## ORIGINAL ARTICLE

# The Link Between Financial Strain, Interparental Discord and Children's Antisocial Behaviors

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Abstract Using data from the Fragile Families and Child Well-Being Study, I examine the impact of interparental discord on children's antisocial behaviors in families facing financial hardship. Structural Equation Modeling analysis of 1222 pairs of parents shows that financial hardship can create turmoil in families' lives by increasing discord between parents. The findings are consistent with the notion that children who experience interparental discord have a higher disposition toward displaying antisocial behaviors. Multiple group analysis also reveals unique differences between mothers and fathers in terms of their conceptualization of strain, discord, and child outcome. While both mothers and fathers may attribute different meanings to financial adversity, their relationships with each other are significantly likely to suffer from household financial insecurity.

**Keywords** Financial strain · Interparental discord · Children · Antisocial behaviors

Financial hardship is a widespread social phenomenon that plagues a significant number of families each year. In 2008, approximately 39.8 million Americans were living in poverty, a 2.5 million increase from the preceding year (CPS 2009). Data from the Survey of Income and Program Participant (SIPP) reveal that roughly 31% of the population went through at least one "spell of poverty" of 2 months or more between 2004 and 2007 (DeNavas-Walt et al. 2009). A comprehensive study of this social occurrence is imperative

Y.-F. Paat (⊠) Department of Sociology, University of Oklahoma, 780 Van Fleet Oval, KH 331, Norman, OK 73019, USA e-mail: yokfong.paat@ou.edu as past research has established a link between economic hardship and children's well-being (Conger et al. 1992, 1994; Gutman and Eccles 1999). Overall, evidence suggests that the social problems associated with financial hardship can have serious repercussions on healthy family functioning and child development (Coley and Chase-Lansdale 2000; Conger et al. 1990, 1992; Gulati and Dutta 2008; Gutman and Eccles 1999; Mistry et al. 2002). Children from economically disadvantaged families, in particular, are disproportionately more at risk of experiencing interparental discord and multiple family disruptions (Kwon et al. 2003; Liker and Elder 1983). Most importantly, children from impoverished families and broken homes face an increased likelihood of displaying multiple social maladjustments that amplify the chances of antisocial and delinquent acts (Sampson and Laub 1994; Shaw and McKay 1969; Shek 2005).

Using recently released data from the Fragile Families and Child Well-Being Study, this paper explores the connection between three potential predictors of financial strain (household size, poverty ratio, and depressed mood), two household contextual factors (financial strain and interparental discord) and children's antisocial propensities. Specifically, this study examines the potential mediating effect of three different types of interparental discord (i.e., interparental conflict and violence, couple's commitment and parenting concordance). The second line of inquiry of this study focuses on gender differences in how men and women respond to strain, and how gender values shape couples' responses to each other and to their children in times of distress. While many studies have examined the implications of financial strain on family functioning, this study contributes to the current literature by incorporating gender differences in the interactive process and how this translates to young children's behavioral difficulties. Using Structural Equation Modeling (SEM), this paper explores responses from 1222 pairs of parents, a nationally representative sample and a sample size larger than many previous researchers who utilized a similar statistical technique—SEM (e.g., Conger et al. 1992, 1994).

This paper first discusses previous research in the areas of financial strain, followed by the influences of interparental discord and the family process leading to children's propensity to develop antisocial behaviors. Subsequently, this study will present the research problem, detail the methods used in the analysis, and discuss the results and their relevance in the literature on the determinants of children's antisocial behaviors.

#### **Financial Stressors**

To better grasp the significance of strain caused by financial hardship, it is worthwhile to explore the leading precursors of this stressor. This focus on the causes of financial stress is important for two reasons. First, recognizing the causes of this stressor helps us more effectively relate individuals and families to the interactive process that leads to strain. Second, knowing these causes help us better predict the magnitude of the strain on individuals and families. This study looks at two socio-structural conditions (i.e., household size and poverty) and a personal attribute (i.e., depressed mood) as potential antecedents leading to economic distress.

#### Household Size

Household size is a strong predictor of a family's level of functioning. Having more mouths to feed, parents may have to spend more money on necessities. In addition, a large household size is regularly associated with an elevated level of stress and disrupted family relations. That is, the high expenditures necessary to keep the household running can create financial pressure for the parents, which in turn transform a close-knit family into a hostile and intense living environment. Parents may become more belligerent toward each other during times when money is perceived to be scarce (Conger et al. 1990). Among many things, a larger family also makes parental supervision difficult as parents must now divert their attention, limited time and resources to more children (Gottfredson and Hirschi 1990). Not only that, depending on the size of a dwelling, a large household size is frequently related to crowding in the household. Household crowding has an adverse effect on the psychological wellbeing of the household members (Baldassare 1981; Fuller et al. 1993). It is possible that living in a congested home where living space and privacy are limited provides more opportunities for disagreement and more confrontation, as well as less room to breathe and grow.

#### Poverty

Household income is a strong determinant of the amount of economic resources the family has and a predictor of how well the family is functioning. Financial hardship typically encompasses job loss, or a significant reduction in pay, as well as inadequate resources to meet basic necessities and family emergencies. Financial strain associated with poverty also entails a series of stressful events such as relocation, acquiring debts, facing the risk of eviction, and turning to welfare assistance. During economic adversity, families may be pressured to cut back expenses; others may have difficulty paying bills on time and have limited resources to go around. Families experiencing deep financial troubles may live in substandard housing in a poor neighborhood with concentrated crime rates (Wilson 1987). Rather than monitoring children's behaviors and promoting socially acceptable behaviors, parents must now combat the social problems associated with poverty and other related disadvantages (Fischer and Kmec 2004). Financial hardship can have a significant impact on the individuals to the extent that it involves tremendous alteration of one's lifestyle (Conger et al. 1994). A family's perception of whether they can make ends meet may create emotional difficulties, making it harder to access other social supports (Lever et al. 2005).

#### Depressed Mood

The mental health status of the major providers in the household is another key component in securing the family's financial well-being. This is because poor mental health is a proxy for low educational and occupational skills. Due to negative stereotypes, social labeling, public rejection and conditions associated with their illness, parents who are mentally ill face substantial barriers and challenges in the job market (e.g., Haj-Yahia 1999). Both chronic and acute mental health are consistently associated with longer duration of unemployment or unstable work history (Dorio et al. 2002; Rimmerman and Botuck 1995). Aside from the fact that parents who have a mental illness are less competitive in the job market, they also have a less positive outlook on life. Parents who are depressed, for instance, may perceive their household financial situation more negatively. Parents may become so depressed that their poor mental health interferes with their ability to bond with, supervise, and discipline their children. As such, parental depression can contribute to a wide range of negative parenting and child outcome. Their depressed mood may further distort their judgment and limit their access to social support, preventing their ability to adequately cope with stress (e.g., Bovier et al. 2004). Further, there is a reciprocal relationship between mental

health and financial strain where financial strain may generate even more psychological distress for those who lack proper coping mechanisms (Weigel and Weigel 1987).

