the variance in internalizing symptoms when behaviour dysregulation was controlled.

Externalizing symptoms. Gender was included as a covariate in the analyses

involving externalizing symptoms. Gender significantly predicted scores on externalizing

symptoms, $B = -5.00$ ($SE = 1.84$), $t(88) = -2.71$, $p < .05$. Higher levels of constructive

marital conflict were significantly related to lower levels of behaviour dysregulation

(Path *a*) and higher levels of behaviour dysregulation were significantly related to higher

levels of externalizing symptoms (Path *b*). As shown in Figure 11, results of indirect

effects indicated that behaviour dysregulation mediated the significant negative

association between constructive marital conflict and externalizing symptoms evidenced

by zero not being included within the 95% confidence interval. Despite the significant

mediation, the direct effects (*c'*) remained significant suggesting that behaviour

dysregulation partially mediated the relations between constructive marital conflict and

externalizing symptoms. Squared partial correlations indicated that behaviour

Figure 10. Mediation of the relations between constructive marital conflict and internalizing symptoms by behaviour dysregulation
*p < .05, **p < .01, ***p < .001

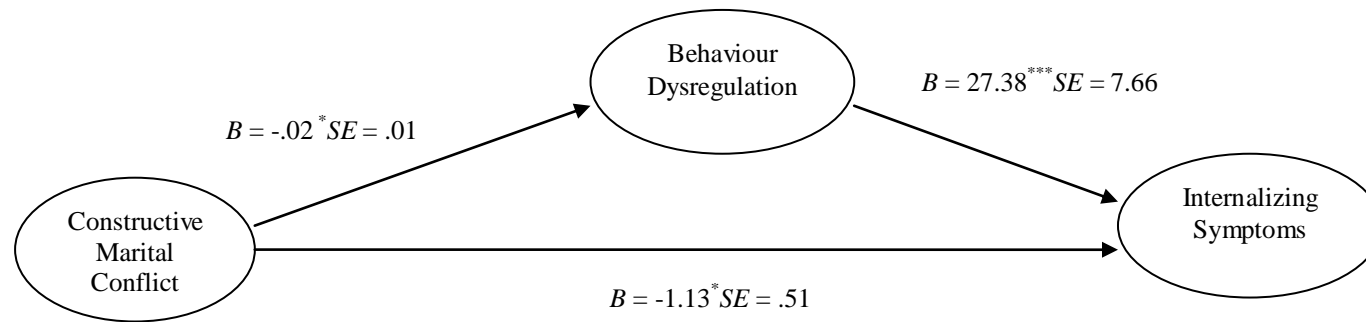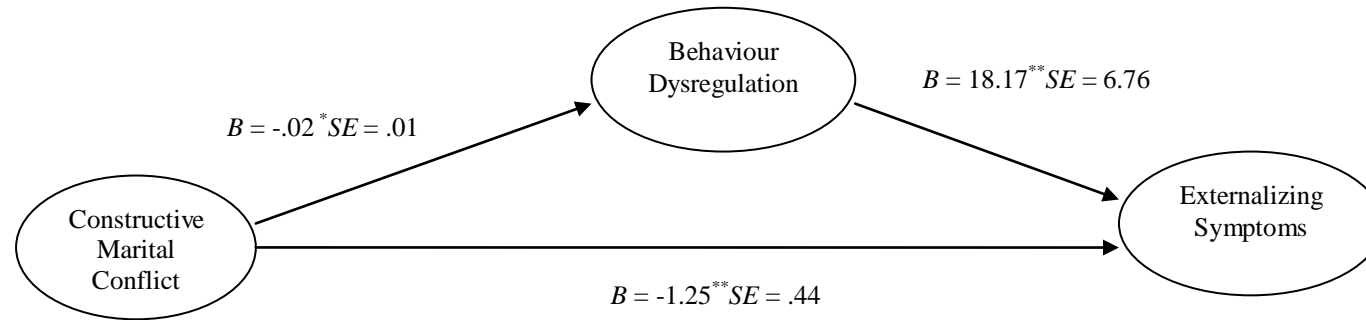*Figure 11*. Mediation of the relations between constructive marital conflict and externalizing symptoms by behaviour dysregulation
p < .05, **p < .01, ***p < .001

accounted for 7.84% of the variance in externalizing symptoms when constructive marital conflict and gender were controlled and that constructive marital conflict accounted for 8.52% of the variance in externalizing symptoms when behaviour dysregulation and gender were controlled.

Total aggression. Based upon casewise diagnostics and standardized residuals, one case was deemed to be a multivariate outlier. This case was deemed to have undue influence on the regression model based upon its Mahalanobis value and that its centered leverage value was greater than two times the average leverage value. This case was deleted from the present analysis. Gender was included as a covariate and significantly predicted scores on total aggression, $B = -.05$ ($SE = .02$), $t(87) = -2.63$, $p < .05$. As presented in Table 11, constructive marital conflict was significantly negatively associated with behaviour dysregulation (Path *a*) and behaviour dysregulation was significantly positively associated with total aggression (Path *b*). Results of indirect effects indicated that behaviour dysgregulation mediated the significant negative association between constructive marital conflict and total aggression (see Figure 12). Full mediation is supported, given that the direct effects (*c'*) were no longer significant when behaviour dysregulation was included in the model. Squared partial correlations indicated that behaviour dysregulation accounted for 7.29% of the variance in total aggression when destructive marital conflict and gender were controlled whereas constructive marital conflict accounted for a nonsignificant 4.28% of the variance in total aggression when behaviour dysregulation and gender were controlled.

Emotional lability/negativity. Gender was controlled for analyses involving emotional lability/negativity and significantly predicted scores on emotional
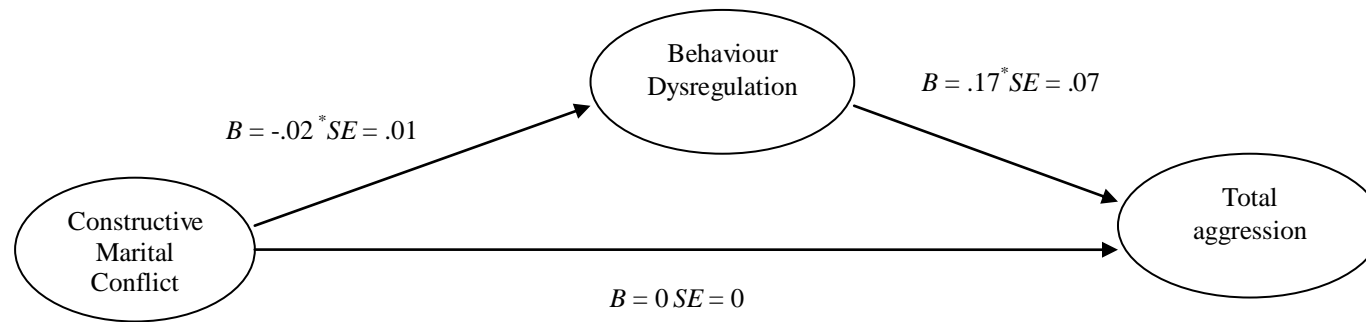
Figure 12. Mediation of the relations between constructive marital conflict and total aggression by behaviour dysregulation
*p < .05

