INTERPARENTAL CONFLICT AND DELINQUENCY AMONG AFRICAN AMERICAN YOUTH: SUPPORTIVE PARENTING AS A MEDIATOR AND MODERATOR

by

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(Under the Direction of RONALD L. SIMONS)

ABSTRACT

Supportive parenting (SP) has long been indicated as a protective factor against delinquency for adolescents facing interparental conflict (IC). However, the mechanisms through which SP accomplishes its role have been underdeveloped due to limited understandings of the mechanism whereby IC contributes to adolescents' delinquency. Based on former findings, the author explores the mechanisms whereby IC impacts children's behavior by testing simultaneously the aggressogenic cognition, emotional security, and spillover models. The author further tests the moderating role of SP between IC and delinquency, and explores the mechanisms through which SP may accomplish its role. The results show support for the emotional security model and the spillover model for girls; for boys, support for all three models is found. In addition, the moderating effect of SP is found for both boys and girls. For girls, SP works as a buffer; while, for boys, supportive parenting seems to operate as an exacerbator. The implication and limitation of current research is discussed, and the directions of further research are suggested.

INDEX WORDS: Supportive parenting, Interparental conflict, Delinquency

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DEDICATION

I would like to dedicate this thesis to my husband, Weiguang Yi, and to my parents, Bengui Su and Xiangyun Li. Thank you for your love and support.

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CHAPTER 1

INTRODUCTION

A wealth of research has shown that interparental conflict has deleterious effects upon children's well-being. Children who experience higher levels of interparental conflict are more likely to show antisocial behavior, aggression, and delinquency/conduct disorder than children who experience lower levels of interparental conflict (e.g. Davies and Cummings 1994; Demo and Cox 2000). Despite the strong evidence accumulated in this literature, a majority of children facing interparental conflict fare well and do not become delinquents (Formoso, Gonzales, and Aiken 2000). This latter finding has shifted the focus of this literature from children's vulnerability to children's resilience. As a likely source of children's resilience, supportive parenting, which demonstrates consistent parental support and warmth and promotes children's autonomy, has attracted the attention of many researchers. A large body of research has shown an inverse relationship between supportive parenting and children's delinquency. In addition, an increasing number of studies show evidence for the buffering effect of supportive parenting in the relation between interparental conflict and children's delinquency.

Discordant with the increasing volume of research that supports the buffering role of supportive parenting, there has been an inadequate exploration of the mechanisms through which supportive parenting moderates the effect of interparental conflict upon children's delinquency. To identify the mechanisms, it is important for researchers to keep in mind one fact: there are competing models proposed to account for the relations between interparental conflict and children's delinquency. However, existing research mainly focuses on exclusively one model or

two models without taking into consideration the other competing model(s). The scarcity of studies that simultaneously test these competing models has encumbered the exploration of mechanisms whereby supportive parenting works as a protective factor.

Thus, I propose and test simultaneously the different mechanisms through which interparental conflict may affect children's behavior. In addition, based on the mechanisms, I propose and test the moderating role of supportive parenting and, further, explored the possible mechanisms through which supportive parenting works as a moderator.

Using an African American sample, the study aims to answer two sets of questions. First, do these models account for the relation between interparental conflict and children's delinquency when taking into consideration other competing models? This set of questions includes: Does children's cynical/hostile view of relationships mediate the relation between interparental conflict and children's delinquency after taking into consideration the emotional security model and the spillover model? Does children's emotional negativity (i.e. anger and fear) mediate the association between interparental conflict after controlling parenting and children's cynical/hostile view of relationship? Do parenting practices mediate the relation between interparental conflict and children's delinquency? The second set of questions include: does supportive parenting moderate the relation between interparental conflict and children's delinquency through moderating both the relation between interparental conflict and children's hostile view of relation and the relation between hostile view of relation and children's delinquency? Does supportive parenting moderate the relation between interparental conflict and children's delinquency through moderating both the relation between children's anger/fear and interparental conflict and the relation between children's anger/fear and children's delinquency?

Ultimately, this study makes three contributions. First, instead of addressing the specific dimension(s) of supportive parenting individually, which often happens in existing research, this study treats supportive parenting as a multidimensional construct. Second, this study tests the mechanisms through which interparental conflict may affect children's behavior in context of competing models. Third, based on the tested mechanisms, this research further makes its contributions by exploring the mechanism whereby supportive parenting may moderate the relation between interparental conflict and children's delinquency.

I present this investigation in four parts. In the first part, I review and synthesize the contributions of previous literature on a) the mechanisms whereby interparental conflict may induce children's delinquency, among which parenting practices (i.e. supportive parenting and parental control) are hypothesized as a mediator between interparental conflict and children's delinquency; b) research on the positive direct effect of supportive parenting upon children's behavior; and c) research on the protective role of supportive parenting in the relationship between interparental conflict and children's delinquency. In addition, based on the review, I explain the issues that still need to be addressed and derive hypotheses for this study. In the second part, I explain the data, measures, and the analytical strategy that I use to test derived hypotheses for this study. In the third part, I present and explain the results of the analysis. In the last part, I discuss and summarize the study's results, address its limitations and make suggestions for future research in this area.

CHAPTER 2

INTERPARENTAL CONFLICT AND ADOLESCENTS' DELINQUENCY

Interparental conflict has been defined broadly as disagreements between parents about various issues in family life (Buehler, Krishnakumar, Anthony, Tittsworth, and Stone 1994). In different families, parents manage their conflict using different strategies or patterns that can be briefly classified as overt hostile style (verbal and physical), covert hostile style, cooperative style, and avoidant style (Zimet and Jacob 2001). Each style of interparental conflict can be measured by its subdimensions: frequency, intensity, content, and degree of resolution (Cummings, Simpson, and Wilson 1993; Fincham and Osborne 1993; Grych and Fincham 1990; Zimet and Jacob 2001). Among the four types of interparental conflict, overt hostile conflict is the main focus of the existing literature concerning interparental conflict and children's delinquency, and most studies focus on the frequency dimension of overt hostile interparental conflict (Buehler et al. 1994).

Within the past two decades, interparental conflict has been widely recognized as a risk factor that may induce children's maladjustment, especially externalized behavior including delinquency (Crockenberg and Covey 1991; Cummings and Davies 2002; Cummings, Goeke-Morey, and Papp 2004; Emery 1982; Fincham 1994; Fincham, Grych, and Osborne 1994; Lindahl and Malik 1999). Research on the relationship between interparental conflict and child delinquency can be traced to studies concerned with the impact of divorce on children's adjustment (Zimet and Jacob 2001). Five perspectives have been proposed to account for children's adjustment to divorce -- interparental conflict perspective, parent loss perspective,

parental adjustment perspective, economic hardship perspective, and life stress perspective (Amato, Loomis, and Booth 1995). The literature from interparental conflict perspective consists of the first generation of research on interparental conflict and children delinquency. It consistently shows that interparental conflict is a stronger predictor for children's aggression, antisocial behavior, and delinquency/conduct disorder than divorce itself (Cummings and Cummings 1988; Emery 1982). The bivariate relation between interparental conflict and children's delinquency has been firmly established.

With the establishment of this relationship, the study of simple bivariate relation between interparental conflict and children's delinquency has reached a point of diminishing returns. In 1990s, researchers shifted their attention to explore the emotional, cognitive and behavioral processes that underlie these relations (Cummings and Davies 2002). Progress on process-oriented directions is indexed by the development of theoretical models to explore the mechanisms whereby interparental conflict affects child behavior and of theoretical models to explain why some children exposed to interparental conflict fare well while others become delinquent (Demo and Cox 2000; Goeke-Morey, Cummings, Harold, and Shelton 2003).

An Aggressogenic Cognition Model

Different mechanisms through which interparental conflict induces child delinquency have been suggested. Derived from Bandura's social learning theory, researchers have proposed an aggressogenic model (Clingemepeel and Brand-Clingempeel 2004). According to social learning theory (Bandura 1973; Bandura 1977), observational learning or modeling is more influential in organizing children's responses than direct reinforcement or punishment contingencies. By vicariously observing adults (i.e. parents) engaging in aggressive or hostile tactics, children in families with interparental conflict learn ways of engaging in aggressive

behavior. Children exposed to aggressive conflict tactics between adults have frequent opportunities to observe, imitate, and generate ineffective methods for resolving their own interpersonal problems (Bandura 1973). Their imitation of specific hostile behaviors displayed by conflicting adults, acquisition of generalized scripts or abstract rules for engaging in hostile behavior, or reduction of the inhibitions about aggressive behavior may result in children's exhibition of greater hostility and aggression (Cox, Paley, and Harter 2001; Emery 1982; Marcus, Lindahl, and Malik 2001; Margolin, Gordis, and John 2001).

Within this framework, the aggressogenic cognition model suggests that children experiencing severe interparental conflicts may acquire aggressogenic cognitions (i.e. a cynical/hostile view of relationship) or beliefs that support aggression as a legitimate response to provocation, which meditate the relation between interparental conflict and children's aggressive behavior (Clingemepeel and Brand-Clingempeel 2004). A number of studies lend supports to this hypothesis (e.g. Marcus, Lindahl, and Malik 2001; Musher-Eizenman, Boxer, Danner, Dubow, Goldstein, and Heretick 2004). For example, Dadds et al's research (1999) indicates that aggressive interparental conflict increases children's proclivities to use aggression to cope with interpersonal disputes with peers. Research conducted by Dodge and colleagues (1993; 1995; 1990; 1987) shows that children's hostile views of relationship lead them to attribute malevolent motives to others, to assume that an aggressive, belligerent attitude is necessary to avoid exploitation, and thus are more likely to engaging in aggressive behaviors. Marcus and colleagues (2001) have found that aggressogenic cognitions (e.g. a hostile view of interaction) partially mediate the relations between interparental conflict and children's aggressive behavior at school, though the mediational effect is not found for children's aggressive behavior at home. Results from Kinsfogel and Grych's research (2004) on 391 adolescents show that boys exposed

to greater interparental conflict are more likely to view aggression as justifiable in a romantic relationships and to believe that aggressive behavior is more common in their peers' dating relationships, both of which in turn, mediate the relation between exposure to interparental conflict and higher levels of verbal and physical aggression toward their own romantic partner.

An Emotional Security Model

Based on attachment theory, Davies and Cummings (1994) have proposed an emotional security model. This model posits that, in context of interparental conflict, preserving emotional security is an important goal for children in their organization of their emotional experiences, action tendency, and appraisal of self and interparental conflict. Facing interparental conflict, children may have a sense of emotional insecurity, which, in turn, contributes to children's adjustment problems including delinquency. Signs of insecurity are reflected in children's emotional reactivity, which is characterized by intense, prolonged, and dysregulated distress reactions (e.g. fear, anger and sadness) to interparental conflict, cognitive representations of interparental conflict, and children's behavior regulation. A large number of research following the emotional security hypothesis focuses on the mediational role of children's emotional reactivity in the relation between interparental conflict and children's externalizing behavior (Cummings, Goeke-Morey, and Papp 2003; Davies 2002; Davies, Cummings, and Winter 2004; Harold, Shelton, Goeke-Morey, and Cummings 2004). Cummings et al.'s (2003) research shows that hostile interparental conflict elicits a general increase in children's negative emotionality (i.e. anger, fear and sadness), which, in turn, results in children's internalizing and externalizing problems. Harold et al.'s research (2004) shows that children's emotional regulation mediates the relation between interparental conflict and children's externalizing behaviors including delinquency.

Among these studies on children's negative emotional reactivity, relatively equal weight has been given to emotions such as fear, anger and sadness as signs of insecurity (Davies and Jenkins 2002). However, Jenkins's research (2000) shows that, when children are exposed to hostile marital conflict, children develop an emotional organization in which anger predominates. In his commentary, Jenkins (2002) has pointed out that current research indicates anger is the basic emotion involved in externalizing disorder. Davies et al. (2002) suggest that, though negative affect (e.g. anger) reflects insecurity, greater concerns about preserving security are more likely to prime children's fear.