## The Strain Perspective

From the strain perspective, the financial difficulties precipitated by a large household size, poverty, and poor mental health can engender different negative emotions such as anger, depression, fear, and frustration. These negative emotions associated with financial adversity create the need for an individual to vent in order to release tension (Agnew 1992). One of the ways to relieve this distressing experience for those who are characterized by "strain overload" is by engaging in aggressive and violent behavior (Agnew 2006; Umberson et al. 2002). Due to daily exposure and regular contact, strain appears to have the greatest impact on someone with whom an individual is intimate with, such as their partners and children. When communication exchanges between parents involve a high level of anger, strain can impact the family process by creating conflict and tension between parents, which is then extended to the parent-child subsystem through similar coercive interaction (Almeida et al. 1999; Patterson 1982). There is also a growing recognition that exposure to interparental conflict is frequently associated with a range of behavioral problems for children, in part through inadequate parenting, modeling, and poor parent-child relations (e.g., Cui and Conger 2008; Gerard et al. 2006). In summary, unresolved interparental discord has a deleterious effect on the family dynamic because it depletes parents' emotions and energy, leading to communication breakdown and parental disengagement.

#### **Interparental Discord**

Interparental discord takes several forms—from the most serious encounters, such as violence and homicide, to a less severe version of discord, such as decreased couple commitment and increased disagreement. This section examines three types of interparental discord: couple conflict and violence, couple's commitment, and parenting concordance.

## Couple Conflict and Violence

In times of desperation, financial distress can create disputes between couples as they become increasingly more likely to lash out against each other over financial matters (Conger et al. 1993). The negative interaction within a couple creates a coercive exchange process, in which one partner becomes more hostile and controlling of the behaviors of the other in order to relieve stress and tension (Umberson et al. 2002). Violence may be preceded by abusive verbal exchanges, followed by a more severe physical altercation, which increases intensity at home. However, the impact of financial strain may differ for men and women (Conger et al. 1993). Following this line of reasoning, men and women may have a dissimilar interpretation and conceptualization of the strain they experience, which distinguishes their emotional reactions and propensity to react to strain with aggression. Conger et al. (1993) found that men are more adversely affected by financial events while women are more likely to be influenced by events occurring to their family. Given the conventional cultural expectation that fathers are the main breadwinners while mothers are the primary caregivers, financial difficulties may have a greater impact on men compared to women as they are associated with the economic security of the household (Conger et al. 1993; Liker and Elder 1983).

In terms of coping, a number of studies have demonstrated that women are more likely to internalize their distress while men are more likely to react to stress with anger (Jang 2007; Nolen-Hoeksema et al. 1999). If that is the case, unemployment and financial insecurity may be more relevant to men's violence against their female partners since it is perceived as threatening their manhood. Besides these emotional dispositions, the relationship between strain and conflict is also facilitated by other factors such as the availability of coping mechanisms (Agnew 2006). Women are more interpersonally-oriented and thus have more social support to cope with distress than men (Wright and Keple 1981). Since women work harder to preserve the quality of their relationships and have greater concerns about the well-being of others (Beutel and Marini 1995), they may be less inclined to reciprocate violence with violence. Even if they do, it is less likely to result in serious physical injury given woman's physical size and strength relevant to their male counterparts. On the contrary, it is still considered more culturally acceptable for men to express their anger in order to gain control of others (Concepción et al. 2009).

The fact that couple conflict and violence inhibit effective parenting and promote children's maladjustment is widely discussed in the marital conflict literature (Harold and Conger 1997; Kaczynski et al. 2006). Perception of financial hardship can create pressures, leading to demoralization for both parents and disruptions in skillful parenting (Conger et al. 1994). In most cases, tension between parents that spills over to their children undermines parent-child attachment and interaction patterns (Almeida et al. 1999; Patterson 1982). The cumulative effect of financial strain and parental violence tends to cause psychological distress on children (Conger et al. 1994) as parents who are angry with each other are also likely to respond to their children the same way. Parents may become so absorbed by their marital problems that they have less positive interactions with their children (Almeida et al. 1999; Cui and Conger 2008) and are less capable of monitoring their children's behaviors. Mclovd et al. (1994) found that parents who are constantly worried about money may employ a more punitive disciplinary strategy with their children but their sample of population is limited to single mothers. Other compelling evidence suggests that parents in marital conflicts may become less effective and tolerant in dealing the challenges brought upon by childrearing and child misconduct (Gerard et al. 2006; Mistry et al. 2002). Children who are subjected to rejection and harsh punishment, in turn, are more likely to develop a number of emotional and behavioral concerns (Fauber et al. 1990). Social learning theorists have contended that children who have been exposed to parental violence are more likely to regard violence as acceptable and normal, and as such, they are more likely to manifest these behaviors with their peers (Christie-Mizell 2003). Witnessing overt hostility between parents can be very distressing (Harold and Conger 1997); therefore, it is possible that children may act out to gain parents' attention and affection. In short, interparental conflict can have an adverse impact on children's development.

#### Parenting Concordance

Parenting concordance is crucial to children's psychological and emotional well-being in part through consistency in parenting. By concordance, I mean the ability of both parents to reach an amicable agreement concerning parenting and childrearing. Couples who are aggressive to each other may have diminished interested in parenting and face difficulties reaching consensus concerning their children. In many instances, parents may not see eye to eye on parenting. They may disagree on how to discipline their children, or who is responsible for a specific task. Due to poor communication and less quality time with each other, parenting at the same pace becomes increasingly challenging-that is, one parent may employ a different disciplinary strategy than the other. Inconsistency is likely to lead to less conformity to parental rules on the children's behalf, even if both parents may be very nurturing, due to the children becoming confused about their parents' expectations. Compromising for the sake of the children can be hard given that both parents are already overwhelmed by the negative feelings associated with conflict and violence. Any further verbal altercation to gain compliance may backfire and result in more tension in their relationship. Nevertheless, if parents are able to reach agreement, peace can be restored and commitment in parenting strengthened.

Concordance in parenting improves the emotional wellbeing of both parents, since it is also related to a higher level of spousal support. Parents who are happy and supportive of each other are more inclined to engage in constructive parenting (Rogers and White 1998). Constructive parenting is a buffer for children's antisocial behaviors as parents who are attentive take the time to reason and help their children develop effective problem-solving skills. These parents are also more inclined to set limits and enforce rules (Dorius et al. 2004).

Gender related socialization may account for differences in parenting as most people continue to perceive men and women to be experts in different domains of the family (Simons et al. 1990). Although the roles of fathers are becoming more salient, women continue to do the lion's share of the caretaking chores (Shelton 2000). Fathers, whose roles continue to center on playing, contribute significantly less time to household chores and day care (Hochschild and Machung 1989). Additionally, mothers bear the most emotional cost if family is disrupted as women are generally more interpersonally oriented compared to men (Wright and Keple 1981), their behaviors are therefore affected more by the quality of the relationship with their male partner (Simons et al. 1990). Therefore, it is logical to infer that concordance in parenting with their spouse has more impact on mothers' behaviors and perception about their children as compared to those of the fathers. In other words, mothers who are in constant disagreements with their spouse as how to parent may perceive their relationship more negatively and may become more likely to have a negative perception on their children as well.

#### Couple Commitment

From the strain perspective, interparental conflict and violence within couples are likely to weaken their relationship to the extent that it undermines their commitment and positive parenting (Almeida et al. 1999; Patterson 1982). From the rational choice perspective, most people strive to maximize benefits and minimize costs in their interactions with others by making rational calculations on the pros and cons of maintaining a relationship (Cherlin 2000). If the cons outweigh the pros, the relationship is likely to lead to dissolution. Women who have experienced unresolved conflicts and violence in their relationships may perceive themselves to be more disadvantaged, and therefore may become less committed to their male partners. Similarly, parents who are less committed to each other may become less committed to their children. The reasoning behind this is that those who are satisfied with their relationships are more contented with parenting and more responsive to their children's needs (e.g., Simons et al. 1990). Parents who are happy and committed to each other are likely to provide support to each other. Supportive spouses, for example, are more likely to provide assistance in child care and child rearing. If a man sees his partner as supportive, he may be persuaded to take on a supportive parenting role. Strongly committed couples, due to their greater devotion to the family, may work harder to monitor their children's behaviors and provide an environment that is less conducive to crime for their children. As a result, the indirect adverse impact associated with poverty and parental violence may have less of an impact on the family. While children with attentive parents are better adjusted socially, insecure children who fear abandonment may manifest a number of externalizing behaviors in an attempt to re-gain their parents' attention (Ablow et al. 2009; Leon 2003).