lability/negativity, $B = -4.65$ ($SE = 1.49$), $t(65) = -3.12$, $p < .05$. As presented in Table 11, the analyses revealed significant indirect effects, which indicated that behaviour dysregulation mediated the significant negative association between constructive marital conflict and emotional lability/negativity evidenced by zero not being included within the 95% confidence interval (Figure 13). Despite the significant mediation, the direct effects (c') remained significant suggesting that behaviour dysregulation partially mediated the relations between constructive marital conflict and emotional lability/negativity. Squared partial correlations indicated that behaviour dysregulation accounted for 12.96% of the variance in emotional lability/negativity when constructive marital conflict and gender were controlled and that constructive marital conflict accounted for 10.82% of the variance in emotional lability/negativity when behaviour dysregulation and gender were controlled.

Summary of Additional Analyses

Overall, the results indicated that behaviour dysregulation partially mediated the significant relations between destructive marital conflict and internalizing symptoms and emotional lability/negativity. There was also a trend, though not significant, that behaviour dysregulation reduced the amount of variance explained by the relations between destructive marital conflict and externalizing symptoms. Behaviour dysregulation also fully mediated the relations between constructive marital conflict and total aggression and partially mediated the significant relations between constructive marital conflict and internalizing symptoms, externalizing symptoms, and emotional lability/negativity.
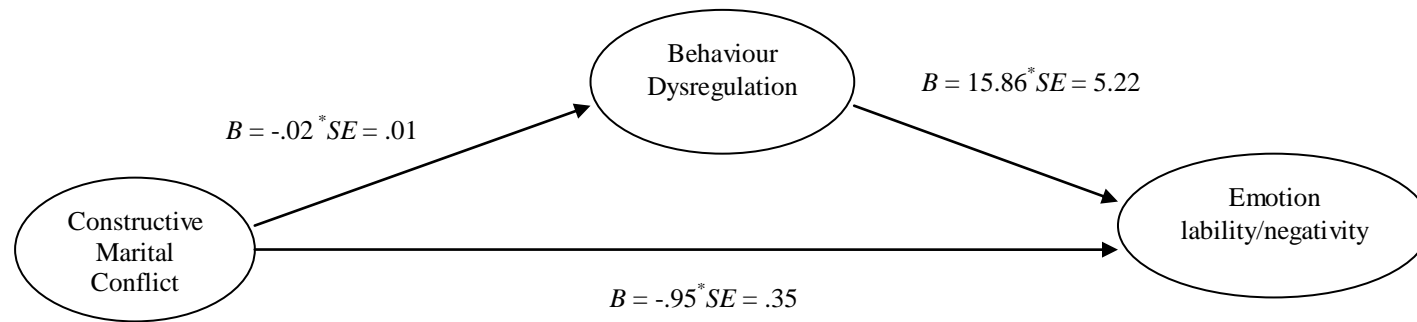
Figure 13. Mediation of the relations between constructive marital conflict and emotion lability/negativity by behaviour dysregulation
*p < .05

CHAPTER IV

Discussion

The purpose of the present study was to examine relations between destructive and constructive marital conflict, preschool children's appraisal and sense of security about the intactness of their family, and children's emotional and social competence, and psychological adjustment. The present study extends work on the Emotional Security Theory (Davies & Cummings, 1994) by examining the mediational role of children's emotional security on the relations between both destructive and constructive marital conflict and children's psychological adjustment, and social and emotional competence. The majority of the research within this area focuses on emotional security as an explanatory mechanism between marital conflict and school-aged children's internalizing and externalizing symptoms (Cummings et al., 2006, Davies et al., 2002; Davies et al., 2004; Harold et al., 2004). There are few studies that have examined the relations between marital conflict and other important developmental processes, such as children's social and emotional competence (e.g., Du Rocher-Shudlich et al., 2004; Goodman et al., 1999; Hart et al., 1998; Katz et al., 2007; Parke et al., 2001), and even fewer have examined the meditational role of emotional security on these relations. To this author's knowledge only one study has been completed that assessed the mediational role of emotional security on children's prosocial behaviour, an aspect of social competence (McCoy et al., 2009). Additionally, previous studies have tended to centre around school-aged children and adolescent samples, with fewer studies focusing on young children. Such a focus is important within the context of prevention and early intervention efforts

as children's maladaptive emotional and behavioural patterns when they are young can become more rigid ways of being as they age if left untreated (Landy & Menna, 2006).

Marital Conflict and Children's Psychological Adjustment, Social and Emotional Competence

The first objective of the present study was to examine the relations between destructive marital conflict and children's psychological adjustment, social competence, and emotional competence. The second objective of the present study was to examine the relations between constructive marital conflict and children's psychological adjustment, social competence, and emotional competence. The present study found that mothers' reports of destructive marital conflict were significantly associated with their ratings of their children's psychological adjustment. More specifically, higher levels of destructive marital conflict were related to higher levels of children's internalizing and externalizing symptoms. These findings are consistent with the majority of studies within the literature for preschool, school-aged, and adolescent populations (Cummings et al., 2006; Dadds et al., 1999; Davies et al., 2002; Grych et al., 2000). For example, Cummings et al. (2006) found that in a sample of young children aged 5-7 years, higher frequency of destructive marital conflict was associated with increases in internalizing and externalizing symptoms, as reported by the children's mothers. Using a sample of children aged 9-18 years, Cummings et al. (2006) found that higher levels of destructive marital conflict, as measured by the frequency of conflict and levels of verbal aggression, measured at one point in time predicted higher levels of internalizing and externalizing problems two years later.

Findings from the present study also indicated that mother reports of their constructive marital conflict were significantly associated with children's psychological adjustment. More specifically, higher levels constructive marital conflict were related to lower levels children's internalizing and externalizing symptoms. These findings are also consistent with results of the limited studies examining such associations. Cummings et al (2008) found that higher levels of constructive marital conflict, following involvement in a treatment study designed to teach such strategies, was associated with less internalizing and externalizing problems in children aged 4-8. Additionally, Du Rocher-Schudlich and Cummings (2003) found that higher levels of constructive conflict tactics, such as conflict resolution and problem solving strategies were negatively associated with internalizing and externalizing symptoms for children aged 8-16. Given the limited nature of such studies, the present study further supports the relations between constructive marital conflict and psychological adjustment with children aged 3-6 years.