A Weak Spillover Model

Different from the above two models under the assumption that interparental conflict directly[1] affect children's behavior, some other researchers have proposed an indirect model - spillover model - which assumes that interparental conflict affect children through parenting practice (Zimet and Jacob 2001). The spillover model posits that interparental conflict, especially overt hostile conflict, is absorbing, diverting, and devastating, and it is associated with disruptions in one or more domains of parenting. Disruption or deterioration in parenting, in turn, is hypothesized to increase children's risk for delinquency (Crockenberg and Covey 1991; Erel and Bauman 1995; Fauber and Long 1991; Holden and Miller 1999).

Within the framework of spillover model, there is a strong spillover model and a weak spillover model (Davies and Jenkins 2002). Utilizing a number of assumptions about the power of parenting processes as mediators, a strong spillover model posits that these processes are the primary or sole mediators of interparental conflict. In other words, parenting is presumed to be a

[1] The description of direct or indirect effects of marital conflict upon children often erroneously leads readers to understand it as whether or not there is mediating variables between interparental conflict and children's behavior (Zimet & Jacob, 2001). In fact, theories arguing direct effect of interparental conflict upon children's behavior involve child variables that may mediate these effects.

full mediator of the risk posed by interparental conflict (Erel, Margolin, and John 1998; Fauber, Forehand, Thomas, and Wierson 1990; Fauber and Long 1991; Patterson, Debaryshe, and Ramsey 1989). In contrast, a weak spillover model hypothesizes that parenting is one of many mediators that mediate the relation between interparental conflict and children's behavior problems (Crockenberg and Covey 1991; Emery, Fincham, and Cummings 1992; Gottman and Katz 1989; Grych and Fincham 1990). In other words, parenting is theorized to be a partial, rather than a full, mediator that only accounts for a part of the relationship between interparental conflict and children's delinquency.

Weak spillover models have received abundant support from existing research (El-Sheikh and Elmore-Staton 2004; Henning, Leitenberg, Coffey, Bennett, and Jankowski 1997; Krishnakumar, Buehler, and Barber 2003; Mann and MacKenzie 1996; Stocker, Richmond, Low, Alexander, and Elias 2003; Webster-Stratton and Hammond 1999). In addition, most of the parenting domains addressed in research following a spillover model are those consisting of supportive parenting including parents' warmth, acceptance, and emotional availability towards child, and of parents' control over children which is characterized by monitoring and consistent discipline. For example, in their research involving 1,452 undergraduate students, Henning et al. (1997) find that a substantial proportion of the variance in young adults' psychological adjustment (including delinquency) accounted for by interparental physical conflict is mediated through decreased parental caring and warmth during childhood. Stocker et al.'s research (2003) shows that mothers' and fathers' hostility partially mediates the association between interparental conflict and children's externalizing as well as internalizing problems. In Krishnakuma et al.'s research (2003) on a weak spillover model, results indicate that, for European-American families, interparental conflict is linked with youth externalizing problem

behaviors through lower levels of parental monitoring, maternal acceptance, and higher levels of parent-youth conflict, though the model receives no support in African American families. Webster-Stratton and Hammond (1999) find that both mother's and father's critical parenting and low emotional responsivity mediate the linkage between negative marital conflict management and children's conduct problem. Fauber et al.'s research (1990) suggests that parental lack of warmth, poor behavioral control (e.g. lax monitoring) and psychological control account, in part, for the association between interparental conflict and children's maladjustment.

Though all of these competing models have received empirical support from research, there is only a limited number of studies testing the competing models simultaneously in a single study[2] (Davies, Harold, Goeke-Morey, and Cummings 2002; Onyskiw and Hayduk 2001). Davies et al.'s research (2004), considering both the emotional security model and the social learning model, shows that the data more closely fit the emotional security model. Onyskiw and Hyduk' research (2001), testing the social learning model and the weak spillover model simultaneously, suggested that both the observational learning perspective and the disrupted parenting perspective provided reasonable explanations of how children are affected when they live in families characterized by physical aggression. This stimulates a number of additional questions. Does emotional security account for the relation between interparental conflict and children's delinquency after controlling for parents' parenting practices and the social learning processes? Does children's aggressogenic cognition mediate the effect of interparental conflict upon children's behavior after taking into consideration parents' parenting practices and children's emotional security? Do parenting practices mediate the relation between interparental conflict and children's delinquency after taking into consideration children's cognition and

[2] Some research does find some direct effect as well as indirect effects. However, these studies usually do not include children's variables to account for the "direct" effect.

emotional security? Studies that can simultaneously measure both direct (i.e. social learning model/aggressogenic cognition model and emotional security) and indirect (spillover) mechanisms are still in great need.

Testing the competing models simultaneously is of especial importance in understanding the mechanisms whereby interparental conflict affects children's behavior. Since progress in this literature is also indexed by the identification of conditions under which some children can fare well despite facing interparental conflict while others become delinquent, better understanding of this mechanism can lend some insight to how those conditions moderate the relationship between interparental conflict and children's delinquency.

CHAPTER 3

SUPPORTIVE PARENTING AND ADOLESCENTS' DELINQUENCY

The aspects of parenting that may play a formative role in children's social development have long attracted the attention of socialization researchers. Parenting dimensions thought to be beneficial to children's social development have been identified (Darling and Steinberg 1993) and different parenting styles have been conceptualized (e.g.Baumrind 1967). Among these conceptualizations, Baumrind's conceptualization of parenting style is best known, and a large number of studies using this conceptualization have shown the link between authoritative parenting and positive adjustment outcomes in children and adolescents (Baumrind 1989; Darling and Steinberg 1993). With the popularity of Baumrind's conceptualization of parenting style, researchers have reached the consensus that effective parenting is a multidimensional construct constituted of interrelated multiple elements that are beneficial to children's cognitive and social development. For example, authoritative parents tend to show higher level of warmth and acceptance, to be more democratic in making decisions and more firm in establishing behavior guidelines.

Effective parenting is more than simply being a set of techniques and skills that may result in positive adjustment outcomes in child and adolescents (Maccoby and Martin 1983; Quinton and Rutter 1988; Rutter 1985a; Rutter 1985b; Simons, Lorenz, Conger, and Wu 1992). Rutter (1985a; 1985b) has suggested that the provision of an environment conducive to children's cognitive and social development is essential to effective parenting. Quinton & Rutter (1988) have indicated that, in addition to being a set of techniques and skills, parenting

functions as a special kind of social relationship. Similarly, several theorists have argued that an involved, supportive relationship with children established by parents is a fundamental feature of effective parenting (Maccoby and Martin 1983; Rollins and Thomas 1979).

Effective parenting –primarily authoritative parenting- consists of a group of interrelated parenting attributes that are developmentally appropriate and supportive for children's cognitive and social development. There has been increasing interest in the separate constituents of authoritative parenting and of other kinds of "supportive" parenting practices that may be empirically distinct from the authoritative parenting. Consistent with the view that effective parenting functions as a special social relation, researchers (e.g. Conger, Conger, Elder, Lorenz, Simons, and Whitbeck 1992; Gottman, Katz, and Hooven 1996; McCord 1996) collapse across these or related parenting dimensions to create a new construct -- supportive parenting -- assuming that supportive parenting, with the overall positivity and support that parents bestow on children, should have generic benefits across a range of child-developmental outcomes. According to Amato (1990), this positivity and support can be shown in a variety of parenting dimensions:

> Supportive parents express interest in children's activities, talk with them a good deal, take them on outings or play games with them, provide help with every day problems and schoolwork, express enthusiasm and praise over accomplishments, and show affection and love (p. 613).

Many familial factors may contribute to parents' parenting practices. Besides interparental conflict discussed in Chapter 2, family economic hardship/strain is a well-recognized familial factor that may affect parents' parenting practices (Conger et al. 1992; Conger, Conger, Elder, Lorenz, Simons, and Whitbeck 1993; Conger, Ge, Elder, Lorenz, and Simons 1994; Simons, Lorenz, Conger, and Wu 1992). For instance, Simons and colleagues' research (1992) shows that economic strain undermines parents' supportive parenting practices

both directly and indirectly by negatively affecting spouse support. Similarly, in Conger et al.'s research, results suggest that objective economic conditions (e.g. per capita income) are indirectly associated with disruptions in parents' parenting practices. However, there are also some studies (e.g. Stern and Smith 1995) suggesting that economic hardship is not associated with disruptions in parenting.

A large body of evidence has shown consistently that supportive parenting is inversely related to children's depression and delinquency/conduct disorder (Brody, Ge, Kim, Murry, Simons, Gibbons, Gerrard, and Conger 2003; Kim, Ge, Brody, Conger, Gibbons, and Simons 2003; Scholte, van Lieshout, and van Aken 2001; Simons, Simons, Conger, and Brody 2004; Zimmerman, Ramirez-Valles, Zapert, and Maton 2000). Baumrind (1989) has noted that the extent to which parents are supportive influences the psychosocial functioning of their children. Social interactional and social control theories argue that adolescents with externalizing problems often have parents who tend to be unsupportive, hostile, and coercive towards their children, and are poor managers of their children's activities (e.g. Gottfredson and Hirschi 1990; Patterson, Reid, and Dishion 1992). In Kim et al.'s research (2003) on an African American sample, for example, the results show that when parenting behaviors are examined according to changes in children's symptom levels, children whose symptoms (i.e. depression and conduct disorder) increase over time report decreases in warmth and nurturant-involved parenting and increases in hostility and harsh-inconsistent parenting. They further suggest that children living with unsupportive parents are more likely to have behavioral problem compared to those with supportive parents. An abundance of empirical evidence shows that uninvolved and hostile parenting practices are related to increases in antisocial behavior during preadolescence (e.g. Patterson, Reid, and Dishion 1992; Synder, Dishion, and Patterson 1986) and to delinquency (e.g.

Patterson, Crosby, and Vuchinich 1992; Simons, Wu, Conger, and Lorenz 1994) during middle and late adolescence. For example, in Brody et al.'s research (2003) on conduct disorder of 296 African American sibling pairs, results show that low levels of nurturant-involved parenting as well as harsh-inconsistent parenting is positively associated with younger siblings' conduct disorder symptoms. The abundant evidence supporting this hypothesis indicates, at the same time, that parents who practice supportive parenting seem to have children who exhibit fewer delinquent behaviors during adolescence.

In addition, accumulated evidence shows that supportive parenting does have positive effects upon children's behavior outcomes. Conger et al.'s research (1994) shows that parental involvement and warmth, as exhibited by both parents, are related to lower rates of hostility, aggression and antisocial behaviors during adolescence. Research conducted by Simons and colleagues (1998) suggests that improved parenting lowers the probability that boys who are oppositional during childhood will graduate to delinquency and drug use during adolescence. Scholte and colleagues (2001) have found that higher levels of parental support are negatively related to adolescents' delinquency and substance use.

The direct beneficial effect of supportive parenting upon children is well-established. Many researchers go a step further by proposing that supportive parenting may protect children from being victimized by interparental conflict. That is, facing interparental conflict, children with a supportive parent(s) may fare well while those without supportive parent(s) may become delinquent. In the next chapter, I explain the rationale underlying this proposition and review related research on the buffering role of supportive parenting in relation between interparental conflict and children's delinquency.

CHAPTER 4

SUPPORTIVE PARENTING AS A BUFFER BETWEEN INTERPARENTAL CONFLICT AND ADOLESCENTS' DELINQUENCY

Social support is a well-established topic in literature concerning stress. The interest in social support roots in one of the earliest focuses of modern sociology—the classic study of suicide by Durkheim (1897/1951) (Vaux 1988). Although the definition of social support, to some extent, diverges from the social ties suggested in this classic study, the idea that individuals' well-being is maintained through primary group ties, and the absence of these bonds may result in despair, a loss of identity, and confusion regarding norms still underlies contemporary discussion of the concept of social support. Numerous studies indicate that social support can buffer the impact of stressful life events, work stress, job disruption, and economic strains upon individuals psychological well-being and health (Lin 1986).

