

The Effects of Coparenting Support and Conflict on Parenting Practices and Child  
Psychosocial Functioning Among Single-Mother African American Families

Sarah Elizabeth Shook

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Approved by:

Deborah Jones, Ph.D.

Donald Baucom, Ph.D.

Beth Kurtz-Costes, Ph.D.

Shannon Dorsey, Ph.D.

Karen Gil, Ph.D.

## ABSTRACT

SARAH E. SHOOK: The Effects of Coparenting Support and Conflict on Parenting Practices and Child Psychosocial Functioning Among Single-Mother African American Families

(Under the direction of Deborah Jones)

The current study examined whether positive parenting mediated the association between two dimensions of coparenting relationships and child psychosocial functioning among 238 African American single mother families. The moderating roles of community context and child age also were examined. Structural equation modeling revealed that positive parenting characterized by maternal monitoring and positive mother-child communication fully mediated the relation between coparenting conflict and child maladjustment among urban-dwelling families and between coparenting support and child competence among rural-dwelling families. A moderating effect of child age also was found in that the model was significant for adolescents, but not for younger children. Clinical implications and future directions are discussed.

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## Chapter I: Introduction

In recent years, child and family psychologists have produced an impressive body of literature documenting both the detrimental effects of parental conflict and the positive effects of parental support on subsequent parenting skills and child psychosocial functioning (see Beach & Jones, 2002; Coyne & DeLongis, 1986; Krishnakumar & Buehler, 2000; Uchino, Cacioppo, & Keicolt-Glaser, 1996 for reviews). Still, this literature has failed to keep pace with the changing face of the American family in at least two ways. First, the majority of research examining the effects of parental relationships on family and child outcomes has utilized samples of middle-class European American families, largely neglecting families of lower income and families of color. As such, authors typically caution readers about the generalizability of their findings for these understudied groups. Second, parental relationship quality has often been operationalized as marital relationship quality. Thus, most of the research to date has focused on the quality of the relationship between married or recently divorced parents and has failed to consider the relationships that exist between single parents, many of whom have never been married, and the non-custodial adults who assist with childcare and parenting.

The present study is being proposed in order to more fully understand (1) the relationship dynamics that exist between low-income African American single mothers and the people who assist them in raising their children, (2) the effects of conflictual and supportive aspects of these coparenting relationships on parenting behavior and child psychosocial functioning, and (3) whether these proposed associations differ depending

upon the community context in which families reside or the age of the child. The following sections present literature documenting the importance of studying child development within the context of the family and community. The phenomenon of coparenting within African American single-mother households is discussed, as well as a review of the parenting literature to date. Also presented is the literature on coparenting conflict and support and the ways in which these two dimensions influence parenting and child well-being. Finally, the importance of examining differences in parenting and family functioning across multiple environmental contexts, as well as across the age span of children, is discussed. Given the notable absence of extensive research on low-income African American single mothers' coparenting relationships with non-custodial adults, the research on coparenting support and conflict among married and divorced families, including those of middle-income and European American ethnicity, will be reviewed in addition to those few studies specifically focused on low-income African American single-mother families.

### *The Family as a Context for Studying Child Psychosocial Functioning*

The theory guiding the proposed study is consistent with the developmental psychopathology approach to understanding human development. Developmental psychopathology is a multidisciplinary scientific field with the primary goal of better elucidating the dynamic-process relations underlying pathways of both normal and pathological development (Cummings, Davies, & Campbell, 2000). Of particular concern to developmental psychopathologists are the ways in which the biological, psychological, and social-contextual aspects of the human condition interact over time to influence the course of development. In the three decades since its emergence, developmental

psychopathology has provided an increasingly sophisticated model for the study of both normal and abnormal development in children.

The developmental psychopathology approach is rooted in contextualism (Biglan, 1995; Cicchetti & Aber, 1998), or the view that developmental processes result from an ongoing interplay between an active, ever-changing organism and the dynamic context in which the organism resides. In this way, individual development is seen as being embedded in a series of nested, interconnected networks of activity at multiple levels of analysis. At the intraindividual level, there exists an interplay between biology, cognition, emotion, and behavior; at the interpersonal level, relationship factors are considered, including family relations and friendships; and at the ecological level, the individual's sociocultural context, including community and culture, are examined (Cummings et al., 2000).