The present study found that higher levels of destructive marital conflict were also associated with social competence variables, such as higher levels of children's aggression and lower levels of social skills and prosocial behaviour, and emotional competence variables, such as higher levels of emotional lability/negativity and lower levels of emotion regulation. These findings are consistent with those reported by previous studies. Du Rocher-Schudlich et al. (2004) found that higher levels of destructive marital conflict were related to 5-8 year old children's tendencies to report peer aggression in hypothetical social situations. Marks et al. (2001) found that children between the ages of 4 and 6 years who witnessed domestic violence had significantly lower social competence than those who had not witnessed domestic violence. In a

longitudinal study, Katz et al. (2007) found that higher levels of domestic violence, as measured when children were 5 years of age, was related to lower levels of emotional awareness and higher levels of emotional dysregulation when children were 9.5 years of age. Additionally, higher levels of domestic violence were related to lower levels of friendship closeness when children were 11 years of age. Taken together, findings from the present study and from previous studies suggest that destructive marital conflict may have negative consequences in the development of children's social and emotional competencies from an early age and extend into adolescence.

In contrast, the present study found that higher levels of constructive marital conflict were associated with lower levels of children's aggression and emotional lability/negativity and higher levels of social skills, prosocial behaviour, and emotion regulation. Studies that have examined such associations are scarce. Goodman et al. (1999) found that a sample of 57 school-aged children generated more effective alternative solutions to hypothetical social problems when their parents used more reasoning to resolve low and moderate levels of marital conflict. McCoy et al. (2009) found that constructive marital conflict was not directly related to children aged 5-7 years prosocial behaviour, nor did it predict these children's prosocial behaviour two years later. The findings from the present study extend the understanding of relations between constructive marital conflict and social and emotional competence for young children. The results from the present study suggest that constructive marital conflict may have benefits to children's social and emotional competence, such as how children respond socially, both aggressively and prosocially, and how well they can regulate their emotions.

Marital Conflict and Emotional Security

The present study found that higher levels of destructive marital conflict were related to higher levels of preschool children's emotional insecurity, while higher levels of constructive marital conflict were related to lower levels of preschool children's emotional insecurity. These findings are similar to those reported by previous studies with preschool, school-aged, and adolescent children (Cummings et al, 2002; Davies & Forman, 2002; Davies et al., 2002; Davies et al., 2006; Harold et al., 2004). As found with previous studies, when children are exposed to conflict that is more destructive, including greater frequency and severity, and that includes conflict tactics that contain one or more elements of avoidance, child involvement in the conflict, stonewalling, verbal aggression, and physical aggression, children tend to feel less safe and secure about the intactness of their family, as evidenced by their emotional, behavioural, and cognitive reactions to marital conflict. In contrast, when children are exposed to conflict that is more constructive, including collaboration and resolution of the conflict, children tend to feel safer and more secure that their family will remain intact and support their needs even in times of stress (Cummings & Davies 1994, 1996, 2010; Davies et al., 2002). These associations are found within the literature regardless of the method used to measure emotional security, including parent report, child self-report, or behavioural observations made within a laboratory setting (Cummings et al, 2002; Cummings et al. 2006; Davies et al, 2002; Davies et al, 2004; Davies et al. 2006; Davies & Forman, 2002; Harold et al, 2004).

Emotional Security as a Mediator

It was hypothesized that emotional security would mediate relations between destructive marital conflict and children's psychological adjustment (hypothesis 1a), social competence (hypothesis 1b), and emotional competence (hypothesis 1c). It was also hypothesized that emotional security would mediate relations between constructive marital conflict and children's psychological adjustment (hypothesis 2a), social competence (hypothesis 2b), and emotional competence (hypothesis 2c). None of these hypotheses were supported. While destructive and constructive marital conflict were related to young children's psychological adjustment, and social and emotional competence variables, and to mothers' reports of their children's emotional security, emotional security was not related to children's internalizing or externalizing symptoms, nor children's social skills, prosocial behaviour, aggression, emotional lability/negativity, or emotion regulation. These findings are in contrast to studies that have found emotional security to mediate relations between destructive and constructive marital conflict and internalizing and externalizing symptoms (Cummings et al., 2006; Davies et al., 2002; Harold et al., 2004) and to the one study in the area that found emotional security mediated associations between destructive and constructive marital conflict and children's, aged 5-7, prosocial behaviour (McCoy et el., 2009).

The age of the present sample compared to other research studies may be an important difference that has theoretical implications when interpreting potential reasons for the nonsignificant mediation in the present study. The present study had a preschool aged sample that ranged in age from 3-6 years of age whereas the preschool samples in Cummings et al. (2006) and McCoy et al. (2009) ranged in age from 5-7 years of age.

Measurements of children's emotional security, including the subscales of behaviour dysregulation, emotional reactivity, and behaviour involvement from the SIMS-PR in Cummings et al. and McCoy et al. were taken one year later when children were between the ages of 6 and 8. The other mediation studies in the area included school aged children and adolescents. These age differences, specifically in terms of the meaning that children of different ages may make regarding their emotional security concerns, may be important when interpreted using the sensitization hypothesis.

According to the sensitization hypothesis, children who are exposed to longer periods of destructive marital conflict experience greater risk for psychological adjustment difficulties as opposed to shorter periods (Cummings & Davies, 1994; Cummings et al., 2000). More specifically, the sensitization hypothesis assumes that older children have more adjustment difficulties than younger children, within the context of marital conflict, because they have been sensitized and exposed to it for longer periods, which can make the threat of family dissolution more possible in the child's mind. Davies et al. (2006) found that 7-year old children were more emotionally insecure than when measured a year earlier within the context of stable levels of marital conflict. Additionally, Cummings et al. (2006) found that the strength of the association between marital conflict and emotional insecurity was stronger for children older than 11 years of age, than younger children. The findings from theses studies suggest as children are exposed to longer periods of marital conflict the meaning for their emotional security concerns may become more salient and the threat of family dissolution may become a more real possibility in the child's mind.