#### Statement of Problem

This study investigates the impact of financial strain on family functioning and the potential mediating effect of interparental discord on children's antisocial behaviors. To assess these effects, I examine three types of interparental discord: couple's conflict and violence, interparental commitment, and parenting concordance. Figure 1 provides the conceptual and theoretical framework guiding this study. My hypothesized model suggests that economic hardship can set in motion a series of events that create tension in a couple's relationship. The emotional distress associated with financial hardship is hypothesized to influence parents' perception and subjective experiences of economic hardship, which are expected to jeopardize positive interaction and constructive parenting. In other words, the pressure from trying to make ends meet with limited income and resources puts their stable relationship at risk in part due to constant negative interaction between them. All three types of couple's discord mentioned earlier are hypothesized to have a negative and significant effect on children's behavioral outcome. However, fathers' reaction in response to financial security is expected to be more salient since it upsets their social role affiliation and identity formation (Conger et al. 1992; Liker and Elder 1983).

Besides a direct effect, interparental conflict is expected to have an indirect effect on children's antisocial behaviors through two mechanisms. The first mechanism suggests that interparental conflict creates more disagreement on parenting and contributes to children's antisocial tendency through inconsistency in parenting. The second mechanism infers that interparental conflict leads to children's behavioral problems through a decrease in commitment to spouse and a subsequent reduction in devotion to the family as a whole. Although not directly tested, I presume that most instances of interparental discord examined here are associated with poor parenting and weakened parent-child relationship caused by strain. Since women work harder to preserve the quality of a relationship and mothers tend to be regarded as the primary caregiver for their children compared to fathers, I anticipate all three types of interparental discord to exert a great impact on the mothers.

Structural background and demographic characteristics, such as household size, poverty ratio and mental health status, are examined in my analysis. These variables are important in terms of their effects on family economic



Fig. 1 Hypothesized one-way process model of interparental discord as the mediator of the relationship between financial strain and children's antisocial behaviors

security, but these characteristics are presumed to have very little direct influence on young children's antisocial behaviors. All these exogenous variable work simultaneously or independently to influence the first endogenous variable-financial strain. In theory, a higher number of family members in the household minimize the share of the family's resources and puts more financial burden on the provider. The poverty ratio, a measure of how the family is functioning at the national poverty level, is presumed to have an inverse association with financial strain, as families who are living above the poverty line are presumed to be better off financially. Finally, parents who are depressed are at an increased risk of perceiving their financial situation more pessimistically. Since depressed mood can affect parents' outlook on their discord and children's behavior, I also test the implied direct relationships to ensure accurate assessment of interparental discord and child outcome (hypothetical relationships are not shown on Fig. 1).

To increase the external validity of this study, I use parents as my informants, since parents are more familiar with their children and therefore are more likely to provide the most reliable information concerning their children's behaviors. To account for separate perspective and to minimize bias resulting from a reliance on any single source, I use responses from both mothers and fathers with the assumption that gender may affect the outcome of my study. The age range of their children is between four and five. This particular age group of children is selected because this is the life stage where antisocial behaviors are becoming more salient for children. Even so, the causal order of my study suffers from utilizing cross-sectional data. As such, the causal link between economic strain and children's antisocial behaviors cannot be inferred from these data. Rather than drawing causal conclusion from the data, this study serves to provide a preliminary understanding of the impact of financial strain on family functioning and child outcomes.

## Method

## Data

The study utilizes data from the Fragile Families and Child Well-Being Study that follows a cohort of approximately 5,000 children born in 75 hospitals in 20 large cities in the United States since 1998 (see http://www.fragilefamilies.princeton. edu or Reichman et al. 2001 for more information ). Sixteen of the 20 cities were selected using a 3-stage stratified random sampling technique that includes sampling in cities, hospitals within the cities, and the births within the hospitals. These cities were selected based on their child support policy, welfare generosity, and current labor market conditions.

Baseline interviews with the focus children's biological parents in the hospitals were conducted between February, 1998 and September, 2000 when the children were born. Both parents were interviewed again when the children turned one, three, and five. The Wave 4 data, which are the main focus of the analysis of this study, were collected between July, 2003 and February, 2006, during the 5-year follow-up, when children were between the ages of four and five (Reichman et al. 2001). The response rate for the latest wave (Wave 4) is 87%. My analysis focuses only on cohabiting or married mothers and fathers who claimed to be living with their children at least half of the time. I also restrict my analysis to cases without any missing values, using listwise deletion.

#### Measures

#### Dependent Construct

Children's antisocial behavior is the dependent latent construct in my analysis. I operationalize this construct as overt or covert disruptive behaviors that can result in psychological harm or physical damage to oneself or others. To measure the children's antisocial behaviors, parents were asked to indicate using a three-point scale ranging from "not true" (coded as 0) to "very true or often true" (coded as 2) how often their children display behavioral difficulties such as disobedience, stubbornness, moodiness, temper tantrums, etc (see Appendix 1). These items are taken from the behavioral problems index developed by Peterson and Zill (1986). Five of the items capture externalizing behaviors that measure defiance, irritability and hostility, while only one item (item 2) captures the internalizing behaviors that assess withdrawn or depressive behaviors. Scores are recoded so that higher scores represent a higher level of antisocial behaviors; a low score can be interpreted as exhibiting less antisocial behaviors. All six items are used as indicators for the latent construct that taps into children's antisocial behavior. Cronbach's Alpha from the correlation analysis for mothers' and fathers' measure is .71 and .69 respectively. T-test analysis indicates that while mothers have a significant tendency to report a higher incidence of child disobedience and stubbornness than fathers, fathers reported more incidents on the lack of remorse from their children (see Table 1).

## **Exogenous Constructs**

Poverty ratio, calculated by dividing the household income with the country's current poverty threshold, is represented by a continuous variable (mean value = 2.78; SD=2.71 for