Supportive parenting, exemplified as the manifestation of parents' emotional and practical support for their children, as a potential protective factor for children facing stressful life events or adversity, has long attracted attentions of researchers who endeavor to enhance children's resilience. The buffering role of supportive parenting practices has long been a research focus (Emery 1988) and many dimensions of supportive parenting have been identified as potential buffers. In her research on individuals with birth complications, Bugental (2004) has found that those individuals who experienced supportive parenting showed an exceptional ability to habituate to stress compared to those who experienced harsh parenting. Results from Wolchik et al.'s research (2000) on 678 children who experienced parental divorce suggests that

mothers' acceptance interact with divorce stressors in predicting both children's internalizing problems and externalizing problems, thereby supporting a stress-buffering effect. Research conducted by Pettit et al. (1997) shows that, in addition to being a direct predictor of children's lower levels of externalizing behavior, supportive parenting mitigates the relationship between family adversity and children's externalizing behavior.

Living in a family with high levels of interparental conflict, especially hostile interparental conflict, is a stressful experience for children. Supportive parenting (especially from mothers, who usually are the primary caregivers of children) is crucial for children to survive the impact of this family stressor. Several researches show that supportive parenting buffer the relations between interparental conflict and children's delinquency. Katz and Gottman (1997) have reported that parental warmth, parental scaffolding (discipline with explanation and lots of warmth), and parents' ability to inhibit parental rejection buffer the relationship between interparental conflict and children's peer aggression. Frosch and Magelsdorf's research (2001) on children's externalizing behavior shows that the association between interparental conflict and children's behavioral problems is not explained by maternal or paternal behavior, but strong support is found for the buffering effects of warm/supportive parenting.

Though there is an increasing body of research supporting the buffering effect of supportive parenting in the connection between interparental conflict and children's delinquency, most of these researches only focus on specific dimension(s) of supportive parenting without addressing it as a multidimensional construct. In addition, exploration of the mechanisms whereby supportive parenting may act as a protective factor is rather limited. So far, only one study conducted by Davies et al. (2002) has explored the mechanisms through which supportive parenting may protect children from the deleterious effect of interparental conflict. Even in this

research, the mechanism they test is mainly based on an emotional security model. Further progress in this area demands more research that tests competing models simultaneously in a single study.

To explore the mechanisms whereby supportive parenting may buffer the impact of interparental conflict upon children's delinquency, we first need to have a better understanding of the mechanism that accounts for the link between interparental conflict and children's delinquency. Based on the review of the mechanisms whereby interparental conflict may affect children's behavior in Chapter 2, I first test the competing models simultaneously to see which model best accounts for the link between interparental conflict and children's delinquency after controlling the competing others. Based on the result from the first investigation, I further test the buffering role of supportive parenting and the mechanism whereby supportive parenting may work as a buffer.

CHAPTER 5

HYPOTHESES

In this research two sets of hypotheses have been derived. The first set of hypotheses test the competing models simultaneously to gain better understanding of the working mechanism that explains the relation between interparental conflict and children's delinquency. The second set of hypotheses tests the buffering role of supportive parenting and the possible mechanisms whereby supportive parenting may work as a buffer.

Interparental conflict may directly affect children's emotional security, and children's emotional insecurity, in turn, may contribute to children's behavior problems. Also, the interparental conflict may facilitate the formation of children's aggressogenic cognitions that, in turn, give rise to children's delinquency. However, those "direct"[3] effects of interparental conflict upon children do not rule out the possibility that interparental conflict may spillover to parenting practices and deteriorated parenting and in turn, affect children's behavior, and vice versa. Following a weak spillover model, I propose that these competing models may work together to account for the link between interparental conflict and children's delinquency. That is, the link between interparental conflict and children's delinquency may be mediated by children's aggressogenic cognition and children's emotional security as well as by parents' parenting practices. Based on the weak spillover model and the findings reviewed in Chapter 2, I have generated the following hypotheses regarding parenting practices:

[3] This "direct" should be understood in a sense that the mediating variables are children's variable instead of other variables.

Hypothesis 1: Interparental conflict negatively affects parents' parenting practices which, in turn, are negatively related to children's delinquency.

Hypothesis 1a: Interparental conflict negatively affects supportive parenting.

Hypothesis 1b. Supportive parenting is negatively related to children's delinquency.

Hypothesis 1c: Interparental conflict negatively affects parental control of children.

Hypothesis 1 d: Parental control is negatively related to children's delinquency.

According to aggressogenic cognition model, children experiencing overt hostile interparental conflict tend to develop aggressogenic cognitions and these aggressogenic cognitions may externalize as delinquency. From the aggressogenic cognition model, the following hypotheses have been derived:

Hypothesis 2: Interparental conflict is positively related to children's aggressogenic cognitions which, in turn, are positively related to children's delinquency.

Hypothesis 2a: Interparental conflict is positively related to children's cynical/hostile view of relationships.

Hypothesis 2b: Children's cynical/hostile view of relationships is positively related to children's delinquency.

Emotional security model proposes that children experiencing interparental conflict tend to feel emotionally insecure, and children's emotional insecurity contribute to children's delinquency. Derived from the review of the emotional security model and the relevant findings in Chapter 2, I expect that children's emotional security mediates the relationship between interparental conflict and children's delinquency.

Hypothesis 3: Interparental conflict is positively related to children's emotional insecurity, and children's emotional insecurity is positively related to children's delinquency.

Hypothesis 3a: Interparental conflict is positively related to children's anger.

Hypothesis 3b: Children's anger is positively related to children's delinquency.

Hypothesis 3c: Interparental conflict is positively related to children's fear.

Hypothesis 3d: Children's fear is positively related to children's delinquency.

According to social learning theory, the modeling processes vary in strength depending on the quality of the relationship between parents and children. Children who have warm and close relationship with adults are more likely to imitate adults' behavior and accept the generalized scripts or abstract rules of their behavior (Andrews, Hops, and Duncan 1997). Thus, facing interparental conflict, children whose parents are more supportive may be more likely to develop aggressogenic cognitions (i.e. cynical/hostile view of relationship). In addition, children whose parents are supportive may be more likely to identify themselves with their parents, and thus more willingly to follow their parents' example to externalize their cynical/hostile view of relationship into delinquent behavior. Thus, I expect supportive parenting may exacerbate the relationship between interparental conflict and children's delinquency both through moderating the link between interparental conflict and children's aggresogenic cognitions and through moderating the link between children's aggressogenic cognitions and children's delinquency:

Hypothesis 4: Supportive parenting moderates the relation between interparental conflict and children's delinquency.

Hypothesis 4a: Interparental conflict is more strongly positively related to children's cynical/hostile view of relationship for children whose parents are more supportive comparing to those whose parents are less supportive.

Hypothesis 4b: Children's cynical/hostile view of relationship is more strongly and positively related to children's delinquency for children whose parents are more supportive comparing to those whose parents are less supportive.

Emotional security model is consistent with aggressogenic cognition theory in positing that the magnitude of associations between interparental conflict and children's behavioral outcomes depends, in part, on the quality of the relationship between children and their parents (Davies, Harold, Goeke-Morey, and Cummings 2002). However, contrary to the proposition of aggressogenic cognitions model, emotional security model proposes that, facing interparental conflict, children whose parents practice supportive parenting have the lowest risk for being delinquent. Interparental conflict is hypothesized to take on a different, more benign meaning when children have access to emotional support, comfort, and protection within the child-parent relationship. As a result, children who have supportive parents may be less likely to feel insecure facing interparental conflict. In addition, the emotional and practical support from parents may also serve to weaken or offset the ill effect of emotional insecurity on children's behavior outcome. Following the emotional security model, I expect that supportive parenting work as a buffer both through moderating the link between interparental conflict and children's emotional insecurity and through moderating the link between children's emotional insecurity and children's delinquency.

Hypothesis 5: Supportive parenting moderates the relation between interparental conflict and children's delinquency.

Hypothesis 5a: The positive relationship between interparental conflict and children's anger is weaker for children whose parents are more supportive.

Hypothesis 5b: The positive relationship between children's anger and delinquency is weaker for children whose parents are more supportive.

Hypothesis 5c: The positive relationship between interparental conflict and children's fear is weaker for children whose parents are more supportive.

Hypothesis 5d: The positive relationship between children's fear and delinquency is weaker for children whose parents are more supportive.

Overall, I expect to find that the aggressogenic cognition model, the emotion security model, and the weak spillover model work together to account for the relation between interparental conflict and children's delinquency. In addition, I expect that supportive parenting moderates the relationship between interparental conflict and children's delinquency through moderating both the connection between interparental conflict and children's cynical/hostile views of relationships and the relationship between children's cynical/hostile views of relationships and children's delinquency. I also expect that supportive parenting moderates the relationship between interparental conflict and children's delinquency through moderating both the relationship between interparental conflict and children's fear/anger emotion and the relationship between children's fear/anger relationship and children's delinquency.

CHAPTER 6

METHODOLOGY

Data

This research utilizes two waves of data from the Family and Community Health Study (FACHS). FACHS is designed to analyze the particular risks and resources that influence African American family functioning and child development in contexts other than inner cities. Based on a longitudinal research design, FACHS data have been collected in two states, Georgia and Iowa, in four waves so far (in 1998, 2000, 2002, and 2006). Current research utilized the data collected in Wave one (1998) and Wave two (2000). At wave one, 867 African American children and their primary caregivers participated in this study. Among the participating children, there are 400 boys and 467 girls; 462 children are in Iowa and 405 are in Georgia. All of the participating children were 10 to 12 years old at wave 1 with a 10.5 year-old mean age. At wave two, 779 children (361 boys and 418 girls) and their primary caregivers were interviewed again. The response rate was 89.9%. Analysis indicates that there is not significant difference between the families who did not participate at wave two and those who did in terms of caregivers' income and education or children's characteristics i.e. age, gender, school performance and delinquency. Among these participating children at wave two, 84.9% have their biological mother as their primary caregivers and 5.6% have their biological father as their primary caregivers.

Subsample

The current study focuses on families in which there is a dyad consisting of children's primary caregiver[4] and the primary caregiver's spouse/romantic partner, instead of focusing exclusively on intact families with a dyad of biological parents. The assumption underlying the current sample selection is that the one who is a primary caregiver of a child is acting as a parent for the child – indeed, most of the primary caregivers are the biological parent of the child. To the child, the romantic dyad of a primary caregiver and the primary caregiver's spouse/romantic partner works like a parental dyad in terms of supportive parenting and interparental conflict, and it becomes an important subsystem of the family. Within the romantic dyad, intense and frequent interactions take place. These interactions exert strong influences upon family atmosphere and the parenting practice of the primary caregivers. A subsample is drawn based on wave 2 data, and families satisfying the following conditions at wave 2 are included in the subsample: 1) Child has a primary caregiver at wave two; 2) Child's primary caregiver is currently married, or living with someone with a steady, marriage-like relationship, or in a steady, romantic relationship with one person.

The subsample includes 518 cases[5]. Among the selected children, 240 are boys and 278 are girls. A large majority of the selected children have their biological mother or biological father as their primary caregiver. Among these cases, 443 of them (85.5%) have their biological mother as their primary caregiver; 36 of them (6.9%) have their biological father as their primary caregiver; 10 of them (1.9%) have their adoptive parent as their primary caregiver; and 12 of them (2.3%) have their grandmother as their primary caregivers. Among the selected cases, 294

[4] A primary caregiver is defined as a person who lived in the same household as the target child and who is responsible for the majority of the child's care.

[5] Complete data for the constructs used in this paper are available for 508 children and their primary caregivers. The 10 cases with missing data on any constructs are excluded from the final analysis.

of the primary caregivers are married; 89 of them are living with someone in a steady marriage-like relationship; and 135 of them are in a steady, romantic relationship with one person.

Measures

My analyses utilize measures[6] of interparental conflict, supportive parenting, parental control, children's fear, children's anger, children's cynical/hostile view of relationship, per capita family income assessed at wave two, and the measures of delinquency assessed at both wave one and wave two. In order to reduce the potential bias that may result from shared assessing methods, both primary caregivers' and children's report are utilized to form the assessments of supportive parenting and parental control. Children's variables i.e. children's fear, anger, cynical/hostile view of relationship, and delinquency are assessed using children's report, while the assessment of interparental conflict is formed based on the primary caregivers' report.