Initially, emotional security concerns may have short term adaptive value for children. For example, the physiological and psychological arousal generated within the context of destructive marital conflict may increase coping behaviour, such as withdrawal or behaviour intervention in the marital conflict, such as distracting the conflict, in an effort to deal with the threats of marital conflict (Saarni et el., 1998). However, these continued efforts by children to regulate their emotional security concerns in the context of destructive marital conflict likely have cumulative and deleterious effects over time. Davies et al. (2006) outlined two ways in which continued exposure to destructive marital conflict and subsequent emotional security concerns may have a negative impact on children. First, the consistent feelings of distress and hypervigilance and behavioural strategies, such as avoiding or intervening the conflict, may act as "scripts" for ways to feel and behave when entering into new and threatening social situations. Consequently, children may re-create behavioural and emotional patterns in their social world that they have become accustomed to in their family. Additionally, Davies et al. (2002) suggested that the continued emotional, behavioural, and cognitive attempts at regulating emotional security concerns may use considerable biopsychosocial resources that deplete children of the energy and attention needed for other developmental tasks and challenges. For example, children may have physiological regulation difficulties, such as difficulties focusing their attention and inhibiting responses in their social environment, as biopsychosocial resources are used due to continued emotional security concerns (Posner et al., 2003). Furthermore, increased emotional security concerns predicts increased sleep disruptions in children (Keller & El-Sheikh, 2011), which can further influence children's difficulties in regulating their biopsychosocial resources.

When interpreted within the context of the present study, mothers reported that their young children had more emotional security concerns when more destructive marital conflict was reported. This association is consistent with other studies that have also found that destructive marital conflict is related to children's emotional security (Cummings et al, 2002; Davies & Forman, 2002; Davies et al, 2002; Davies et al, 2006; Harold et al, 2004; McCoy et al. 2009). The age of the children in each of these studies when emotional security was measured was at least 6 years (Cummings et al. 2006; Davies et al 2006; McCoy et al 2009) and other studies measured emotional security when children were between the ages of 10 and 11 years (Cummings et al 2006; Davies et al. 2002; Harold et al. 2004). Given the implications of the sensitization hypothesis it is possible that the meaning that children in the present study attached to their emotional security concerns was different than the meaning attached to older children's emotional security concerns in other studies. It may be the case that the younger children in the present sample were less sensitized to the marital conflict than older children in other samples and the threat of family dissolution might have been less prominent.

Consequently, the younger children in the present study may have used less emotional, behavioural, and cognitive energy to regulate their emotional security concerns than in studies with older children. The regulation of emotional security concerns is known to use considerable biopsychosocial resources over time and impairs children of the energy and attention needed for other developmental tasks and challenges, than in studies with older children. Thus, the emotional security concerns reported for the children in the present study may have yet to be strong enough to account for variance in relations between marital conflict and children's psychological adjustment or

social/emotional competence. In the present study, it is also possible that the higher levels of emotional security concerns of children exposed to higher levels of destructive marital conflict are somewhat adaptive attempts by children to regulate their security concerns at their young age, and have yet to become rigid ways of feeling and behaving (Cole et al., 1994), whereas older children's continued efforts to regulate their security concerns over time may become more rigid ways of thinking and behaving that start to influence them emotionally and socially. At present, there is no research that delineates the exact age or length of exposure to marital conflict in which emotional security concerns begin to emerge as an explanatory mechanism between marital conflict and psychological adjustment, social competence, or emotional competence.

Behaviour Dysregulation as a Mediator

In the present study, emotional security was measured by the sum of three subscales or aspects that constitute emotional security within the context of marital conflict, including children's emotional reactivity, behaviour dysregulation, and behaviour involvement. Additional analyses revealed that a specific aspect of emotional security, behaviour dysregulation, might be important in explaining some of the associations between destructive and constructive marital conflict and psychological adjustment, social competence, and emotional competence variables. Children's behaviour dysregulation was assessed by the extent to which children yelled at family members, said unkind things to family members, hit, kicked or threw things at family members, and appeared angry when they witnessed arguments or disagreements between their parents.

The present study found that behaviour dysregulation partially mediated the significant relations between destructive marital conflict and children's internalizing symptoms and accounted for 9.06% of the variance in this association. Behaviour dysregulation also partially mediated the significant relations between destructive marital conflict and children's emotional lability/negativity and accounted for 8.82% of the variance in this association. Children's emotional lability/negativity assessed children's negative emotional expressions or emotional displays that are disproportionate to what is occurring. There was also a trend that behaviour dysregulation reduced the amount of variance in externalizing symptoms explained by destructive marital conflict evidenced by the direct effects of the unstandardized beta weight being smaller than the total effects unstandardized beta weight when behaviour dysregulation was included within the model. Behaviour dysregulation accounted for 4.53% of the variance in the relations between destructive marital conflict and externalizing symptoms.

The present study also found that behaviour dysregulation partially mediated the significant associations between constructive marital conflict and children's internalizing symptoms, accounting for 12.96% of the variance in this association, and externalizing symptoms, accounting for 7.84% of the variance in this association. Behaviour dysregulation also partially mediated the significant associations between constructive marital conflict and children's emotional lability/negativity, accounting for 12.96% of the variance in this association. Lastly, behaviour dysregulation fully mediated the significant relations between constructive marital conflict and children's aggression, accounting for 7.29% of the variance in this association.

The present study appears to be the first to report that an aspect of children's emotional security, namely behaviour dysregulation, explained relations between marital conflict and children's psychological adjustment, including internalizing and externalizing symptoms, aspects of their social competence, such as aggression, and aspects of their emotional competence, such as emotional lability/negativity. These findings suggest that children had more internalizing symptoms and were more emotionally labile and negative within the context of higher levels of destructive marital conflict because they had more security concerns, as assessed by higher levels of behaviour dysregulation. They also suggest that children had less internalizing and externalizing symptoms, were less aggressive, and were less emotionally labile or negative within the context of constructive marital conflict because they had less security concerns, as assessed by lower levels of behaviour dysregulation.

These findings may have important considerations that could extend the Emotional Security Theory. Cummings and Davies (1994) explained that emotional security could be measured as three interrelated, yet distinct classes of responses: emotional reactivity, regulation of conflict exposure, and hostile internal representations. Within the present study, emotional security was assessed by three subscales, children's emotional reactivity, behaviour dysregulation, and behaviour involvement within the context of marital conflict. The sum of these three subscales created a total emotional security score. In the present study, it was found that all three of these subscales on the SIMS were associated with each other at a moderate level, with correlation coefficients ranging from .32-.57. The strength of these associations appears to confirm that various components indicative of emotional security are related, yet distinct. Within the present

study, the total emotional security score was not related to psychological adjustment variables, including internalizing and externalizing symptoms, social competence variables, including social skills, prosocial behaviour, and aggression, or emotional competence variables, including emotion regulation and emotional lability/negativity. However, the behavior dysregulation subscale of emotional security, but not emotional reactivity or behaviour involvement subscales, was related to internalizing and externalizing symptoms, aggression, and emotional lability/negativity, which prompted additional analyses to assess for its mediational role. The present study found that only the behavioural dysregulation aspect of emotional security was a mediating variable compared to total emotional security in studies with older samples. This difference suggests the possibility of a developmental pathway or trajectory in terms of how children's expression of their emotional security concerns are related to their psychological adjustment, aggression, and emotional lability/negativity. The possibility of such a developmental trajectory suggests that we cannot make the same assumptions about young children's reactions to marital conflict in the same way as older children. Results from the present study suggest that assessing young children's overall emotional security concerns may provide less information than the behavioural dysregulation aspect of emotional security when assessing how children's security concerns influence young children's psychological, social, and emotional outcomes.