**Table 1** Descriptive statisticsfor variables in the analyses

Variable	Mothers		Fathers	<i>t</i> -test	
	Mean	Std Dev	Mean	Std Dev	
Children's antisocial behaviors					
1. Disobedient	0.51	0.59	0.44	0.56	3.06 **
2. Difficulty with peers	0.17	0.42	0.16	0.41	0.64
3. No remorse	0.37	0.57	0.46	0.65	-3.63 ***
4. Stubborn	0.56	0.63	0.49	0.61	2.78 **
5. Moody	0.41	0.56	0.39	0.56	0.76
6. Hot temper	0.50	0.61	0.48	0.61	0.77
Interparental conflict and violence					
7. Emotional abuse	1.37	0.39	1.33	0.34	2.70 **
8. Physical attack and control	1.02	0.12	1.06	0.18	-6.94 ***
9. Power control	1.08	0.20	1.11	0.23	-3.91 ***
Couple's commitment					
10. Importance	3.43	1.29	4.14	1.03	-15.16 ***
11. Long lasting	4.23	1.07	4.46	0.88	-5.82 ***
12. Inseparable	4.19	1.03	4.38	0.94	-4.88 ***
13. Strong will	4.56	0.75	4.63	0.74	-2.20 *
14. Sexual satisfaction	4.30	0.90	4.39	0.89	-2.42 *
15. Faithfulness	4.24	1.04	4.48	0.86	-6.39 ***
Parenting concordance					
16. Well-behaved	3.74	0.50	3.85	0.38	-5.84 ***
17. Trust	3.94	0.29	3.98	0.15	-5.05 ***
18. Respect rules	3.72	0.53	3.81	0.45	-4.36 ***
19. Support	3.77	0.48	3.81	0.42	-2.59 **
20. Communication	3.79	0.54	3.85	0.46	-2.71 **
21. Dependable	3.87	0.39	3.96	0.24	-7.10 ***
22. Respect wishes	3.76	0.49	3.87	0.36	-6.65 ***
Financial strain					
23. Difficulty paying bills	0.18	0.21	0.17	0.21	0.79
24. Difficulty buying foods	0.04	0.14	0.02	0.11	2.39 *
25. Difficulty paying for housing	0.01	0.08	0.01	0.08	0.17
Structural and demographic character	ristics				
26.Household size	4.73	1.40	4.69	1.44	0.75
27. Poverty ratio	2.78	2.71	3.18	3.37	-3.23 **
28. Mental health	0.17	0.38	0.10	0.30	5.28 ***

mothers; mean value = 3.18; SD=3.37 for fathers). Poverty ratio, instead of household income, is preferred in this study because this measure provides the most relevant information of how the family is doing financially relative to the poverty line. While some households may be poorer and other households richer, on average, households in my sample have an income level that is approximately 2 times or 3 times above the level of poverty. The measure for both parents are significantly correlated (r=.70; p<.001).

Parents' depressed mood is assessed by parents indicating if they have "felt sad, blue or depressed for two or more weeks in a row" for the past year. Those who indicate that they have are coded as 1, and those who indicate otherwise are coded as 0. Only about 10% of the mothers and 17% of the fathers indicate they have exhibited these feelings. Both reports of mental health history are minimally correlated (r=.12; p<.001). This measure is particularly important since parents' psychological health can influence their perception of their financial capacity and relations with other household members.

Finally, the size of the household is represented by a continuous variable that captures the total number of adults and children residing in the household. Table 1 shows that an average household in my sample has approximately four people. Both parental reports are highly correlated (r=.79; p<.001).

#### Endogenous Constructs

In this study, financial strain is a measure of individuals' perceptions of financial difficulties and their responses caused by financial hardship (Conger et al. 1992). This latent construct, influenced by poverty ratio, household size and depressed mood, is represented by three indicators. The first indicator is a seven-item scale which assesses the parents' ability to pay their mortgage, utility, medical expenses, clothes, etc, in the past 12 months (Cronbach's alpha=.67 and .69 for mothers and fathers, respectively). The second indicator is a three-item scale that estimates the parents' difficulty in paying for food and groceries in the past year (Cronbach's alpha=.61 and .52 for mothers and fathers respectively). The third indicator is a three-item scale that evaluates the parents' difficulty in paying for accommodations. This subscale questions parents' experiences on eviction and relocation due to inability to pay for housing expenses (Cronbach's alpha=.50 and .49 for mothers and fathers, respectively). For all three subscales, parents who indicate difficulty are coded 1, while those who note otherwise are coded 0. The responses were summed to form three composite measures of financial strain. Cronbach's Alpha from the correlation analysis of this measure for mothers and fathers is .54 and .58 respectively.

#### Mediating Constructs

Interparental conflict and violence, operationalized as any open or subtle disagreement between parents that take on any format ranging from verbal confrontation to physical altercation, is a latent construct represented by three indicators. While it is beneficial to capture the level of conflict and violence by measuring many observable indicators, this study is interested in a more holistic measure of discord. Each indicator is a subscale using the response format ranging from "often" (coded as 1) to "never" (coded as 3). The first indicator, the emotional abuse scale, is a subscale of six items, intended to assess the extent to which parents see their partners as not supportive, caring, uncritical, and understanding (see Appendix 1) (Cronbach's Alpha=.78 and .73 for mothers and fathers respectively). The second indicator, the physical attack and control scale, is a subscale of five items that asks the parents if their partners have kicked, slapped, hit, hurt, thrown things at, pushed or forced sex on them (see Appendix 1) (Cronbach's Alpha=.80 and .77 for mothers and fathers, respectively). The third indicator, the power control scale, is a subscale of five items that questions the parents if their partners have tried to control their social life, sex lives or parenting behaviors (see Appendix 1) (Cronbach's Alpha=.65 and 59 for mothers and fathers, respectively). Prior to summing, scores are recoded so that higher scores indicate a higher level of interparental conflict and violence. Cronbach's Alpha from the correlation analysis of the interparental conflict and violent measure is .69 and .75 for mothers and fathers, respectively.

Parenting concordance, a measure of the degree to which parents can reach consensus in parenting, is another latent construct that is represented by seven indicators. Parents were asked to respond if their partners are dependable, respectful, and supportive to the ways that they want their children to be raised (see Appendix 1). Possible responses for the items prior to summing are likert-type responses ranging from "always true" (coded as 4) to "never true" (coded as 1). Scores are recoded so that higher scores reflect a higher level of parenting concordance, while lower scores signify a lower level of concordance. Cronbach's Alpha from the correlation analysis for mothers' and fathers' measure are .79 and .71, respectively

Couple commitment, a measure of how dedicated parents are to making their intimate relationships last, is represented by six indicators. Using a response format ranging from "strongly disagree" (coded as 1) to "strongly agree" (coded as 5), parents were asked if they perceive their relationship with their spouse as inseparable, satisfying or long lasting (see Appendix 1). Scores are recoded so that higher scores reflect a higher level of parenting commitment. Cronbach Alpha's from the correlation analysis for mothers' and fathers' measure is 0.78 and 0.76, respectively.

The means, standard deviation, and *t*-test for variables of study for mothers and fathers are presented on Table 1.

#### Analytic Approach

I use Structural Equation Modeling (SEM) to test the empirical credibility and validity of my conceptual model. Maximum likelihood is used to estimate the measurement and structural model parameters for both mothers and fathers. The measurement model illustrates the strength of the hypothesized relationship between the observed indicator variables and their respective latent construct. The structural model describes the magnitude of the hypothesized causal relationship among the constructs (Ullman 1996). The unconstrained models, with no parameters restricted to be equal, represent the baseline models. To test for measurement invariance across groups, I conduct a multiple group analysis by constraining the factor loadings between groups. The goal of constraining the factor loadings is to test the null hypothesis that the same measurement model is indeed shared by both genders and to examine the assumption that the measurement models for both genders are comparable. A chi-square difference test is performed between the baseline model and a more

restrictive model. A significant  $X^2$  will result in rejecting the null hypothesis that the model is invariant for both genders (see Ullman 1996). Overall, a measurement model with factor loadings not significantly different across groups indicates that both genders are comparable on the meanings they assigned to the latent constructs. If measurement invariance is upheld, further analysis will be conducted to test for structural invariance.

#### Measurement Model

The correlation matrix for variables of the study is represented in Table 2. As a whole, the direction and magnitude of the correlations between indicators do not seem to deviate from the expectation of this study. The correlation analysis also indicates good convergent and discriminant validity as the correlation between the indicators for each construct tends to be stronger among the indicators than with those of other construct or variables (Knoke et al. 2002).