Dependent variable

The dependent variable is children's delinquency at wave two. This construct is measured using the conduct disorder section of the Diagnostic Interview Schedule for Children, Version 4 (DISC-IV) based on children's self-reports. The conduct disorder section includes a series questions asking about bullying; initiating fights; being physically cruel to people/animals; stealing with confrontation; breaking into someone's house, building, or car; telling lies; stealing without confrontation; staying out at night despite parental prohibitions; running away; and being truant from school. Children are asked about whether they have done so during the preceding year. These items are combined into a count variable measuring children's delinquency. The reliability of the scale is .68 at wave two.

[6] Except children's delinquency at time one, other measures are all time two measures.

Independent variables

In the current research, the key independent variables are supportive parenting, interparental physical conflict, emotional negativity variables (i.e. children's fear and anger), and cynical/hostile view of relationships at wave two. I use the assessments of these variables at wave two rather than at wave one since I assume that these concurrent familial environments and immediate emotion/cognitions, rather than that of two years before, are more influential to children's behavior.

SUPPORTIVE PARENTING. Supportive parenting is computed using a composite measure. Children in the sample report on the extent to which their parents show warmth/affection and avoid of hostility. In addition, both children and their primary caregivers are asked about the extent to which the primary caregivers provide reasons for rules and decisions, and engage in problem solving with their child. These items concerning different dimensions of supportive parenting are adapted from instruments developed for the Iowa Youth and Families Project (Conger et al. 1992; Conger et al. 1994). Empirical research suggests that these measures have both good validity and high reliability (Conger et al. 1992; Simons, Chao, Conger, and Elder 2001; Simons, Johnson, Conger, and Elder 1998). In addition, focus group feedback prior to data collection indicates that these items are applicable to African American population and are able to capture parenting dimensions that are considered important by African American parents(Simons, Murry, McLoyd, Lin, Cutrona, and Conger 2002).

Warmth/affection of primary caregivers is measured using a 9-item scale based on children's report at wave 2. Children are asked about, during the past 12 months, how often did primary caregiver help them do something that is important to them; let them know he/she really cares about them; listen carefully to their point of view; act supportive and understanding toward

them; act loving and affectionate toward them; have a good laugh with you that was funny; let them know that he/she appreciate them, their ideas or the things they do; tell them he/she loves them; and understands the way they feel about things. Children are asked to indicate the frequency as 1 always, 2 often, 3 sometime, and 4 never. The responses are recoded so that higher score means higher level of warm/affection. The scores are summed up across the items as the scores for target reported parental warmth/affection. The reliability for the scale at wave 2 is .88.

Eschew of hostility is also based on target reports at wave 2. A scale of 14 items is composed to measure the harshness of parenting. Children are asked about, during the last 12 months, how often did their primary caregivers get angry at them; get so mad at them that he/she broke or threw things; shout or yell at them because he/she was mad at them; criticize them or their ideas; push, grab, hit, or shove them; strike them with an object. Children are asked to indicate the frequency as 1 always, 2 often, 3 sometime, and 4 never. The responses are recoded with always as 0, often as 1, sometimes as 2, and never as 3. The scores are summed up across items as the scores for eschew of hostility. Thus higher values mean that parents are more successful in avoiding hostility towards their children. The reliability for this scale at wave two is .76.

Both children's and primary caregivers' report at wave 2 are utilized to measure inductive reasoning and problem solving. Inductive reasoning is measured using a 3-item scale. Children are asked about, during the last 12 months, how often the primary caregivers give the children reasons for their decisions; discipline children by reasoning, explaining, or talking to them; and/or explain the reason for making a rule. The primary caregivers are asked to respond to the same questions that are reworded. Both children and their primary caregivers are asked to

indicate the frequency as 1 always, 2 often, 3 sometimes, and 4 never. The responses are recoded, and the scores on the 3 items are summed up for target and for primary caregiver, respectively. The reliability for target report at wave 2 is .68. The reliability for primary caregivers' report at wave two is .66.

Problem solving is measured using a 4-item scale based on both target child and parent reports. Children are asked about how often they and their primary caregivers can figure out how to deal with problems; how often they talk to their primary caregivers about things that bother them; how often their primary caregivers ask what they think before deciding on family matters involving them or before making decisions about them. The primary caregivers are asked the same questions in reworded versions. The responses are in the same pattern as that used for inductive reasoning. The responses are recoded so that higher scores indicate parents' use more positive practices in problem solving. The scores are then summed up across the items for children and primary caregivers, respectively. The reliability of scale at wave two is .76 for children's report and .67 for parent report.

Children's report of parents' warmth/affection, eschew of hostility, inductive reasoning, and problem solving are z-scored and summed up as the child-reported supportive parenting. Since parent's warmth/ affection and eschew of hostility are not available for parents, parents reported inductive reasoning and problem solving are z-scored and summed up to form a primary caregiver's report of supportive parenting. Both children's report and primary caregivers' report on supportive parenting are then standardized and summed up to form a composite measure for supportive parenting.

EMOTIONAL NEGATIVITY In this study, two types of negative emotions - anger and fear - are used as the signs of emotional insecurity.

ANGER The measure of children' anger is generated using 4 items from the DISC-IV. Children are asked about how often he or she loses his or her temper, feels grouchy or annoyed, gets mad at people or things, or gotten angry because you thought things were unfair. The response is yes as 2 and no as 0. The responses are recoded to yes as 1 and no as 0. The scores on these four items are summed up as the scores for anger. Higher score means higher level of anger. The reliability for this scale is .69 at wave two.

FEAR Children's fear is computed using a 6-item scale. Children are asked about, in the last year, was there a time when they had a lot of bad dreams or nightmares; when they were unable to fall asleep without an attachment figure near them; when they often worried that something bad might happen to their attachment figure, like being in an accident or getting sick; when they often worried that their attachment figure might go away and never come back; when they worried that something might happen that leave them without their family, like getting lost, or being kidnapped; when they often felt very nervous or upset when they couldn't be with their attachment figure. Children are asked to indicate yes 2 or no 0. The responses are recoded as yes as 1 and no as 0. The scores on the six items are then summed up as the scores for fear. The reliability for fear at wave two is .62.

CYNICAL/HOSTILE VIEW OF RELATIONSHIPS Cynical/ hostile view of relationships is measured using a 9-item scale. Cynical/hostile view of relationships is a biased perspective (Dodge, Price, Bachorowski, and Newman 1990; Dodge and Somberg 1987). Children holding a cynical/hostile view of relationships tend to make errors in presuming hostility when it does not exist and to assume that an aggressive, belligerent attitude is necessary to avoid exploitation. Cynical/hostile view of relationships is measured using a 9-item scale. In the 9 items, 4 of them ask children about how true it is that their friends have often betrayed them; they have been often

lied to; when people are friendly, they usually want something from them; and some people oppose them for no good reason. Children are asked to indicate as mostly true 2 and mostly false 0. The scores are recoded to mostly true as 1 and mostly False as 0. The other 5 items ask children about the extent to which they agree the statements like "Sometimes you have to use physical force or violence to defend your rights; people will take advantage of you if you don't let them know how tough you are; sometimes you need to threaten people in order to get them to treat you fairly; behaving aggressively is often an effective way of dealing with someone who is taking advantage of you; and if you don't let people know you will defend yourself, they will think you are weak and take advantage of you". The children are asked to respond as 1 strongly agree, 2 agree, 3 disagree, or 4 strongly disagree. The scores are recoded to strongly disagree as 0, disagree as 1, agree as 2, and strongly agree as 3. The scores on 9 items are standardized and then summed up as the score on cynical/hostile view of relationships, so the higher score means that children hold a stronger cynical/hostile view of relationships. The reliability for the scale at wave two is .72.

INTERPARENTAL CONFLICT Interparental conflict is conceptualized as overt interparental conflict. Overt hostile behaviors including yelling, screaming, threatening, slapping, and hitting (Buehler et al. 1994). Overt hostile conflict is measured using a composite measure based on report data. A 12-item scale is generated. Primary caregivers are asked about, during the past 12 months, how often did their spouse or romantic partner get so mad at them that he or she broke or threw things; pushed, grabbed, hit, or shoved them; struck them with an object; threw things at them; shouted or yelled at them; criticized them or their ideas; got angry at them; argued with them whenever they disagreed about something; insulted or swore at them; bossed them around a lot; or gave them a lecture about how they should behave. Primary caregivers are asked to

indicate the frequency of conflict as 1 always, 2 often, 3 sometimes, or 4 never. The responses are reversely coded into never as 1, sometimes as 2, often as 3, and always as 4. The scores on the 12 items are then summed up, and the sum is used as the score on interparental conflict. Higher score on interparental conflict means there are higher level of overt hostile conflict between primary caregivers and their spouses/romantic partners. The reliability for the scale at wave two is .83.

Primary caregivers' spouse/romantic partners also report on interparental conflict; however, the report is only limited to those who also act as the target children's secondary caregivers. Since the report by those spouses/romantic partners who are not children's secondary caregivers are not available, a sound part of the report by primary caregiver's spouses/romantic partners (219 cases) is missing. The available data shows that the correlation coefficient between interparental conflicts reported by primary caregivers and their spouse/romantic partners is .366, which is statistically significant at the .01 level. One-way ANOVA shows that primary-caregiver-reported interparental conflict does not significantly differ for those whose spouses' or romantic partners' reports are available comparing to those not available ($p=.20$). Thus, the report by primary caregiver's spouse/romantic partner is not utilized, and the interparental conflict is assessed only based on the primary caregiver's report.

Control variables

In this research, several variables i.e. children's gender, children's delinquency at time one, parental control at wave two, and per captia family income at wave two are controlled.

GENDER Children's gender is controlled in this research by analyzing the effects of interparental conflict and supportive parenting for boys and girls separately. This is important, as some studies have shown that boys and girls react differently to interparental conflict (e.g.

Kerig 1998), and children's gender affects the relation between interparental conflict and children's externalizing behaviors including delinquency (e.g. Hart, Nelson, Robinson, Olsen, and McNeilly-Choque 1998; Kennedy, Bolger, and Shrout 2002).

EARLIER DELINQUENCY Children's delinquency at wave one is also controlled. Many research suggests that antisocial behavior/delinquency tends to be relatively stable across the life course (e.g. Caspi and Moffitt 1995; Glueck and Glueck 1968; Sampson and Laub 1993). Some children who have delinquent behavior may manage to desist from deviance later; however, generally a child who has delinquency behavior before tends to have delinquency behaviors later. Besides, children's former delinquent behavior may also deteriorate parents' parenting practices and deteriorated parenting practices, in turn, contribute to children's delinquency. To disentangle the confounding effect of former delinquency upon children's later behavior, children's delinquency at wave one is controlled. This construct is measured using the conduct disorder section of the Diagnostic Interview Schedule for Children, Version 4 (DISC-IV) based on children's self-reports at wave one. Children are asked to indicate whether they have ever engaged in the behaviors such as bullying, initiating fights, being physically cruel to people/animals, stealing with confrontation, breaking into someone's house, building, or car, telling lies, stealing without confrontation, staying out at night despite parental prohibitions, running away, or being truant from school. These items are combined into a count variable measuring children's delinquency. The reliability for the scales at wave one is .69.

PARENTAL CONTROL Parental control at wave two is also controlled as another important aspect of parenting. Though there are no grounds to expect a moderating effect of parental control in the relationship between interparental conflict and children's delinquency, existing research does show the direct effect of parental control upon children's behavior (e.g. Loeber and

Stouthamerloeber 1986; Patterson and Stouthamerloeber 1984). For example, Pattson and Stouthamer-loeber's research (1984) shows that the measures of parent monitoring and discipline are significantly correlated with both police contacts and children's self-reported delinquency.