The developmental literature suggests that young children tend to best express themselves through their behaviour until their verbal skills and emotional understanding increase and they are better able to understand and express how they are feeling through their words (Cole, Armstrong, & Pemberton, 2010; Fabes Eisenberg, Hanish, & Spinard,

2001; Sroufe, 1996) According to Sroufe (1996), children aged 18-35 months begin to experience their frustration and anger through defiance, rage, and intentional hurting of others. By 36-54 months, children's emotions become more differentiated and responsive to the child's interpretation of the meaning of a situation. Between the ages of 4 and 6 years children's emotional vocabulary continues to expand and becomes further differentiated, they are able to make references to their own and other's emotional states, and they become increasingly able to use language for social functions (Fabes et al., 2001). While the increased use of expressive language provides children with the means to verbally communicate their needs with an enhanced ability to understand their own and others emotional lives and also helps to regulate their behaviour and actions (Cole et al., 2010), their emotional understanding is not sophisticated enough to fully express the variety of strong, confusing, and conflicting feelings they may experience. For example, Harter and Buddin (1987) outlined a five-stage developmental sequence of children's understanding of the simultaneity of two emotions. They found that children between the ages of 4 and 6 years could only conceive of having one emotion at a time and they could not integrate opposing emotions, such as happiness and anger. In their study, preschool children either denied that two emotions could simultaneously exist, or that one emotion had to be experienced first before a second emotion could be experienced.

Placed within the context of the present study and children's emotional security concerns, it is likely difficult for preschool children who witness destructive marital conflict to understand that their parents may still love each other even when they are arguing or are mad at each other, particularly because they themselves cannot integrate two opposing feelings. Thus, within a child's mind, they may reason that if their parents

are mad at each other, that their parents will break up leaving the child with anxiety about the meaning a break up will have for their own safety and security. Furthermore, children's socialization experiences with adults are likely powerful contributors to the way in which expressive language influences the quality of children's emotional and behavioural regulation. For example, the extent to which parents use emotion language and talk with their children about their experiences is one way in which language may contribute to emotional and behavioural regulation (Cole, et al., 2010). Parents who engage in higher levels of marital conflict and lower levels of marital love have been found to use less diverse vocabulary with their children (Pancsofar, Vernon-Feagans, Odom, & Roe, 2008). Preschool children, who already have difficulty understanding and integrating complex emotions, and who witness higher levels of destructive marital conflict, are further hampered by having less ability to verbally express their complex feelings to help them regulate their emotions and behaviour. Thus, their best mode of communication or way to regulate their security concerns may be through their behaviour, such as yelling, screaming, hitting, or saying unkind things to family members. These behaviours can be aimed at stopping their parents from arguing, or turning the problem towards themselves. Within the present study, these types of behaviours, conceptualized as behaviour dysregulation, partially explained why these children had difficulties with their psychological adjustment and emotional lability/negativity within the context of destructive marital conflict. In contrast, children who live within the context of higher levels of constructive marital conflict can respond in a more behaviourally regulated fashion when their parents disagree because they are less concerned with the possibility of a family break up. Children from these

environments are also more likely to use a more diverse range of vocabulary to regulate their behaviour (Cole et al., 2010; Pancsofar et al., 2008). The lower levels of emotional security concerns, as evidenced by lower levels of behaviour dysregulation, partially explained why these children had less internalizing/externalizing symptoms, were less aggressive, and less emotionally labile and negative.

Study Limitations

Several limitations of the present study must be noted. These include characteristics of the sample, potential problems with method variance, and the cross-sectional nature of the study. The sample size of 91 in the present study is much smaller than samples of other studies that examine the role of emotional security in the relations between marital conflict and children's psychological adjustment, which are close to 200 (Harold et al., 2004) or higher (Cummings et al., 2006; Davies et al., 2002). It is possible that the present study did not have enough power to detect a mediation effect for the total emotional security measure. The potential lack of power may become even more prominent given that the magnitude of the mediational role of emotional security is modest to moderate (Davies et al., 2006). The small sample size also limited the use of Structural Equation Modeling techniques to combine manifest outcome variables (e.g., social skills, prosocial behaviour, aggression) into latent constructs (e.g., social competence) and then to perform regressions on these latent constructs.

While the present study attempted to use a multi-method approach to assessment, the lack of associations between child and parent measures only allowed for results to be based on mother reported questionnaires. Father and teacher reports were not measured, although attempts at recruiting fathers were made. Having multiple reports from different

sources and contexts is important given that children's behaviour may differ depending on their context and who is observing them. While these methodological limitations may limit the generalizability of the study, results were generally consistent with studies that included father and teacher reports and studies that used observational methods for assessing marital conflict and children's emotional security (Cummings et al., 2002, 2006; Davies & Forman, 2002; Harold et al., 2004; Katz & Gottman, 1993).

Another limitation of the present study was the cross-sectional methodological design. While the present study assumed that marital conflict was a preceding factor to childhood outcome variables, based upon results from previous research (Cummings et al. 2006; Davies et al. 2002; Harold et al. 2004), it is not possible to draw causal connections between marital conflict, emotional security, and children's psychosocial and emotional outcomes. Longitudinal designs are better able to delineate these developmental pathways.

Directions for Future Research

The limitations as well as the findings from the present study suggest future research directions or advancements when exploring relations between marital conflict and children's psychological adjustment and emotional/social competence within the context of the Emotional Security Theory. Continued work designed to delineate the potential developmental pathway of children's emotional security across age groups, from infancy into adolescence, should continue to be explored. While it is known that children's emotional security concerns tend to increase with prolonged exposure to destructive conflict, it is important to know at what point in development emotional security concerns start to become particularly salient and influence children's emotional

and social development so that early intervention efforts can be targeted to children and families in need. Thus, a longitudinal study from infancy to adolescence, that examines children's emotional security concerns within the context of destructive and constructive marital conflict and its relations to psychosocial and emotional child variables would be useful. New measurement and observational tools to measure infant's emotional security concerns would need to be developed for this type of work. This type of research could also focus on when specific outcome variables, such as emotion regulation and social behaviour, become particularly salient for children.