Table 3 presents the standardized factor loadings of the measurement variables on each latent construct. Multiple group analysis shows that the comparison of the constrained model ( $X^2$ =2224.05, df=685, RMSEA=.0429, AGFI=.8518) and the baseline model ( $X^2$ =2057.02, df=665, RMSEA=.0414, AGFI=.8589) indicate a statistically significant difference between the two models ( $\Delta X^2$ =167.03,  $\Delta df$ =20; p<.05). In other words, the constrained

model fit the data slightly worse than the baseline model. The  $\Delta$ RMSEA is +.0015 and the  $\Delta$ AGFI is -.0071 demonstrated that there is indeed a decrement of fit between the baseline model and the constrained model. The factor loadings are also not invariant between groups. To analyze if the noninvariance is relevant to a specific factor, further investigation is carried out by constraining the factor loadings of each set of factors and freeing one factor at a time (see Garson 2009). Additional testing also result in a significant chi square value (output not shown), indicating that both mothers and fathers are indeed different in their conceptualization of all latent constructs examined in this study. Since measurement invariance is not supported, there is little justification to test for structural invariance for both genders, as any differences in their responses, association among the latent constructs as well as the observed variables, are likely to be caused by different conceptualization of the factors to begin with. To state this differently, cross comparison of both models is no longer meaningful due to nonequivalent measures (Vandenberg and Lance 2000). That is, mothers' and fathers' models are unique in their own sense.

#### Structural Model

The hypothesized model for both mothers and fathers each produces a GFI of .94, AGFI of .93 and a RMSEA of .04, indicating a fairly good fit of data to the model. Although

Table 2 Correlation matrix for variable of study by gender of the parents

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Disobedient	0.21 ***	0.22 ***	0.22 ***	0.39 ***	0.28 ***	0.35 ***	0.16 ***	0.14 ***	0.13 ***	-0.02	-0.05	-0.10 ***	-0.04
2. Difficulty with peers	0.28 ***	0.15 ***	0.13 ***	0.22 ***	0.19 ***	0.20 ***	0.17 ***	0.11 ***	0.15 ***	0.00	-0.09 **	-0.03	-0.04
3. No remorse	0.19 ***	0.20 ***	0.11 ***	0.18 ***	0.24 ***	0.23 ***	0.09 **	0.11 ***	0.11 ***	-0.02	-0.04	-0.05	-0.01
4. Stubborn	0.38 ***	0.26 ***	0.22 ***	0.26 ***	0.37 ***	0.45 ***	0.15 ***	0.13 ***	0.17 ***	-0.02	-0.08 **	-0.05	-0.03
5. Moody	0.32 ***	0.25 ***	0.26 ***	0.38 ***	0.19 ***	0.42 ***	0.17 ***	0.22 ***	0.23 ***	-0.03	-0.14 ***	-0.06 *	-0.05
6. Hot temper	0.35 ***	0.24 ***	0.19 ***	0.44 ***	0.39 ***	0.32 ***	0.17 ***	0.19 ***	0.19 ***	-0.05	-0.11 ***	-0.09 **	-0.06 *
7. Emotional abuse	0.17 ***	0.14 ***	0.09 **	0.13 ***	0.13 ***	0.09 **	0.29 ***	0.42 ***	0.50 ***	-0.17 ***	-0.35 ***	-0.18 ***	-0.20 ***
8. Physical attack and control	0.10 ***	0.05	0.10 ***	0.11 ***	0.11 ***	0.05	0.28 ***	0.23 ***	0.56 ***	-0.12 ***	-0.27 ***	-0.11 ***	-0.08 **
9. Power control	0.11 ***	0.12 ***	0.10 ***	0.12 ***	0.11 ***	0.08 **	0.52 ***	0.47 ***	0.23 ***	-0.17 ***	-0.26 ***	-0.11 ***	-0.10 ***
10. Importance	-0.01	-0.02	-0.02	0.01	-0.03	0.00	-0.20 ***	-0.11 ***	-0.14 ***	0.11 ***	0.29 ***	0.27 ***	0.25 ***
11. Long lasting	-0.06 *	-0.12 ***	-0.09 **	-0.06 *	-0.14 ***	-0.06 *	-0.45 ***	-0.22 ***	-0.33 ***	0.31 ***	0.17 ***	0.28 ***	0.27 ***
12. Inseparable	-0.03	-0.08 **	-0.03	-0.01	-0.03	0.00	-0.26 ***	-0.11 ***	-0.18 ***	0.24 ***	0.30 ***	0.02	0.47 ***
13. Strong will	-0.04	-0.05	-0.03	0.00	-0.04	0.00	-0.29 ***	-0.18 ***	-0.20 ***	0.23 ***	0.39 ***	0.49 ***	0.06 *
14. Sexual satisfaction	-0.10 ***	-0.10 ***	-0.02	-0.08 **	-0.10 ***	-0.01	-0.43 ***	-0.25 ***	-0.30 ***	0.18 ***	0.34 ***	0.38 ***	0.52 ***
15. Faithfulness	-0.07	-0.12 ***	-0.07 *	-0.05	-0.12 ***	-0.05	-0.49 ***	-0.25 ***	-0.31 ***	0.31 ***	0.48 ***	0.39 ***	0.49 ***
16. Well - behaved	-0.14 ***	-0.06 **	-0.05	-0.08 **	-0.10 ***	-0.08 **	-0.48 ***	-0.21 ***	-0.35 ***	0.20 ***	0.34 ***	0.15 ***	0.22 ***
17. Trust	-0.03	-0.03	0.01	-0.03	-0.03	-0.01	-0.31 ***	-0.34 ***	-0.31 ***	0.14 ***	0.21 ***	0.10 ***	0.15 ***
18. Respect rules	-0.15 ***	-0.05	-0.04	-0.10 ***	-0.10 ***	-0.10 ***	-0.40 ***	-0.21 ***	-0.27 ***	0.17 ***	0.25 ***	0.12 ***	0.13 ***
19. Support	-0.15 ***	-0.07 *	-0.06 *	-0.16 ***	-0.08 **	-0.11 ***	-0.48 ***	-0.23 ***	-0.36 ***	0.19 ***	0.30 ***	0.14 ***	0.19 ***
20. Communication	-0.07 **	-0.04	-0.05	-0.04	-0.06 *	-0.03	-0.33 ***	-0.16 ***	-0.23 ***	0.15 ***	0.23 ***	0.19 ***	0.19 ***
21. Dependable	-0.13 ***	-0.08 **	-0.04	-0.13 ***	-0.07 *	-0.09 ***	-0.39 ***	-0.23 ***	-0.35 ***	0.12 ***	0.25 ***	0.18 ***	0.18 ***
22. Respect wishes	-0.12 ***	-0.11 ***	-0.06 *	-0.14 ***	-0.10 ***	-0.11 ***	-0.45 ***	-0.21 ***	-0.33 ***	0.18 ***	0.31 ***	0.20 ***	0.22 ***
23. Difficulty paying bills	0.09 **	0.03	0.04	0.12 ***	0.13 ***	0.11 ***	0.27 ***	0.15 ***	0.23 ***	-0.15 ***	-0.21 ***	-0.01	-0.04
24. Difficulty buying foods	0.03	0.03	0.06 *	0.02	0.06	0.05	0.14 ***	0.12 ***	0.14 ***	-0.08 **	-0.12 ***	-0.02	-0.03
25. Difficulty paying for housing	0.01	0.01	0.05	0.03	0.04	0.04	0.08 **	0.02	0.05	-0.05	-0.10 ***	-0.01	-0.02
26. Household size	0.00	0.06 *	0.02	-0.01	0.01	0.00	0.04	0.00	0.04	-0.02	-0.02	-0.02	-0.02
27. Poverty ratio	0.03	-0.04	-0.10 ***	0.00	-0.10 ***	-0.02	-0.10 ***	-0.09 **	-0.11 ***	0.16 ***	0.14 ***	0.06 *	0.09 **
28. Mental health	0.07 *	0.04	0.02	0.13 ***	0.13 ***	0.12 ***	0.20 ***	0.13 ***	0.20 ***	-0.04	-0.15 ***	-0.03	-0.08 **

Note: Coefficients above the diagonal represent the correlations between variables for fathers; coefficients below the diagonal represent correlations between variables for mothers;

and highlighted coefficients along the diagonal represent correlations between mothers' and fathers' responses. Each latent construct is represented by a box.