Parental control at wave two is computed using both children's and primary caregiver's reports. Both children and primary caregivers report on the extent to which their parents practice monitoring and consistent discipline. A 13-item scale is generated. The items in this scale are also adapted from the parenting instrument developed for the Iowa and Youth and Families Project (IYFP; Conger et al., 1992). The reliabilities of the scale for primary caregiver report and child report at wave two are .64 and .63, respectively. Both primary caregiver and child are asked about, during the past 12 months, how often the primary caregiver knew what the child does after school; where the child is and what the child is doing; how well the child is doing in school; if the child does something wrong; how often the child can do whatever he/she wants after school without the primary caregiver knowing what the child is doing; how often the child would be disciplined at home if the child broke a school rule; how often do the primary caregiver gives up when he/she ask the child to do something and the child doesn't do it; how often the primary caregiver disciplines the child when he/she tell the child to stop doing something and the child doesn't stop; how often the child can get out of being disciplined once the primary caregiver decide on a type of discipline; how often the primary caregiver disciplines the child for something at one time and then, at other times, not discipline the child for the same thing; how often the type of discipline the primary caregiver uses depend on his/her mood, when the primary caregiver disciplines the child; how often the primary caregiver grounds the child when the child does something wrong. The responses are 1 as always, 2 as often, 3 as sometimes, and 4 never. The responses are recoded so that higher value means higher level of parental control. The

scores on these items are summed up and then z-scored for children and primary caregivers, respectively. The z-scores for both primary-caregiver-reported parental control and child-reported parental control are then added together as the scores on parental control at wave two.

PER CAPTIA FAMILY INCOME Per captia family income at wave two is controlled in this research. Some research shows that economic distress/strain influences parents' parenting practices which is, in turn, associated with children's internalizing and externalizing behaviors (Conger et al. 1992; Conger et al. 1994). Per captia family income is obtained by summing up both primary and secondary caregivers' reported earnings from employment, government payments, child support, etc. during previous year and then being divided by the family size. Per captia family income is calculated in $1000s.

Analytical Strategy

In the current research, I conduct the analyses in two steps. In the first step, Path Analysis[7] available in LISREL VIII (8.54) is utilized to test simultaneously the competing models proposed to account for the relation between interparental conflict and adolescents' delinquency. The analyses are conducted separately for boys and girls.

Based on results from the first analyses, I further test both the moderating role of supportive parenting and the hypothesized mechanism whereby supportive parenting moderates the relation between interparental conflict and children's delinquency using the group comparison option available in LISREL VIII (8.54). These analyses also are conducted separately for boys and girls.

[7] Path analysis is utilized in current study instead of full Structural Equation Modeling that includes both latent variables and indictors. Using full Structural Equation Models, the sample size for current study is rather small relative to the number of parameters needed to estimate, and there would be not enough degrees of freedom. So, instead of treating the studied constructs as latent variables, I use the composite measures of constructs and treat them as observed variables.

CHAPTER 7

RESULTS

The mean, standard deviation, and range for each of the study variables are displayed in Table 1. Among the selected children, most of them (83% of boys and 69% of girls) reported at wave two that, during the preceding year, they had engaged at least one of the delinquent behaviors listed in the DISC measure of conduct problems. The number of symptoms reported ranged from 0 to 15 for boys and from 0 to 12 for girls. One-way ANOVA test shows that boys report significantly higher number of delinquency counts than girls ($p<.01$). This echoes the pattern in the original FACHS sample with boys report higher level of delinquency. Comparing to boys, girls seems to show higher level of fear emotion and have higher level of parental control ($p<.01$ and $p<.05$, respectively). There is no significant difference in other variables for boys and girls.

The correlation matrix illustrating the zero-order correlations between studied constructs for boys and girls is presented separately in Table 2. The correlation matrix shows that, for both boys and girls, delinquency at time one is significantly and substantively correlated with children's delinquency at time two. For girls, interparental conflict is significantly correlated with children's delinquency; in addition, interparental conflict is significantly correlated with children's anger, supportive parenting, and parental control; children's cynical/hostile view of relationships, fear, anger, supportive parenting, and parental control are significantly correlated with children's delinquency; per captia income is marginally significantly correlated to parental control. For boys, the correlation coefficients between interparental conflict and children's

delinquency fail to reach significance at .10 level; interparental conflict is marginally significantly correlated with children's cynical/hostile view of relationship at .10 level, and is significantly correlated with both supportive parenting and parental control at .01 level; children's cynical/hostile view of relationships, fear, anger, and supportive parenting are significantly correlated with children's delinquency at time two; per captia income is significantly correlated with supportive parenting.

Conceptual model testing of the competing models proposed to account for the relation between interparental conflict and adolescents' delinquency is presented in Figure 1. The path analysis available in LISREL VIII (8.54) is utilized in this analysis. Since the endogenous variables (delinquency, cynical/hostile view of relationship, fear, anger, supportive parenting, and parental control at time two) fail to satisfy the multivariate normality assumption required by using maximum likelihood estimation[8], the general weighted least squares estimation recommended by Jeoreskog and Sorbom (1993) is utilized.

According to Jeoreskog and Sorbom (1993), when the observed endogenous variables deviate far from normality, the chi-squares and standard errors of parameters produced by maximum likelihood estimation are likely to be underestimated, comparing to general weighted least square estimates. Thus, when the multinormality assumption is violated, using maximum likelihood estimation is easy to yield significant parameters and to lead to type I error, comparing to using general weighted least square estimation. To utilize the WLS method, the sample variances and co-variances and their asymptotic covariance matrix are computed using

[8] Maximum likelihood estimation assumes that the endogenous continuous variables in a given study are multivariate normally distributed. However, results from the skewness and kurtosis test of multivariate normality for endogenous variables suggest that the null hypothesis -- the endogenous continuous variables are multivariate normally distributed -- is rejected at .01 level for both boys and girls (p=0.00).

PRELIS 2 that is available in LISREL VIII (8.54) before running the path analysis. Those matrixes are finally used in model-fittings.

The first set of analyses is conducted separately for boys and girls. Fitting data for girls, the hypothesized model produces a large chi-square relative to degrees of freedom 64.32/16df. The root mean square error of approximation (RMSEA) of the model is 0.106 and a goodness of fit index (GFI) is 0.95 with an adjusted goodness of fit index (AGFI) 0.86. The conceptual model does not fit the data very well. The modification indices suggest that there are significant paths both from delinquency at time one to supportive parenting and from delinquency at time one to parental control. It also suggests there is significant path from children's anger to supportive parenting. In addition, strong correlations are indicated between residual variances for cynical/hostile view of relationships and for fear and anger. These suggested paths are reasonable in that delinquency at time one is likely to influence parents' supportive parenting or parental control or both, and children's anger emotion may have disruptive effect upon parents' supportive parenting. In addition, there is high possibility that some common causes for both cynical/hostile view of relationship and children's fear and anger that are not included in current study. So, the suggested paths are incorporated into the conceptual model. Adding these paths, the model produces a chi-square/df ratio 2.70 (35.06/13df=2.70). Arbuckle and Wothke (1999) suggest that a chi-square/df ratio between 1 and 3 indicates a good model fit. In addition, both RMSEA for the modified model .08, with a 90% confidence interval from 0.05 to 0.11, and GFI 0.97 with an AGFI 0.91 suggest a good model fit. This modified model[9] for girls is accepted.

[9] The modification indices also suggest that there are strong paths from delinquency at wave two to children's anger and hostile view of relationship at wave two. Adding these paths may improve model fit greatly; however, the modification is not reasonable. Human behavior is assumed to be the externalization of cognitions or psychological processes, not the reverse way around. So to avoid being simply driven by data, I stopped model modification and did not further incorporate these modifications.

The results from fitting the data of girls to the modified models are presented in Figure 2. For girls, no support is found for the aggressogenic cognition model. The path from interparental conflict and children's cynical/hostile view of relationship (γ_{22}=.04) is not statistically significant, though the paths from children's cynical/hostile view of relationship to children's delinquency (β_{12}=.12) are significant at .05 level. There is some support for emotional security model is found for girls, though only anger emotion show mediating effect in the relation between interparental conflict and children's delinquency. The coefficients for the paths both from interparental conflict to children's anger (γ_{42}=.12) and from children's anger to delinquency (β_{14}=.33) are statistically significant at .05 level. The coefficient for path from interparental conflict to children's fear (γ_{32}=-.01) is not significant, while the path from children's fear to delinquency (β_{13}=.14) is statistically significant at .05 level. For girls, the spillover model is also supported. However, inconsistent with the derived hypothesis from spillover model, supportive parenting does not mediate the relation between interparental conflict and children's delinquency. The coefficients for paths both from interparental conflict to parental control (γ_{62}=-.17) and from parental control to children's delinquency at time two (β_{16}=-.14) are statistically significant at .05 level, while the coefficient for path from interparental conflict to supportive parenting (γ_{52}=-.11) fails to reach statistical significance.

In addition to the significance test shown in model fitting, the significance of these paths is also tested by single degree-of-freedom comparisons. The model with all these paths free and models deleting any of these paths (fixing to 0) are compared and the results are presented in Table 3. The results from model comparison are basically consonant with the above findings, suggesting that most of these path coefficients are significantly different from 0. However, deleting the path from interparental conflict and parental control (γ_{62}=-.17) only yield a small

chi-square increase 1.83 (p=0.18) suggesting that the path is not significantly different from 0. The result seems inconsistent with the significance test in model fitting. However, since chi-square test used in model comparison is a two-tailed test with the null hypothesis that the deleted path coefficient equals zero, whereas a directional relation between interparental conflict and parental control is proposed and thus the null hypothesis should now be that the deleted path is not smaller than 0. A one-tailed test should be conducted instead of two-tailed test. With 1 degree of freedom, z is the square root of chi-square. Employing a one-tailed z test, the model deterioration after deleting the path from interparental conflict and parental control is marginally significant at .10 level, suggesting there is marginally significant path from interparental conflict and parental control. This result is consistent with the result shown in Figure 2 showing support for spillover model.

For girls, there is a significant path from delinquency at time one to delinquent at time two (γ_{11}=.29) suggesting girls' delinquency at time one contributes directly and significantly to later delinquency at .05 level. The coefficient for path from delinquency at time one to parental control (γ_{61}=-.25) is approaching significance with a t-value –1.90, and the path coefficient between parental control and children's delinquency at time two (β_{16}=-.14) is statistically significant at .05 level. In addition, per captia family income shows significant effect upon parental control (γ_{63}=0.14). The coefficients for paths both from delinquency at time one to supportive parenting (γ_{51}=-.43) and from supportive parenting to delinquency at time two (β_{15}=-.12) are approaching significance with t-values –1.85 and –1.82, respectively.

Consistently, fixing the paths either from delinquency at time one to supportive parenting (γ_{51}=-.43) and from delinquency at time one to parental control (γ_{61}=-.25) to 0 yields a significant

chi-square increase in model fit[10]. This suggests that instead of approaching significance indicated by their t-value, both of these paths are statistically significant. This result further suggests that children's delinquency at time one may also indirectly contribute to children's later delinquency through impacting parental control. However, fixing the path between supportive parenting and children's delinquency (β_{15}=-.12) to 0 does not yield significant chi-square increase in model fit (p=.22), indicating that the path is not significant even though the t-value indicate its approaching significance. This further suggests that supportive parenting does not mediate the relation between girls' earlier and later delinquency.

Fitting data for boys, the hypothesized model produces a large chi-square relative to degrees of freedom 71.49/18df. The RMSEA of the model is 0.113 and GFI is 0.95 with an AGFI 0.87. The conceptual model also does not fit the boys' data very well. The modification indices suggest that there are significant paths from delinquency at time one to supportive parenting. A strong path from children's anger to supportive parenting is suggested as well. However, the modification indices do not suggest the path from delinquency at time one to parental control[11]. Adding these paths to the conceptual model, the model produces an acceptable chi-square/df ratio 2.93 (46.95/16df=2.93). The RMSEA of the model drops to .09, with a 90% confidence interval from 0.06 to 0.12; the goodness of fit index is 0.97 with an AGFI 0.90. This modified model for boys is accepted.