Studies should incorporate multiple assessment methods including observations methods to assess marital conflict and child functioning. For example, marital conflict has been assessed using observations of parents' conflicts in a laboratory setting (Katz & Gottman, 1993; McCoy et al, 2009), through parental diaries of marital conflict behaviour (Cummings et al, 2002), parent questionnaires of marital conflict (Davies & Forman, 2002; Davies et al., 2004; Goodman et al., 1999; Ingoldsby et al., 1999; Marks et al, 2001; McCoy et al, 2009), children's reports of their perceptions of marital conflict (Davies et al., 2004; Grych et al., 1992; Goodman et al., 1999; Harold et al., 2004) and children's perceptions of marital conflict through puppet story tasks (Du Rocher Schudlich et al., 2004). Emotional security has been assessed through parent report questionnaires (Cummings et al., 2006; McCoy et al., 2009), children's self-report of their emotional security concerns (Davies, Forman et al., 2002; Keller & El-Sheikh, 2011), children's observed reactions to conflict within a laboratory setting (Davies & Forman, 2002; Davies et al., 2004; Harold et al., 2004; Ingoldsby et al., 1999), and children's perceptions of their family relationships using puppet tasks (Du Rocher

Schudlich et al., 2004). Children's psychological and social problems have been assessed through parent, teacher, and self-report questionnaires of internalizing and externalizing symptoms and child behaviour (Cummings et al., 2006; Davies et al., 2004; Hart et al., 1998; Harold et al., 2004; Marks et al., 2001: McCoy et al., 2009). Various methods, including parent, teacher, and self-report questionnaires, peer ratings of children's social functioning, and children's responses in the laboratory, have also been used to assess aspects of social competence including empathy, perspective taking, communication, affect regulation, social skills, social problem solving skills, and sociometric ratings (Crick & Dodge, 1994; Denham, 2006; Eisenberg & Fabes, 1998; Goodman et al., 1999; Gresham, 1986; Wardern & Mackinnon, 2003). Children's emotional competence, including their emotional expression, knowledge, and regulation have been measured using observations of children's play, parent questionnaires, and parent sorting tasks (Denham et al., 2003; Fabes et al., 1999; Katz et al., 2007; Shields & Cicchetti, 1997, 1998). Studies that use such multiple methods and reporters would provide a more robust understanding of the mechanisms through which exposure to marital conflict is related to the development of social, emotional, and psychological difficulties or health in children.

The current study used a community sample that may not have been exposed to high levels of verbal or physical aggression. It will be important to extend this work to higher risk populations to see if the trajectory of higher destructive conflict, leading to higher emotional security concerns and mental health difficulties exists within a clinical population or if there is a certain level of marital conflict or emotional security concerns that contribute to the clinical picture.

It will also be important to examine the role of marital conflict on children's development within the context of other risk and protective factors and complex models of family functioning, such as parenting strategies, emotional climate of the family, and parental mental health. For example, Davies et al. (2004) cluster analyzed different family characteristics, in addition to marital conflict, and found that the role of marital conflict on children's emotional security and psychological functioning differed depending on the broader aspects of family functioning. Results indicated that emotional security mediated the relation between membership in enmeshed families and internalizing and externalizing symptoms. Enmeshed families were characterized by high levels of spousal hostility, parental disagreements, parental psychological control, and inconsistent discipline while having modest to moderate levels of spousal affection and parental acceptance. In addition emotional security mediated the relation between membership in disengaged families and internalizing symptoms. Disengaged families generally reported moderately high levels of spousal hostility, parental disagreements, parental psychological control and inconsistent discipline while having extremely low levels of spousal affection and parental acceptance. Children from enmeshed families displayed the greatest levels of emotional insecurity despite being exposed to levels of marital conflict that were similar to disengaged families. Future work of this kind should also examine child outcomes including social and emotional competence. These types of studies would permit an examination of the specificity of the effects of each of these risk and protective factors as well as possible interactions between these factors in greater detail and provide a richer understanding of processes that relate to children's social, emotional, and psychological development.

Study Implications

The results from the present study, consistent with others studies suggest that destructive marital conflict is a risk factor for challenges in children's psychological adjustment and emotional and social competence, whereas constructive marital conflict is a protective factor (e.g, Cummings et al., 2006; Davies et al., 2002; Doyle & Markiewicz, 2005; Harold et al., 2004; Ingoldsby et al., 1999; Katz & Gottman, 1993). Within the present study, preschool children exposed to higher levels of destructive marital conflict were having greater adjustment and socioemotional problems while children exposed to constructive marital conflict were not. Some of this can be explained by the presence or lack of children's emotional security concerns. The present study found the possibility of a developmental pathway where preschool children exposed to greater destructive marital conflict experienced greater emotional security concerns, but that these may not be strong enough to influence adjustment, although aspects of this construct, mainly behavioural dysregulation, are starting to play a role. If these emotional security concerns are not addressed, they are likely to increase in amplitude as children are exposed to longer periods of destructive marital conflict (Cummings et al., 2000; Cummings et al., 2006; Davies et al., 2006). These findings suggest the importance of prevention and early intervention efforts aimed at reducing risk factors and enhancing protective factors to minimize or avoid mental health issues in children; especially because approximately 20% of preschool and school aged children have significant mental health challenges (Carter et al., 2010; Lavigne et al., 1996; Offord et al., 1997; McDonnell & Glod, 2003).

Research suggests that psychoeducational interventions to address destructive marital conflict are successful at improving children's psychological adjustment.

Cummings et al. (2008) examined the impact that either a four-session psychoeducational group about marital conflict or a self-study control group had on parent's knowledge of marital conflict, conflict tactics, and their children's psychological adjustment at 6- and 12-month posttest. Children were between 4 and 8 years of age. The training program included information on the effects of destructive marital conflict on themselves and their children and training on positive marital communication. They found that parents in the treatment group had significantly more knowledge about marital conflict, engaged in less destructive conflict behaviours, and more constructive conflict behaviours at 6- and 12-months following the treatment. Additionally, they found that increases in mothers constructive conflict behaviour was related to improved child adjustment. While Cumming's study could be seen as a form of early intervention for children, it also could have applications for prevention efforts of negative child adjustment if administered to parents who are expecting children, either from a community sample, or higher risk communities.

Marital therapy and prevention programs are other important interventions to reduce the negative effects of destructive marital conflict, not only on children's behaviour and emotions, but on the couple themselves. Important components of successful marital therapy include addressing communication patterns, such as listening and responding skills, enhancing problem solving skills, and addressing the physiological arousal that can interfere with effective communication during conflict by overlearning skills that can be internalized and used in high conflict situations (Gottman, 1993, 1994). Bray and Jouriles (1995) published a review that consolidated information from other published reviews on the effectiveness of marital therapy, including narrative or

qualitative approaches, meta-analysis studies, and studies that evaluate clinical significance differences between distressed and non-distressed couples. When consolidating all of these studies, which used a variety of marital therapy theories and interventions, they concluded that marital therapy was effective, at least in the short term, in reducing marital conflict. They also noted a potential confound in the outcome research that limited the effectiveness numbers of therapy in that most studies did not view divorce as a positive event, even if the couple felt the therapy was helpful in helping the couple reach that solution.