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Correlation Matrix for Variable of Study by Gender of the Parents.

Correlation Matrix for Variable of Study by Gender of the Parents.														
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
-0.11 ***	-0.04	-0.16 ***	-0.06 *	-0.13 ***	-0.20 ***	-0.04	-0.06 *	-0.13 ***	0.07 *	0.06 *	0.04	0.01	0.00	0.13 ***
-0.10 ***	-0.11 ***	-0.06 **	0.01	-0.09 ***	-0.10 ***	-0.05	-0.04	-0.08 **	0.05	0.07 *	0.05	0.05	-0.07 *	0.08 **
-0.06 *	-0.04	-0.07 *	0.02	-0.07 *	-0.05	-0.09 **	-0.07 *	-0.04	0.08 **	0.06 *	0.01	0.01	-0.07 *	0.01
-0.09 **	-0.03	-0.11 ***	-0.02	-0.15 ***	-0.15 ***	-0.03	-0.05	-0.14 ***	0.07 *	0.10 **	0.02	-0.01	-0.03	0.14 ***
-0.05	-0.06 *	-0.11 ***	-0.06 *	-0.14 ***	-0.14 ***	-0.05	-0.08 **	-0.14 ***	0.14 ***	0.13 ***	0.06 *	0.04	-0.07 **	0.16 ***
-0.08 **	-0.07 *	-0.13 ***	-0.04	-0.15 ***	-0.15 ***	-0.06 *	-0.02	-0.16 ***	0.09 **	0.09 **	0.03	-0.04	-0.05 *	0.12 ***
-0.32 ***	-0.35 ***	-0.39 ***	-0.18 ***	-0.36 ***	-0.42 ***	-0.24 ***	-0.19 ***	-0.37 ***	0.23 ***	0.19 ***	0.14 ***	-0.02	-0.08 **	0.27 ***
-0.20 ***	-0.29 ***	-0.22 ***	-0.14 ***	-0.26 ***	-0.31 ***	-0.10 ***	-0.12 ***	-0.21 ***	0.26 ***	0.19 ***	0.18 ***	0.03	-0.07 *	0.29 ***
-0.20 ***	-0.27 ***	-0.32 ***	-0.17 ***	-0.37 ***	-0.38 ***	-0.17 ***	-0.24 ***	-0.28 ***	0.26 ***	0.22 ***	0.18 ***	0.04	-0.09 ***	0.26 ***
0.21 ***	0.29 ***	0.12 ***	0.06 *	0.10 ***	0.12 ***	0.13 ***	0.08 **	0.09 **	-0.12 ***	-0.05	-0.04	0.04	0.05	-0.08 **
0.28 ***	0.32 ***	0.20 ***	0.15 ***	0.16 ***	0.16 ***	0.15 ***	0.11 ***	0.16 ***	-0.14 ***	-0.11 ***	-0.07 *	0.05	0.11 ***	-0.13 ***
0.36 ***	0.37 ***	0.08 **	0.05	0.07 *	0.07 *	0.14 ***	0.10 ***	0.03	-0.06 *	-0.03	0.10	0.05	0.04	-0.04
0.52 ***	0.52 ***	0.10 ***	0.10 ***	0.07 *	0.05	0.12 ***	0.06 *	0.04	-0.07 *	-0.03	0.00	0.01	0.07 **	-0.07 *
0.13 ***	0.48 ***	0.18 ***	0.09 ***	0.19 ***	0.18 ***	0.17 ***	0.06 *	0.11 ***	-0.09 **	-0.05	-0.06 *	0.05	-0.04	-0.15 ***
0.52 ***	0.20 **	0.21 ***	0.16 ***	0.24 ***	0.21 ***	0.23 ***	0.10 ***	0.16 ***	-0.16 ***	-0.13 ***	-0.09 **	0.01	0.09 **	-0.19 ***
0.25 ***	0.34 ***	0.09 **	0.28 ***	0.40 ***	0.41 ***	0.19 ***	0.17 ***	0.38 ***	-0.13 ***	-0.09 **	-0.10 ***	0.03	0.05	-0.14 ***
0.23 ***	0.24 ***	0.35 ***	0.05	0.18 ***	0.15 ***	0.09 **	0.19 ***	0.18 ***	-0.09 **	-0.08 **	0.00	-0.04	0.04	-0.12 ***
0.21 ***	0.26 ***	0.37 ***	0.26 ***	0.09 **	0.63 ***	0.19 ***	0.13 ***	0.40 ***	-0.13 ***	-0.16 ***	-0.18 ***	0.03	0.03	-0.20 ***
0.31 ***	0.34 ***	0.45 ***	0.28 ***	0.53 ***	0.20 ***	0.26 ***	0.11 ***	0.51 ***	-0.16 ***	-0.16 ***	-0.15 ***	0.01	0.05	-0.17 ***
0.23 ***	0.22 ***	0.32 ***	0.17 ***	0.27 ***	0.40 ***	0.10 ***	0.16 ***	0.21 ***	-0.07 *	-0.05	-0.08 **	-0.01	0.07 *	-0.09 **
0.21 ***	0.26 ***	0.38 ***	0.29 ***	0.30 ***	0.34 ***	0.25 ***	0.04	0.20 ***	-0.07 *	-0.04	0.00	0.02	0.05	-0.07 *
0.29 ***	0.31 ***	0.42 ***	0.23 ***	0.42 ***	0.52 ***	0.36 ***	0.37 ***	0.15 ***	-0.14 ***	-0.07 *	-0.11 ***	-0.05	0.04	-0.20 ***
-0.11 ***	-0.17 ***	-0.22 ***	-0.16 ***	-0.16 ***	-0.14 ***	-0.09 **	-0.09 **	-0.16 ***	0.33 ***	0.34 ***	0.26 ***	0.12 ***	-0.23 ***	0.26 ***
-0.05	-0.11 ***	-0.11 ***	-0.13 ***	-0.06 *	-0.06	-0.08 **	-0.07 **	-0.05	0.38 ***	0.25 ***	0.34 ***	0.13 ***	-0.14 ***	0.19 ***
-0.04	-0.05	-0.07 *	-0.05	-0.04	-0.03	-0.02	-0.06 *	-0.04	0.24 ***	0.22 ***	0.15 ***	0.10 ***	-0.09 **	0.20 ***
-0.01	-0.09 **	-0.03	0.03	0.03	0.03	-0.01	0.02	-0.01	0.03	0.07 *	0.01	0.79 ***	-0.19 ***	0.07 *
0.02	0.16 ***	0.07 *	0.06 *	-0.01	0.02	0.07 *	-0.01	0.02	-0.23 ***	-0.14 ***	-0.11 ***	-0.23 ***	0.70 ***	-0.05
-0.13 ***	-0.14 ***	-0.10 ***	-0.11 ***	-0.12 ***	-0.13 ***	-0.08 **	-0.09 **	-0.14 ***	0.28 ***	0.15 ***	0.21 ***	0.03	-0.06 *	0.12 ***