The results from fitting the data of boys to the modified models are presented in Figure 3. For boys, strong support for the aggressogenic cognition model is found. The coefficients for paths both from interparental conflict and children's cynical/hostile view of relationship (γ_{22}=.18)

[10] For the sake of parsimony, these results are not presented in Table 3.
[11] Adding the path from delinquency at time one to parental control increases model chi-square significantly at the 0.1 level, suggesting that adding this path significantly deteriorates the model fit.

and from children's cynical/hostile view of relationships to children's delinquency at time two (β_{12}=.19) are statistically significant at .05 level.

For boys, no support is found for the mediating role of both fear and parental control. The paths both from interparental conflict to children's fear (γ_{32}=-.08) and from children's fear to delinquency (β_{13}=-.04) fail to reach statistical significance. Though there is significant path from interparental conflict to parental control (γ_{62}=-.17), the path from parental control to children's delinquency (β_{16}=-.05) fail to reach significance level. The path from children's anger to children's delinquency (β_{14}=.42) is statistically significant, and the coefficient for the path from interparental conflict to children's anger (γ_{42}=.10) is approach significance with a t-value 1.67. In addition, the coefficient for the path from interparental conflict to supportive parenting (γ_{52}=-.12) is approaching significance level with a t value 1.72, and the coefficient for the path from supportive parenting to delinquency (β_{15}=-.11) is statistically significant.

The significance of these paths is also tested by a single degree-of-freedom comparison. The model with all these paths free and models with any of these paths fixing to 0 are compared and the results are presented in Table 4. The results from model comparison are consistent with the above findings about the significant paths. In addition, fixing the path between interparental conflict and children's anger (γ_{42}=.10) to 0 yield a chi-square increase 2.22 with a p-value .13. Since the predicted relation between interparental conflict and children's anger is directional, a one-tailed z test is conducted. Employing a one-tailed z test, the model deterioration after fixing the path to 0 is significant at .10 level (p=.068). This indicates that there is marginally significant path between interparental conflict and children's anger. Combining with the result shown in Figure 3, the indication further lends support to emotional security model that boys' anger mediates the relation between interparental conflict and boys' delinquency. Similarly,

fixing the path between interparental conflict and supportive parenting yield a model chi-square increase 2.78, which is marginally significant (p=0.09). One-tailed z test is also conducted, and the results suggest that the path between parental conflict and supportive parenting is statistically significant at .05 level (p=0.048). This result, together with the results shown in Figure 3, provides support for the spillover model suggesting that supportive parenting mediates the relation between interparental conflict and boys' delinquency. In addition, significant path is found between children's anger and supportive parenting, suggesting that children's anger reactions to interparental conflict may disrupt parents' supportive parenting and contribute to children's delinquency.

For boys, there also is a significant path from delinquency at time one to delinquent at time two (γ_{11}=.23) suggesting boys' delinquency at wave one contribute directly and significantly to later delinquency. The coefficients for paths both from delinquency at time one to supportive parenting (γ_{51}=-.25) and from supportive parenting to children's delinquency at time two are statistically significant at .05 level. This suggests that supportive parenting may partially mediate the effect of boys' delinquency at time one on boys' later delinquency. In addition, per captia family income seems to positively impact parents' supportive parenting (γ_{53}=0.15) which contributes to boys' delinquency significantly. Results from the model comparison[12] are consistent with the above results.

The second step of analyses is concerned with whether or not supportive parenting moderates the relation between interparental conflict and children's delinquency, and if it does, how supportive parenting works as a moderator. The group comparison option available in LISREL VIII (8.54) is utilized to test the moderating role and the moderating mechanism of supportive parenting. To use the group comparison option, the sample must be separated into

[12] For the sake of parsimony, this part of the results is not presented in Table 4.

groups high and low on the moderator variable, and the paths between constructs compared for the two groups. Thus, in order to test the moderating effect of supportive parenting, both boys and girls are divided into two groups depending on whether they are above or below the median on supportive parenting. Based on the results from simultaneously testing the competing models proposed to account for the relation between interparental conflict and children's delinquency, the moderating effect of supportive parenting is tested separately for boys and girls.

Based on the results from the first set of analyses, two paths have been compared for girls with high versus low supportive parenting; and four paths been compared for boys with high versus low supportive parenting. Table 5 presents the result of the group comparison. The upper part of the table is for girls and the lower part of the table is for boys. For girls, the coefficient for path from interparental conflict to children's anger is -0.02 for the group with high supportive parenting and is 0.12 for group with low supportive parenting, when the path between interparental conflict and anger emotion is free to differ. This difference is rather striking with the path for children with low supportive parenting being statistically significant at .05 level while the path for children with high supportive parenting does not approach significant levels even at .10 level (t=-0.27). Table 5 shows that constraining the path to be equal for the two groups increases the model chi-square from 15.21 to 17.09 with 1 degree of freedom. The reduction in chi-square has a probability of .17. Since the predicted difference in path between interparental conflict and children's anger is directional, a one-tailed z test is utilized. Employing a one-tailed z test, the deterioration in model fit derived by a model that constrains the paths for the high and low supportive parenting groups to be equal is marginally significant at .10 level (p=.085).

In contrast, there is no support for the moderating role of supportive parenting on the relation between children's anger and children's delinquency for girls. Table 5 shows the path coefficients between children's anger and children's delinquency is 0.39 and 0.35, respectively, for girls with high and low supportive parenting, when the path is free to differ. Both of the coefficients are significant at .05 level. Constraining the path to be equal for both high and low supportive parenting groups only yield a small chi-square change 0.16, which is not statistically significant (p=.69).

For boys, when the path between interparental conflict and children's cynical/hostile view of relationship is free to differ, the coefficient is 0.10 and 0.21, respectively, for groups with high and low supportive parenting. It seems rather striking in that the coefficient for low supportive parenting group is statistically significant at .05 level, while the coefficient for the low group fail to reach significant even at .10 level. However, Table 5 shows that constraining the path to be equal for both groups only increase model chi-square slightly from 39.56 to 40.12. The chi-square change is not statistically significant at all (p=0.45). Similar, there is also no support for the moderating effect of supportive parenting in the relation between children's cynical/hostile view of relationship and children's delinquency.

In contrast, support is shown for the moderating effect of supportive parenting in the relation between interparental conflict and children's anger for boys. When the path between interparental conflict and children's anger is free to differ, the coefficient is 0.19 and –0.06, respectively, for child with high and low supportive parenting. The coefficient for high supportive parenting boys is significant at .10 level, while the coefficient for low supportive parenting group fails to reach significance (t=-0.80). Constraining the path to be equal for both groups increases the model chi-square from 39.56 to 42.62, which is significant at .10 level.

However, counter to the predicted direction, the relation between interparental conflict and children's anger is significantly stronger for the group with high supportive parenting than that of the group with low supportive parenting.

Similarly, Table 5 shows support for the moderating effect of supportive parenting in the relationship between children's anger and children's delinquency for boys. When the path between children's anger and children's delinquency is free to differ, the coefficient is 0.30 and 0.55, respectively, for children with high and low supportive parenting. Both of the coefficients are significant at .05 level. Constraining the path to be equal for both groups yield a large chi-square increase 5.46/1df, which is significant at .05 level. This suggests that the coefficient for path from children's anger to children's delinquency is significantly higher for higher supportive parenting group relative to lower supportive parenting group.

CHAPTER 8

DISCUSSION

Past research has, to different extents, shown support for the competing mechanisms proposed to account for the relation between interparental conflict and children's delinquency. However, there is a scarcity of studies that test these competing models simultaneously. Are these models exclusive to each other in explaining the relation between interparental conflict and children's delinquency or do they work complementarily with each other with any one of them only explaining a part of the relation? Answering this question is crucial in further exploring the mechanism whereby supportive parenting may work as a moderator.

In the current research, the results show that the competing models proposed to account for the relationship between interparental conflict and children's delinquency work complementarily in explaining the relation between interparental conflict and children's delinquency. For girls, both the weak spillover model and the emotional security model account for the relationship between interparental conflict and children's delinquency; for boys, support is found for all three models. The findings also suggest that delinquency at time one does pose as a strong predictor for later delinquency for both boys and girls, consistent with the findings from existing research (e.g. Sampson and Laub 1993). However, controlling the delinquency at time one, interparental conflict still significantly contributes to children's delinquency at time two. In the total (including the indirect and direct effect), every standard deviation increase in interparental conflict results in 0.05 and 0.08 standard deviation increase in girls' and boys' delinquency, respectively.

Consistent with existing research (e.g. Kennedy, Bolger, and Shrout 2002), the mechanism whereby interparental conflict is related to children's delinquency seems to differ for boys and girls. For girls, children's emotional insecurity and parents' parenting practices mediate the relation between interparental conflict and children's delinquency. Supporting the emotional security model, interparental conflict is positively related to girls' anger emotion, and girls' anger emotion is positively related to girls' delinquency. Comparing to girls experiencing lower level of interparental conflict, girls who experience higher levels of interparental conflict tend to develop stronger anger emotion, and the stronger anger emotion gives rise to girls' delinquency counts. In addition, the result lends support for the spillover model in that, with higher level interparental conflict, girls' parents seem to lower their control over girls, and the loose parental control contributes to higher levels of delinquency. However, parent's supportive parenting fails to show the mediating effect in the relationship between interparental conflict and girl's delinquency as predicted. In addition, for girls, there is no support found for the aggressogenic cognition model. Although girls' cynical/hostile view of relationships also contributes to delinquency, the result does not suggest that, facing interparental conflict, girls tend to develop cynical/hostile view of relationship.

For boys, the cynical/hostile view of relationship, emotional insecurity, and parents' parenting practices mediate the relation between interparental conflict and children's delinquency. The result lends support to the aggressogenic cognition model in that interparental conflict is positively related to boys' cynical/hostile view of relationships and boys' cynical/hostile view of relationships is positively related to boys' delinquency. Facing higher levels of interparental conflict, boys tend to develop stronger cynical/hostile view of relationships, and the stronger cynical/hostile view of relationships contributes to the increase in

the counts of boys' delinquency. The result for boys also show support for the emotional security model in that interparental conflict is positively related to boy's anger emotion, and the anger emotion is positively related to boys' delinquency. Facing higher level of interparental conflict, boys tend to have stronger anger emotion, comparing to those who experience lower levels of interparental conflict. The stronger anger emotion, in turn, gives rises to the count of boys' delinquency. In addition, the result for boys provides support for the spillover model showing that supportive parenting mediates the relation between interparental conflict and children's delinquency. Interparental conflict deteriorates parents' supportive parenting, which, in turn, contributes to boys' delinquency. Additional, interparental conflict also deteriorates parents' supportive parenting indirectly through the disruptive effect of children's anger emotion upon parents' parenting practice.

Echoing Jenkins's suggestion (2002) that anger is the basic emotion involved in externalizing disorder, current research shows that children's anger, for boys as well as girls, is the emotion that mediates the relation between interparental conflict and children's delinquency. There is no mediating effect in the relation between interparental conflict and children's delinquency is found for children's fear emotion.

The findings that emotional insecurity mediates the relation between interparental conflict and children's delinquency for both boys and girls, but the cynical/hostile view of relationships mediates the relation only for boys, suggesting that boys and girls may react to interparental conflict differently. Interparental conflict in this study is measured based on primary caregivers' reports, and it may only reflect the part of conflict that is inflicted upon primary caregivers by their spouses/romantic partner. Since most of the primary caregivers are children's biological mothers, the interparental conflict measured in the present study is mainly

those conflicts that are inflicted by the male part of the romantic dyad. Thus, for girls, the modeling process underlying the aggressogenic cognition model may not work. However, for boys, the conflict inflicted by the male part of the romantic dyad may pose as behavioral models.

The simultaneous test of competing models proposed to account for the relation between interparental conflict and children's delinquency gives a better understanding of the mechanism whereby interparental conflict impacts children's behavior. Based on the test, the present study further tested the possibility that supportive parenting might serve to moderate the effect of interparental conflict upon children's behavior. Findings from the present study provide moderate support for hypotheses derived from the emotional security model; however, the findings fail to show support for those derived from the aggressogenic cognition model.