In light of the modest improvements resulting from marital therapy, Markman, Renick, Floyd, Stanley, and Clements (1993) evaluated the Premarital Relationship Enrichment Program (PREP), a prevention program delivered to pre-marital couples who were happy or in the early stages of distress. The program taught couples, who were planning their first marriage, communication and conflict resolution skills. Couples were randomly assigned to the PREP intervention group or the control group. Results from a 5 year follow up indicated that couples that received the PREP program had enhanced relationship satisfaction, increased positive communication skills, and reduced occurrences of marital violence.

While much of the implications from the present study suggest the importance of prevention or early intervention for destructive marital conflict and teaching couples constructive conflict, secondary interventions for children who are emotionally insecure and who are raised within the context of destructive marital conflict can include individual play therapy. Play therapy provides a safe and positive relational context in which the child's inner concerns, wishes, and anxieties can be explored, managed, and

integrated into the child's sense of self and sense of others (Altman, Briggs, Frankel, Gensler, & Pantone, 2002). Thus, children who experience emotional insecurity within the context of destructive marital conflict would be able to explore different facets of their emotions which are often intense, confusing, and contradictory and can provide children with a different way of relating, which is important given that maladaptive ways of being consolidate into more rigid patterns of behaviour as children age (Landy & Menna, 2006; Rutter, 2000). It is important, however, that play therapy, be conducted within the context of family and marital work aimed at reducing the risk for children's psychological, emotional, and social difficulties. A meta-analysis of play therapy outcome research, conducted by LeBlanc and Ritchie (1999) found that treatment groups have improved emotional, social, and behavioural functioning compared to non-treatment groups. They also found that treatment efficacy increased when parents were included within the therapy and when the duration of sessions was between 30-35 play therapy sessions.

While children's behavioural dysregulation emerged as a variable that partially explained relations between destructive and constructive marital conflict and psychological adjustment, emotional lability, and aggression, it only explained approximately 8-13% of the variance depending on the particular analysis or outcome variable. These results, and the null findings that total emotional security measure did not emerge as a mediating variable suggests that the findings and implications of the present study must be placed within the larger context of individual, family, social, and cultural risk and protective factors for childhood adjustment (Cummings et al., 2000). Marital conflict does not occur in isolation and can have both direct (e.g., Davies et al., 2006) and

indirect effects on children through its association with parenting, parental mental health, and parent-child attachment (Cox et al., 2001; 2006; Engfer, 1988; Hetherington & Clingempeel, 1992). Often, destructive marital conflict occurs within the context of spousal hostility, inconsistent discipline, parental psychological control, while families who engage in constructive marital conflict tend to be more cohesive and show higher levels of spousal affection and parental acceptance (Davies et al., 2004). From a treatment standpoint it is important that interventions target all possible risk factors for poor childhood adjustment and that interventions be individually tailored to suit the needs of the particular family.

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Appendix A: *Demographics Questionnaire*

The Canadian Psychological Association recommends that researchers report the major

demographic characteristics of research participants. To assist us in collecting this

information, please complete this brief questionnaire (use the back if needed). All data

are confidential and will not be used in any way that identifies you or your child. If you

have any questions concerning any of the items, please do not hesitate to ask them.

Child's Name _____

Today's Date _____

Child's birth date (please include day, month, and year) _____

Child's current grade _____

Child's gender _____

Your relationship to child (e.g., mother, father) _____

Parents' Marital Status

    ☐   Married, If so, for how long? _____
    ☐   Divorced
    ☐   Separated
    ☐   Living together, If so, for how long? _____
    ☐   Remarried
    ☐   None of the above (Please Specify: _____)

Who does the child live with most of the time?

    ☐   Mother
    ☐   Father
    ☐   Step-father
    ☐   Step-mother
    ☐   Other (Please Specify: _____)
    ☐

Father's education

    ☐   Less than 7 years
    ☐   Junior high school (Grade 9)

- ☐   Some high school (Grade 10 or 11)
- ☐   Graduated from high school or equivalent high school diploma
- ☐   Some college or university (at least one year)
- ☐   Graduated from college or university
- ☐   Graduate/professional school (e.g., Master's, Ph.D.)
- ☐   Other _____

Mother's education

- ☐   Less than 7 years
- ☐   Junior high school (Grade 9)
- ☐   Some high school (Grade 10 or 11)
- ☐   Graduated from high school or equivalent high school diploma
- ☐   Some college or university (at least one year)
- ☐   Graduated from college or university
- ☐   Graduate/professional school (e.g., Master's, Ph.D.)
- ☐   Other _____

Please describe stepparents' education if applicable:

Stepmother:

- ☐   Less than 7 years
- ☐   Junior high school (Grade 9)
- ☐   Some high school (Grade 10 or 11)
- ☐   Graduated from high school or equivalent high school diploma
- ☐   Some college or university (at least one year)
- ☐   Graduated from college or university
- ☐   Graduate/professional school (e.g., Master's, Ph.D.)
- ☐   Other _____

Stepfather:

- ☐   Less than 7 years
- ☐   Junior high school (Grade 9)
- ☐   Some high school (Grade 10 or 11)
- ☐   Graduated from high school or equivalent high school diploma
- ☐   Some college or university (at least one year)
- ☐   Graduated from college or university
- ☐   Graduate/professional school (e.g., Master's, Ph.D.)

☐   Other _____

Mother's occupation _____

Father's occupation _____

Please describe stepparents' occupations if applicable: _____

_____

Mother's ethnicity: (please choose the one that fits best)

    ☐   South Asian
    ☐   East Asian
    ☐   Caucasian
    ☐   African Canadian
    ☐   Caribbean
    ☐   Hispanic
    ☐   Native Canadian
    ☐   Biracial - Please Specify _____
    ☐   Multi-racial - Please Specify _____
    ☐   Other – Please Specify _____

Father's ethnicity (please choose the one that fits best):

    ☐   South Asian
    ☐   East Asian
    ☐   Caucasian
    ☐   African Canadian
    ☐   Caribbean
    ☐   Hispanic
    ☐   Native Canadian
    ☐   Biracial - Please Specify _____
    ☐   Multi-racial - Please Specify _____
    ☐   Other – Please Specify _____

If applicable: Stepfather's ethnicity

    ☐   South Asian
    ☐   East Asian
    ☐   Caucasian

□ African Canadian

□ Caribbean

□ Hispanic

□ Native Canadian

□ Biracial - Please Specify _____

□ Multi-racial - Please Specify _____

□ Other – Please Specify _____

If applicable: Stepmother's ethnicity

□ South Asian

□ East Asian

□ Caucasian

□ African Canadian

□ Caribbean

□ Hispanic

□ Native Canadian

□ Biracial - Please Specify _____

□ Multi-racial - Please Specify _____

□ Other – Please Specify _____

Has your child been diagnosed with a disability or a psychological disorder? _____

If so, please specify _____

Has your child been suspected of having a learning disorder?