fit indices indicate that the model applies to both genders, each model should be interpreted independently due to measurement non invariance. As predicted, depressed parents are significantly more likely to become financially strained (B=.36 and .37 for mothers and fathers respectively, p < .001) (see Figs. 2 and 3). Parents who claimed to be depressed are also significantly more likely to report a higher level of interparental conflict and violence (B=.13,p < .01 for mothers and B=.22, p < .001 for fathers). While depressed mothers perceive their children's behaviors more negatively (B=.10, p < .01), this is, however, not the case for fathers. A depressed mood has no significant impact on couple's commitment and parenting concordance for either gender. For both mothers and fathers, poverty ratio is inversely related to financial strain (B=-.29 and -.24 respectively, p < 0.001). Household size shows a positive association with father's financial strain (B=.11, p<.01), but has no significant effect on the mothers. Overall, the structural and demographic constructs account for 22% and 23% of the variance in financial strain for mothers and fathers respectively.

Analysis also indicates a positive and significant relationship between financial strain and interparental couple conflict and violence (B=.35 and .43 for mothers and fathers respectively, p<.001). That is, the higher the level of strain reported by the parents, the greater the level of interparental couple conflict and violence that follows. Both couple's commitment (B=-.70 and -.46 for mothers and fathers respectively, p < .001) and parenting concordance (B=-.84 and -.69 for mothers and fathers respectively, p < .001) have a negative association with interparental conflict but have no effect on children's antisocial behaviors. No significant path can be found between couple's commitment and parenting concordance on child outcome, perhaps because they both share a common cause—interparental conflict and violence. In other words, the couple's commitment and parenting concordance work together with interparental conflict to determine the child outcome.

## Discussion

There is growing evidence that families facing financial hardship are at grave risk for marital discord (Kwon et al. 2003; Liker and Elder 1983). An impressive body of research also suggests that many delinquents come from broken homes or disrupted families (Sampson and Laub 1993, 1994; Shaw and McKay 1969). Without establishing a proper process linkage between these two empirical findings, many crucial social determinants of healthy family functioning are overlooked or misguided. This study explores the family dynamics of those facing economic hardship with the primary goal of linking these two pieces of the puzzle together. In this study, SEM was used to predict the connection between family financial adversity and its residual effect on young children's antisocial

**Table 3** Factor loadings for themeasurement variables andCronbach coefficients for thelatent constructs

	Mothers' factor loadings	Father's factor Loadings
Children's antisocial behaviors	Alpha=0.71	Alpha=0.69
1. Disobedient	0.57	0.55
2. Difficulty with peers	0.42	0.34
3. No remorse	0.36	0.35
4. Stubborn	0.66	0.65
5. Moody	0.60	0.60
6. Hot temper	0.63	0.67
Interparental conflict and violence	Alpha=0.69	Alpha=0.75
7. Emotional abuse	0.80	0.70
8. Physical attack and control	0.45	0.66
9. Power control	0.65	0.75
Couple's commitment	Alpha=0.78	Alpha=0.76
10. Importance	0.38	0.40
11. Long lasting	0.62	0.46
12. Inseparable	0.55	0.57
13. Strong will	0.67	0.70
14. Sexual satisfaction	0.68	0.67
15. Faithfulness	0.77	0.73
Parenting concordance	Alpha=0.79	Alpha=0.71
16. Well-behaved	0.65	0.57
17. Trust	0.45	0.28
18. Respect rules	0.61	0.73
19. Support	0.73	0.80
20. Communication	0.49	0.32
21. Dependable	0.54	0.23
22. Respect wishes	0.67	0.61
Financial strain	Alpha=0.54	Alpha=0.58
23. Difficulty paying bills	0.75	0.62
24. Difficulty buying foods	0.50	0.57
25. Difficulty paying for housing	0.35	0.48

All factor loadings are significant at the level of p < .001. Cronbach Alpha coefficients are obtained from the correlation analysis.

propensities. The central focus of the study is to understand the contextual interactional process that takes place within financially troubled families.

In my proposed model, financial strain is hypothesized to engender interparental conflict and the negative aftermath associated with parents' disputes has a direct and indirect influence on children's antisocial propensities. The indirect effects associated with stressful events that accompany financial hardship on child social maladjustment are presumed to be mediated through parenting concordance and interparental commitment. That is, children from families suffering from financial hardship are at an elevated risk of developing more behavioral problems, in part because the induced stress on family financial circumstances can interfere with the dyadic relationships among the parents and between parents and their children. The logic behind this is that in a conflict ridden family, parents who are "strain overloaded" are more likely to engage in coercive exchange processes that increase the irritability of both parties, and the outcome associated with cynical exchanges between parents can spill over to their children (Almeida et al. 1999; Conger et al. 1994). Heightened parental irritability frequently affects children through a lack of parental involvement and lower quality of parentchild interaction (Conger et al. 1994). When parents are angry with each other, they may have difficulties reaching consensus on how to parent. Additionally, anger may provoke aggression and negative feelings that drive both parents apart (Conger et al. 1994; Harold and Conger 1997; Kaczynski et al. 2006). Through these processes, financial hardship is hypothesized to increase the risk for behavioral and emotional problems among children. Conversely, if parents are strongly committed to each other and the family as a whole, the erosive effect resulting from being financially strained may have a lesser impact on their children. In other words, strong parenting concordance or couple commitment can serve as protective factors against parents' strain on children's antisocial tendencies.



Fig. 2 Maximum likelihood estimation of the structural model for mothers. Standardized Solution for the unconstrained model; non-significant paths have been deleted. \* refers to p < .05, \*\* refers

In summary, this study finds that financial hardship can create turmoil in families' lives by increasing the stress level and discord between parents. Financial hardship faced by families works through interparental conflicts to influence children's behaviors. This finding is consistent with the notion that children who experience interparental discord have a higher disposition toward displaying antisocial behavior (Gulati and Dutta 2008; Harold and Conger 1997). Although the study does not find any mediating effect of concordance and commitment from

to p<.01, \*\*\* refers to p<.001 (two-tailed test). GFI=0.94; AGFI= 0.93; RMSEA=0.04. N=1,222

the parents, this could be attributed to the fact that these three components (parenting concordance, interparental commitment and children's antisocial behaviors) indeed share the same common cause—interparental conflicts and violence. This is consistent with a large body of divorce literature which suggests that interparental discord increases risk for children's maladjustment (Amato 2000; Kelly and Emery 2003; Leon 2003). Unlike distressed parents, parents who are happy with each other may be more responsive to their children's needs and are more likely to engage in



Fig. 3 Maximum likelihood estimation of the structural model for fathers. Standardized Solution for the Unconstrained Model; non-significant paths have been deleted. \* refers to p < 0.05, \*\* refers to p <

0.01, \*\*\* refers to p<0.001 (two-tailed test). GFI=0.94; AGFI=0.93; RMSEA=0.04. N=1,222

constructive parenting that involves adequate bonding, supervision, monitoring, reasoning and teaching effective problem solving skills. "Stress-free" parents can also model a variety of good behaviors, which distressed parents frequently are not able to do. As a matter of fact, interparental discord increases the risk that parents are likely to utilize harsh and inconsistent disciplinary strategies and show lower tolerance of their children's misbehaviors (Gonzales et al. 2000). Young children, through social learning and their cumulative daily experiences with unhappy parents, may come to believe that such coercive exchange process is normal (Christie-Mizell 2003). It is, therefore, not surprising that children from unhappy and financially strained families are more likely to manifest a range of antisocial behaviors.