According to Rutter (1990), a protective factor is a personal or environmental characteristic that eliminates the deleterious consequences of a particular risk. Result from the present study indicates that, supporting the prediction derived from emotional security model, supportive parenting operates as a protective factor for girls in that supportive parenting mitigates the risk of emotional insecurity (i.e. anger) associated with interparental conflict. However, result fails to show that, for girls, supportive parenting can moderate the relation between children's emotional insecurity and children's delinquency.

For boys, results from the present study suggest that, instead of being a protective factor which is suggested by the emotional security model, supportive parenting seems to exacerbate the risk of emotional insecurity (i.e. anger) associated with interparental conflict. In other words, facing the same level of interparental conflict, boys enjoying higher level of parental support tend to have stronger anger emotions, compared to their peers with lower levels of supportive parenting. This finding is also inconsistent with the stress-buffering role of supportive parenting

suggested by existing literature (e.g. Bugental 2004). However, consistent with the prediction derived from the emotional security model, supportive parenting operates as a protective factor for boys in the relation between anger emotion and delinquency in that, given the same level of anger emotion, boys with supportive parents are less likely to externalize their anger into delinquency. This findings is also consistent with the findings from Davies et al.'s (2002) study. In their study, Davies and colleagues (2002) find that the relations between children's emotional insecurity and psychological maladjustment including delinquency are the strongest in the context of greater parenting difficulties.

In addition, the result for boys fails to support the predictions derived from the aggressogenic cognition model in that there is no difference, for boys with high versus low supportive parenting, either in the relation between interparental conflict and boys' cynical/hostile view of relationships or in the relation between boys' cynical/hostile view of relationships and boys' delinquency. This finding that supportive parenting fails to moderate the relation either between interparental conflict and boys' cynical cynical/hostile view of relationship or between boys' cynical/hostile view of relationship and boys' delinquency may be due to a fact that, even though the primary caregiver are highly supportive, boys may still not be more likely to identify themselves with their primary caregivers or take their primary caregivers as their role model because most of their primary caregivers are their biological mothers, not their biological fathers.

Though findings from the present study suggest that supportive parenting moderate the relation between interparental conflict and children's anger for both boys and girls, the moderation effect of supportive parenting is in the predicted direction for girls, whereas, for boys, the direction is reversed. Comparing to low supportive parenting group, boys with high

supportive parenting tend to show stronger anger emotion when facing interparental conflict; while girls with high supportive parenting tend to have weaker anger emotion comparing to their low supportive parenting counterparts. This may be explained by that boys with supportive primary caregivers may be more likely to act as the protector of their primary caregivers (mostly their biological moms) and may be more likely to take side in the parental conflict. Thus, when conflict happens, boys with high supportive moms may be more likely to feel being threatened by the conflict and be more likely to show the sign of emotional insecurity. However, with the protection or support from supportive moms, girls may feel less threatened when facing interparental conflict. This is echoed by one fact that, even though there is not significant difference in interparental conflict for boys and girls in the present study, primary caregivers of girls report significantly higher level of severe conflict like physical attack by their spouse/romantic partners ($p=.03$), compared to those of boys. This fact also point to that boys may stand out as a protector of their mothers when interparental conflict occur which contributes to the lower level of severe interparental conflict.

The findings from the present study help to provide a better understand of the mechanisms whereby interparental conflict may affect children's behavior. In addition, the present study contributes to existing literature by testing the mechanisms whereby supportive parenting operates as a moderator in the relationship between interparental conflict and children's delinquency.

However, a few limitations of this study must be noted. First of all, as mentioned above, interparental conflict in the present study is solely based on the primary caregivers' report due to a sound amount of missing data in the spouses'/romantic partners' reports. Though the reports from primary caregivers and their spouses' or romantic partners are significantly correlated with

each other, still the measure based on single report only shows a part of the picture. Do the primary caregivers inflict conflict towards their spouses/romantic partners? How often they inflict conflict on their spouses/romantic partners? From the current measure of interparental conflict, I miss a part of the whole vision of conflicts within the romantic dyad.

In addition, the parent-child gender patterns may also impact the moderating role of supportive parenting in the relation between interparental conflict and children's delinquency. The present study controls children's gender, however, how children with different parent-child gender patterns react to the interparental conflict and how the supportive parenting with different parent-child gender pattern operates as a moderator are not addressed. Future studies in this field may take into consideration of the different parent-child gender pattern when identifying supportive parenting as a protective factor.

Thirdly, current research assumes that the support from the primary caregiver is of primary importance for children's well-being. What about social support from other sources like peers or other social network? Do those social supports protect children from the deleterious impact of interparental conflict by providing a refuge for children? The fact that findings from the present study indicate that supportive parenting may serve as both a mediator and a moderator in the relation between interparental conflict and children's delinquency is interesting in that supportive parenting itself may be influenced by interparental conflict though it may moderate impact of interparental conflict upon children's behavior. Future research may go beyond the supportive parenting to focus on other sources of social support. Social support from kin relatives, conventional peers, community, or schools may be relatively stable in that they are less likely to be impacted by interparental conflict. Given the strong emphasis on extended families of African American culture (Harrison, Wilson, Pine, Chan, and Buriel 1990), social

support from kin relatives may be of especial importance for African American children in conflictive families.

CHAPTER 9

CONCLUSION

The present study makes a number of contributions to the existing literature. First, it contributes to a better understanding of the mechanisms that accounts for the relation between interparental conflict and children's delinquency. Second, this analysis provides new evidence for the protective effect of supportive parenting for child in the conflictive families. Third, this study explores the mechanism whereby supportive parenting operates as a protector for child in context of interparental conflict. Fourth, this study envisions the direction of future research on other protective factors for children in conflictive families.

Though a variety of models have been proposed to explain how interparental conflict impacts children's behavior in existing literature, there are limited understandings on how these mechanisms work controlling other competing models. In a way, this has hindered the development of research on how supportive parenting may operate as a protector for children in conflictive families. Studies that simultaneously test the competing models are in high demand. Within the weak spillover model framework, I posit that these competing models may work complimentarily in explaining the relation between interparental conflict and children's delinquency. The present study examines three well-established models – the spillover model, the aggressogenic cognition model, and the emotional insecurity model. The results do show some support for this proposition of complementary working mechanism.

A second contribution is that this study provides new evidence for the protective effect of supportive parenting for child in conflictive families. Results from present study suggest that

supportive parenting, as a construct, does have protective effect for children in conflict families. In addition, the results also suggest supportive parenting may not always be a protective factor for child. In some situation, supportive parenting may exacerbate the impact of interparental conflict upon children's outcome.

A third contribution is that this study makes exploration on how supportive parenting operates as a protector (or a moderator) for children facing interparental conflict. This exploration is based on a better understanding of how interparental conflict impacts children's behavior. The results suggest supportive parenting may operate as a moderator either in the relationship between interparental conflict and children's emotional insecurity that is expressed as anger or in the relation between children's emotional insecurity and children's delinquency.

Being part of the effort to enhance children's resilience, this study evinces the direction of future research on the protective factors for children in conflictive families. Support for spillover model shown in this study sheds some light on the somewhat unstable features of parenting in context of marital conflict. Instead of focusing on locating protective factors in the immediate families, the present study suggests that social support from other sources e.g. from kin relatives or from conventional peers may be of great importance for the resilience of children in the conflictive families.

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Table 1: Mean, Standard Deviation, and Range for Studied Constructs

	Male (N=236)			Female (N=272)			All Child (N=508)		
Variables	Mean	SD	Range	Mean	SD	Range	Mean	SD	Range
Delinquency	3.25	3.22	0-15	2.50	2.86	0-12	2.84	3.05	0-15
Delinquency T1	2.17	2.94	0-15	1.19	2.11	0-15	1.65	2.57	0-15
Parental Conflict	16.98	3.75	12-31	17.13	4.60	12-45	17.06	4.22	12-45
Hostile View of Relation	.37	4.83	-11.71-13.58	-.37	5.42	-12.96-13.58	-.03	5.16	-12.96-13.58
Fear	1.18	1.23	0-6	1.53	1.51	0-6	1.36	1.39	0-6
Anger	1.80	1.47	0-4	1.90	1.40	0-4	1.86	1.43	0-4
Supportive parenting	-0.4	.69	-1.60-1.64	.034	.79	-2.08-1.58	0.00	.75	-2.08-1.64
Parental Control	-.09	1.41	-4.79-2.98	.17	1.51	-5.66-3.62	.05	1.47	-5.66-3.62
Per captia income	9.03	9.80	0-102.50	8.39	7.09	0-36.67	8.69	8.45	0-102.50

Note: the unit for per captia income is $1000; Except delinquency at time 1, other variables are time 2 measures.

Table 2: Correlation Matrix for Studied Constructs by Children's Gender

Variables	1	2	3	4	5	6	7	8	9
1 Delinquency	--	.549**	.148*	.304**	.218**	.478**	-.352**	-.336**	-.096
2 Delinquency T1	.389**	--	.081	.172**	.128*	.269**	-.253**	-.224**	-.118*
3 Parental Conflict	.080	.104†	--	.052	-.004	.117*	-.191**	-.214**	.010
4 Hostile View of Relation	.290**	.195**	.114†	--	.207**	.259**	-.046	-.104†	-.189**
5 Fear	.125*	.035	.047	.181**	--	.129*	.073	.001	-.109†
6 Anger	.481**	.157*	.063	.087	.182**	--	-.203**	-.102†	-.068
7 Supportive parenting	-.245**	-.196**	-.163**	-.045	-.055	-.198**	--	.520**	.064
8 Parental Control	-.095	-.008	-.140*	-.803	-.170**	.063	.419**	--	.112†
9 Per captia income	-.021	-.086	-.007	-.010	-.080	.103	.174**	.029	--

Note: ** p<.001; * p<.05; † p<.10 (two-tailed test); the correlation coefficients above diagonal are for girls, and below are for boys; the case number for boys is 236, for girls is 272.

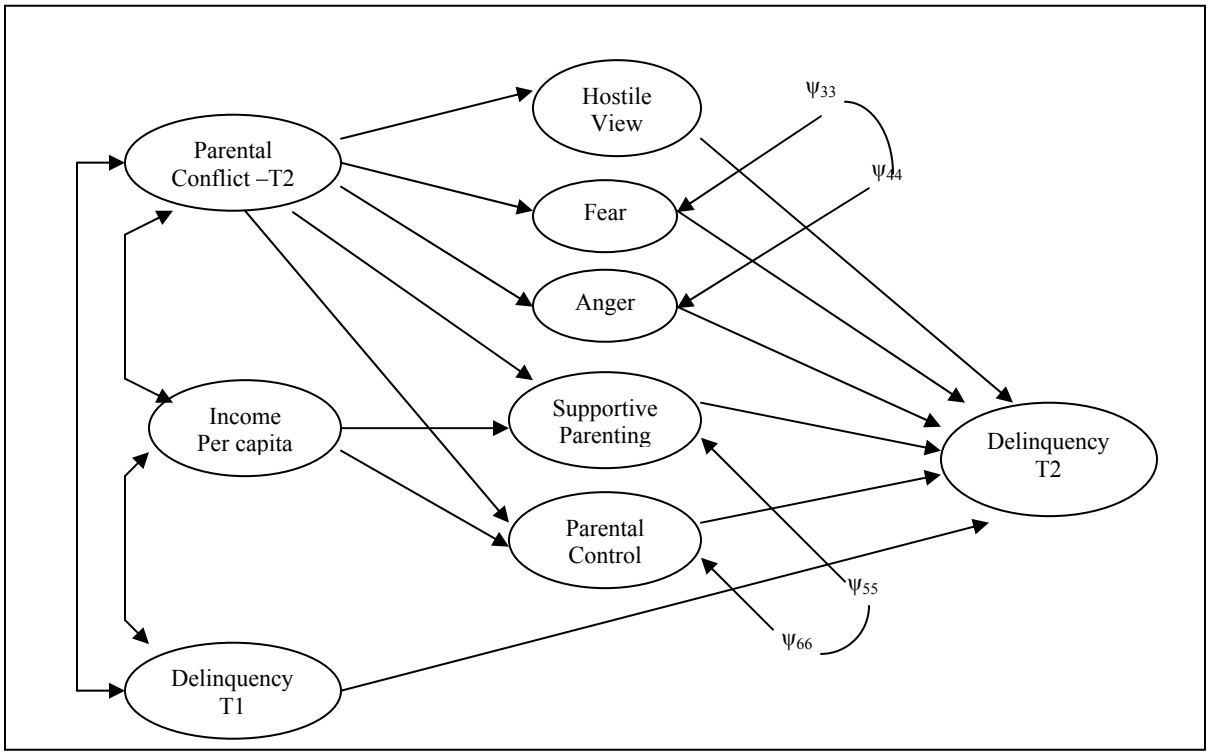

Figure 1: Conceptual model (Measures without mentioning its time are all time-two measures.)