If so, please specify _____

Do you think your child has a disorder of any kind? _____

If so, what do you think the child has? _____

Is your child receiving any psychological services? _____

If so, please describe: _____

Does your child have a serious illness? _____

If so, please specify _____

Is your child currently taking any medications? _____

If so, please specify _____

Approximate total annual income of parent(s) who live with the child

      ☐   Under $30 000
      ☐ $ 30 000 to $60 000
      ☐ $ 61 000 to $100 000
      ☐ $ 101 000 to $150 000
      ☐ $ 151 000 to $250 000
      ☐   Over $250 000

Does your child have any siblings? If so, please indicate gender and date of birth for each child.

_____

_____

How would you describe your child as an infant? (e.g., easy, difficult, slow-to-warm up)

_____

_____

_____

Imagine that your child came to you and told you that another child hit your child while they were playing on the playground. What would you tell your child to do?

_____

_____

_____

Imagine that your child came to you and told you that another child was telling other children not to be friends with your child. What would you tell your child to do?

_____

_____

Appendix B: *Parent Consent Form*

University
of Windsor

CONSENT TO PARTICIPATE IN RESEARCH

Correlates and Predictors of Preschool Children's Social Behaviour: Parent/Guardian Consent Form

You are asked to participate in a research study conducted by Dr. Rosanne Menna, Robert Clark, Sara O'Neil, Holly Ambrose, and Adam Kayfitz from the Psychology Department at the University of Windsor. This study is part of a Ph. D. dissertation by Robert Clark, Sara O'Neil, Adam Kayfitz, and Holly Ambrose. If you have any questions or concerns about the research, please feel to contact Dr. Rosanne Menna at 519-253-3000 extension 2230.

PURPOSE OF THE STUDY

The purpose of this study is to learn about how children's behaviour in situations with other children is related to their thinking style, their language skills, their knowledge about emotions, their relationships with their parents and their parents' marital interactions. Furthermore, this study is intended to further understanding in regards to the ways parents teach their children when spending time with them in one-to-one interactions.

PROCEDURES

If you volunteer to participate in this study, we would ask you to do the following things:

- Give permission for your child's teacher to fill out questionnaires about your child. These questionnaires will ask about your child's behaviour at school.

- Visit the university with your child. During this time, you and your child will be asked to engage in a series of interactive tasks while being videotaped. The tasks are intended to approximate the types of interactions you have with your child at home. Also, we would like to obtain measures of your child's cognitive functioning and language skills. This assessment is expected to take about 60 minutes. While we are assessing your child's cognitive functioning and language skills, we would like you to fill out a few questionnaires about your child's behaviour and about your own experience as a parent. In total, this visit is expected to require 1 to 1.5 hours of your time.

- Give permission for your child to work one-on-one with a researcher for approximately 20 minutes to 30 minutes. During this time your child will listen to several brief stories accompanied by pictures and will be asked questions about the stories. In addition, your child will be read some statements about activities that some children are good at and will be asked to decide whether or not he or she is good at those activities.

POTENTIAL RISKS AND DISCOMFORTS

When you visit the university, you will be asked to engage in two interactive tasks with your child, which he/she may find mildly frustrating. If at any time, you believe that your child is too frustrated, we will end the task immediately.

When filling out questionnaires about your child's behaviour, you may find that you are reminded of some negative behaviours your child may exhibit. This may cause you to feel somewhat uncomfortable. You may also experience some negative feelings when filling out a questionnaire on your marital interactions. If this is the case, please feel free to discontinue the questionnaire and return to it later, or not at all. Also, please feel free to talk to us about your discomfort. We have included the telephone numbers of local resources should you feel the need to discuss with someone your concerns in regards to your child's behaviour:

Parent Help Line	519-257-5437
Children First	519-250-1850
Windsor Regional Children's Centre	519-257-5215

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

By participating in this study, you may become more aware of your child's behaviour, as well as his/her strengths and weaknesses. In addition, you may receive feedback on your child's language skills and social skills. Your child is expected to enjoy the tasks as they are designed to be developmentally appropriate and feature stories, puppets, toys, and stickers. In addition, by participating in this study you will be contributing to science by increasing our understanding of the links between children's thoughts and behaviour. The information obtained from this study may help with the development of special programs intended to help children and their families.

PAYMENT FOR PARTICIPATION

As a token of our appreciation for your help with this study, you will be given a $5 gift certificate to Tim Horton's when you complete the questionnaires. You will also be provided $10 in cash when you come to the University of Windsor to complete the additional tasks.

CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission to the people who are working on this particular project. The information will be kept in a locked cabinet and will be destroyed after 5 years. Group results may be published in a professional journal and/or at professional conferences, but no identifiable information will be included. In addition, you will have permission to review videotapes if you would like to do so.

PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE PARTICIPANTS

Group results will be presented here:

http://web4.uwindsor.ca/units/researchEthicsBoard/studyresultforms.nsf/VisitorView?OpenForm

Preliminary results are expected to be available by September 2010. Further results will be available by September 2011.

SUBSEQUENT USE OF DATA

Do you give consent for the subsequent use of the data from this study? ☐ Yes ☐ No

May we contact you for future studies similar to this one? ☐ Yes ☐ No

If yes, please provide phone number: _____

If yes, please also provide mailing address

_____

_____
___

RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without penalty. If you have questions regarding your rights as a research subject, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario, N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

SIGNATURE OF RESEARCH SUBJECT/LEGAL REPRESENTATIVE

I understand the information provided for the study "Correlates and Predictors of Preschool Children's Social Behaviour" Parent/Guardian Consent Form@ as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

_____
Name of Child

_____
Name of Parent or Guardian

_____   _____
Signature of Parent or Guardian   Date

SIGNATURE OF INVESTIGATOR

These are the terms under which I will conduct research.

_____   _____
Signature of Investigator   Date

VITA AUCTORIS

NAME: Adam Kayfitz

PLACE OF BIRTH: Toronto, Ontario

YEAR OF BIRTH: 1981

EDUCATION: Thornlea Secondary High School, Thornhill, Ontario
1995-2000

Wilfrid Laurier University, Waterloo, Ontario
2000-2004 Honours B.A., graduated with high distinction

University of Windsor, Windsor, Ontario
2004-2006 M.A. Psychology

University of Windsor, Windsor, Ontario
2006-Present Ph.D. Candidate, Clinical Psychology
(anticipated graduation October, 2011)