Gender differences in the conceptualization of strain and discord are supported in this study. The fact that fathers and mothers are different in their perception of financial security and discord indicates that gender should be taken into consideration in the studies of future researchers. While both mothers and fathers may attribute different meanings to financial adversity, their relationships with each other are significantly likely to suffer from household financial security. Since household financial status has a great impact on the family's overall well being, policy planners should consider allocating more assistance in helping families alleviating strain related to financial insecurity (Conger et al. 1994). While more importance is being placed on women's income and attaining gender equality among American families, men still feel strained to support a bigger household. If depressed men and women are vulnerable in their effort in sustaining a harmonious relationship with their partners, clinicians can work with their clients to overcome this obstacle. More emphasis should be placed on minimizing any negative impact resulting from partners' potential coercive exchange before it over spills to their partners-since both genders in intact families continue to be affected by their relationship with their partners and children.

This study provides a preliminary understanding of the relationship between financial hardship, interparental discord and children's antisocial tendencies. However, several limitations resulting from data limitation and inadequate measurement should be noted. First, since this study utilizes cross-sectional data, causation cannot be inferred from the study. Although a relationship between two constructs can be confirmed through a cross-sectional data analysis, it cannot guarantee that one element precedes the others. Without longitudinal data, a more accurate understanding on the sequence among the variables cannot be established (see Moffitt 2005). Second, the study only hypothesizes a one way process model; the actual family interactive process involves a more complicated process. Even though

this investigation finds a negative association between interparental conflicts and parents' level of concordance and commitment, the direction of these relations can be spurious. That is, conflict can precede or be superseded by a lack of concordance and commitment on the parents' part. Additionally, any parent-child communication is likely a two-way street. Children's behaviors can solicit a significant reaction from their parents, just as they are influenced by their parents' interactions. In other words, child acting out behaviors also further aggravate the tension between their parents instead of the reverse. However, to model the effect of these bidirectional processes will require a more complicated modeling strategy and the usage of longitudinal data.

Third, the outcome of this study might be a function of selection effect. That is, certain individuals may be more likely to possess a particular personal attribute that heightens their chances of becoming financially strained. It is possible that those who are more predisposed to financial strain are also more likely to experience couple discord, less likely to keep a regular job or engage in skillful parenting. People who face financial hardship may be more likely to comprise those who are susceptible to negative life events due to their lack of access to social support and resources that help them cope with stress effectively. This group of individuals typically consists of those with lower educational credentials, those with lower occupational skills or those with poor mental health (Coley and Chase-Lansdale 2000). Unlike financially stable families, financially strained families are likely to concentrate in poor neighborhoods with high crime rates, and therefore are more likely to pick up some antisocial behavioral traits (e.g., Wilson 1987).

Since this study is limited to those who are cohabiting or married, the results are not generalizable to other samples. Without a comparison to other types of family structure, it cannot be inferred that the interactive processes involved here are also applicable to other types of families. Other research has pinpointed the importance of family structure in assessing child outcome (e.g., Carlson and Corcoran 2001; Gennetian 2005; Lichter and Landale 1995). Households of single or divorced parents, for example, may face greater economic hardship as compared to two-parent households (Simons et al. 1993). To obtain a more accurate assessment, this study may be able to replicate in a more naturalistic environmental setting involving qualitative work. This study has demonstrated the deleterious effect of family financial distress and interparental discord on children's conduct. Future researchers should also consider exploring different types of mediators that help connect the missing link between financial strain and children's deviancy (e.g., Simons et al. 1992). A multidimensional interpretation incorporating possible internal coping mechanisms (e.g., self-efficacy and self-esteem), external support (e.g., social support and welfare assistance), and personal attributes (e.g., level of education) merit the attention and further assessment of future researchers. A better understanding of this matter is crucial to aid in the development of more efficient prevention and intervention strategies to assist families in need and those who are most at risk of financial hardship.

## Appendix 1: Indicators for Measures

Children Antisocial Behaviors

- Is disobedient.
- Doesn't get along with other children.
- Doesn't seem to feel guilty after misbehaving.
- Is stubborn, sullen, or irritable.
- Have sudden changes in mood or feelings.
- Has temper tantrums or a hot temper.

Financial Strain

Difficulty paying bills (scale)

In the past 12 months,

• Did you not pay the full amount of rent or mortgage payments?

• Did you not pay the full amount of a gas, oil, or electricity bill?

• Was your gas or electric service ever turned off, or the heating oil company did not deliver oil because there wasn't enough money to pay the bills?

• Did you borrow money from friends or family to help pay bills?

• Was there anyone in your household who needed to see a doctor or go to the hospital but couldn't go because of the cost?

- Have you cut back on buying clothes for yourself

Have you worked overtime or taken a second job?

Difficulty buying food (scale)

In the past 12 months,

• Did you receive free food or meals?

• Was (child/were the children) ever hungry, but you just couldn't afford more food?

• Were you ever hungry, but didn't eat because you couldn't afford enough food?"

Difficulty paying for housing (scale)

• Were you evicted from your home or apartment for not paying the rent or mortgage?

• Did you move in with other people even for a little while because of financial problems?

• Did you stay at a shelter, in an abandoned building, an automobile or any other place not meant for regular housing, even for one night?

Interparental Conflict and Violence

Emotional abuse (scale)

• He/She is fair and willing to compromise when you have a disagreement.

• He/She expresses affection or love for you.

• He/She insults or criticizes you or your ideas (reverse coded).

• He/She encourages or helps you to do things that are important to you.

• He/She listens to you when you need someone to talk to.

- He/She really understands your hurts and joys.

Physical attack and control (scale)

• He/She tries slaps or kicks you (reverse coded).

• He/She hits you with a fist or an object that could hurt you (reverse coded).

• He/She withholds sex to try to control your behavior (reverse coded).

• He/She throws something at you (reverse coded).

• He/She pushes, grabs, or shoves you (reverse coded).

Power control (scale)

• He/She tries to keep you from seeing or talking with your friends or family (reverse coded).

• He/She tries to prevent you from going to work or school (reverse coded).

• He/She withholds money, make you ask for money, or takes your money (reverse coded).

• He/She tries to make you have sex or do sexual things you don't want to do (reverse coded)

• He/She insults or criticizes you for not taking good enough care of the child or your home (reverse coded)

Parenting concordance

• When (father/mother) is with (child), he/she acts like the father/mother you want for your child.

• You can trust (father/mother) to take good care of (child).

• He/She respects the schedules and rules you make for (child).

• He/She supports you in the way you want to raise (child).

• You and (father/mother) talk about problems that come up with raising (child).

• You can count on (father/mother) for help when you need someone to look after (child) for a few hours.

• You respect (father/mother)'s wishes about how (child) should be raised.

Couple's commitment

- My relationship with father/mother is more important to me than almost anything else.
- I may not want to be with (father/mother) a few years from now (reversed coded).
- I like to think of (father/mother) and me more as a couple than as two separate people.
- I want this relationship to stay strong no matter what rough times we may encounter.
- I am happy with my sexual relationship with (father/ mother).
- I can trust that (father/mother) will not cheat on me with other people.

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