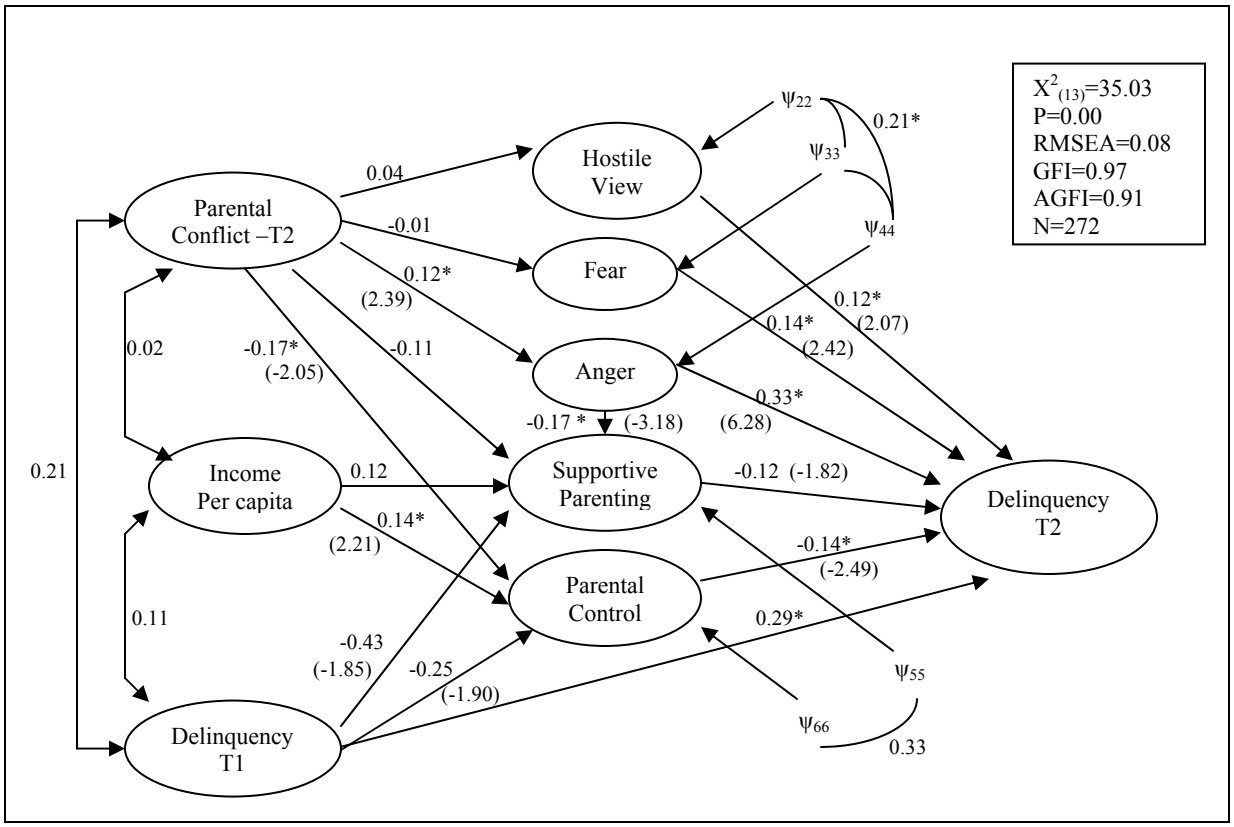

Figure 2: Fitted Model for Girls (Standardized path coefficients are shown; the t-values for path coefficients are shown in parentheses; * p<.05)

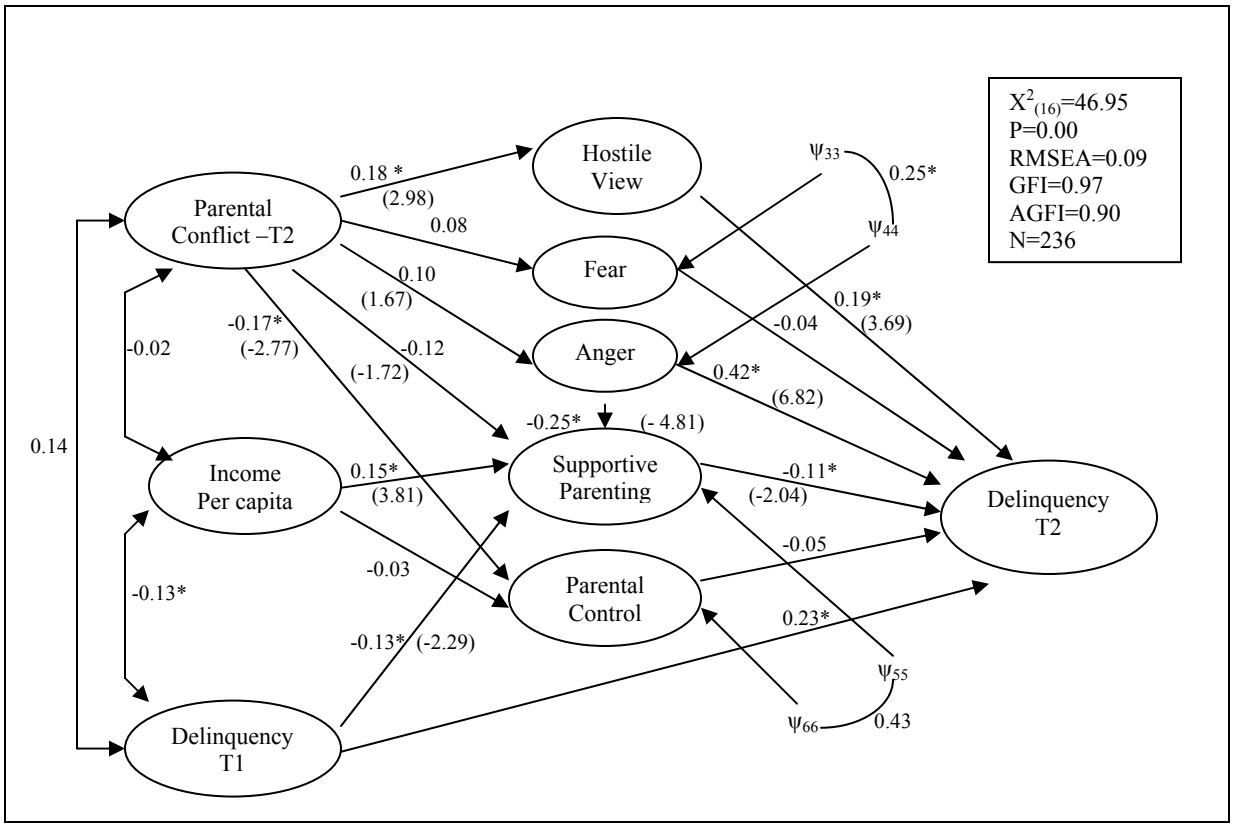

Figure 3: Fitted Model for Boys (Standardized path coefficients are shown; the t-values for the path coefficients are shown in parentheses; * p<.05)

Table 3: Model Comparison of Alternative Models for Girls

Model		χ^2	D. F.	$\Delta\chi^2(1)$	p-value for $\Delta\chi^2(1)$
Baseline model	All coefficients free	35.06	13		
Model 1	fix γ_{22}				
	Parental conflict-->Hostile view of relation	35.6	14	0.54	0.46
Model 2	fix β_{12}				
	Hostile view of relation -->Delinquency T2	39.27	14	4.21	0.04
Model 3	fix γ_{32}				
	Parental conflict --> Fear	35.11	14	0.05	0.82
Model 4	fix β_{13}				
	Fear -->Delinquency T2	40.59	14	5.53	0.02
Model 5	fix γ_{42}				
	Parental conflict --> Anger	39.85	14	4.79	0.03
Model 6	fix β_{14}				
	Anger -->Delinquency T2	68.65	14	33.59	0
Model 7	fix γ_{52}				
	Parental conflict --> Supportive parenting	35.63	14	0.57	0.45
Model 8	fix β_{15}				
	Supportive parenting --> Delinquency T2	36.56	14	1.5	0.22
Model 9	fix γ_{62}				
	Parental conflict --> Parental Control	36.89	14	1.83	0.18
Model 10	fix β_{16}				
	Parental control --> Delinquency T2	40.42	14	5.36	0.02
Model 11	fix β_{54}				
	Anger--> Supportive parenting	44.5	14	9.44	0

Table 4: Model Comparison of Alternative Models for Boys

Model		χ^2	D. F.	$\Delta\chi^2(1)$	p-value for $\Delta\chi^2(1)$
Baseline model	All coefficients free	46.95	16		
Model 1	fix γ_{22}				
	Parental conflict-->Hostile view of relation	53.13	17	6.18	0.01
Model 2	fix β_{12}				
	Hostile view of relation -->Delinquency T2	60.08	17	13.13	0
Model 3	fix γ_{32}				
	Parental conflict --> Fear	48.25	17	1.3	0.25
Model 4	fix β_{13}				
	Fear -->Delinquency T2	47.23	17	0.28	0.59
Model 5	fix γ_{42}				
	Parental conflict --> Anger	49.17	17	2.22	0.13
Model 6	fix β_{14}				
	Anger -->Delinquency T2	86.75	17	39.8	0
Model 7	fix γ_{52}				
	Parental conflict --> Supportive parenting	49.73	17	2.78	0.09
Model 8	fix β_{15}				
	Supportive parenting --> Delinquency T2	51.16	17	4.21	0.04
Model 9	fix γ_{62}				
	Parental conflict --> Parental Control	53.78	17	6.83	0.01
Model 10	fix β_{16}				
	Parental control --> Delinquency T2	47.92	17	0.97	0.32
Model 11	fix β_{54}				
	Anger--> Supportive parenting	68.3	17	21.35	0

Table 5: Comparison of the Paths for High and Low Supportive Parenting Groups

		Path Coefficients (β/γ)					
	Model	High support	Low support	χ^2	D.F.	$\Delta\chi^2(1)$	p-value for $\Delta\chi^2(1)$
Girls							
Parental conflict - Anger	γ free to differ	-0.02	0.12*	15.21	10	_	_
	γs equal in both groups	0.05	0.05	17.09	11	1.88	0.17
Anger - Delinquency T2	β free to differ	0.39**	0.35**	15.21	10	_	_
	βs equal in both groups	0.37	0.37	15.37	11	0.16	0.68
Boys							
Parental conflict - Hostile view of relation	γ free to differ	0.10	0.21*	39.56	20	_	_
	γs equal in both groups	0.17	0.17	40.12	21	0.56	0.45
Hostile view of relation - Delinquency T2	β free to differ	0.16*	0.16	39.56	20	_	_
	βs equal in both groups	0.16	0.16	39.57	21	0.01	0.92
Parental conflict - Anger	γ free to differ	0.19†	-0.06	39.56	20	_	_
	γs equal in both groups	0.07	0.07	42.62	21	3.06	0.08
Anger - Delinquency T2	β free to differ	0.30*	0.55*	39.56	20	_	_
	βs equal in both groups	0.42	0.42	45.02	21	5.46	0.02

Note: ** p<.01; * p<.05; † p<.10