Of these three levels, the family environment, including parent-parent and parent-child relationships, has received considerable attention in the developmental psychopathology literature and is now commonly viewed as one of the most significant contextual influences on child development. Ecological models, including Bronfenbrenner's ecological-systems model (Bronfenbrenner, 1979; 1989) and Cicchetti and colleagues' ecological-transactional model (Cicchetti, 1991; Cicchetti & Lynch, 1993) are elaborate contextual models which emphasize the predominance of the family within a larger whole of society, culture, and community. According to this framework, the contexts most distal to the child (the macro- and exosystems) encompass extrafamilial factors, or factors outside of the family. The *macrosystem* includes cultural beliefs and values which permeate societal and family functioning, while the *exosystem* includes

community characteristics such as risks and resources. More proximal to the developing child is the *microsystem*, characterized by the child's family environment and including such factors as parenting and relationship quality. Finally, the *ontogenic*, or individual-level system includes biological and psychological characteristics of the child, including his or her age, gender, and psychological functioning, among others. This sort of family-focused ecological framework has been used extensively to study multiple domains of child and family functioning (e.g., Salzinger, Feldman, Stockhammer, & Hood, 2002), with a growing body of work supporting its relevance to the study of parenting and family relationships among African American single mothers in particular (e.g., Jones, Forehand, Brody, & Armistead, 2003; Jones, Zalot, Foster, Sterrett, & Chester, 2007; Kotchick, Dorsey, & Heller, 2005).

#### *Parenting Practices and Child Psychosocial Functioning*

A rich legacy of parenting research has clearly demonstrated the importance of parenting in the socialization of children, earning it a central role in most models of both normal and abnormal child development (see Maccoby, 1992 for a review). Over the past three decades, social scientists have progressed from relying on univariate research designs, examining differences in child functioning based on only a single parenting dimension (e.g., discipline), to more sophisticated conceptualizations of parenting and child development. This is consistent with an overall trend towards family process models of parenting in which precise process relations and directions of effect between parenting dimensions and child outcomes, as well as intervening variables (e.g., mediators and moderators) are clearly articulated (e.g., Darling & Steinberg, 1993). Despite variation in nomenclature among parenting theories, the majority of social

scientists have tended to differentiate between two broad dimensions of parenting, one pertaining to behavioral control (e.g., child management), and the other related to the parent-child emotional relationship (e.g., acceptance, warmth, positive communication) (Barber, 1996; Cummings & Davies, 1995). Extensive research has documented that, although these two dimensions share considerable variance in predicting child outcomes, each also has demonstrated unique effects on child internalizing symptoms, externalizing symptoms, and competence (for a review, see Cummings et al., 2000).

Research has shown that management of children's behavior is an integral component of childrearing and socialization (Hetherington & Martin, 1986; Maccoby & Martin, 1983). By communicating and enforcing rules, monitoring and supervising children's activities, and using discipline techniques which stress the consequence of actions, parents promote the development of prosocial behavior and values consistent with an acceptance of social order and harmony (Cummings et al., 2000). In fact, even in the context of a warm and nurturing parent-child relationship, lax or inconsistent patterns of control and monitoring place a child at increased risk for significant psychological problems (Baumrind, 1971; Steinberg, 1990). An impressive body of research now suggests that the strongest predictor of child involvement in problem behavior may be the extent to which parents exert control over their children's behavior (Gray & Steinberg, 1999; Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994).

Like parental control, the emotional bond that develops between parent and child is particularly predictive of child adjustment. Warm parental expressions of support and sensitivity, as well as responsiveness to children's psychosocial needs, are generally

associated with more positive developmental outcomes, including self-regulation, self-esteem, academic achievement, social competence, avoidance of deviant peers, and low levels of internalizing and externalizing symptoms (for a review, see Cummings et al., 2000). It has been suggested that positive parent-child relationships show children that they are worthy of others' affection, leading to the development of more positive self-concepts and, subsequently, lower levels of problem behavior and emotional problems (Sroufe & Fleeson, 1986). Furthermore, children who perceive their relationships with their parents to be more positive in nature are more likely to share information about their lives, including peer group affiliations and activities, with their parents (Fletcher, Steinberg, & Williams-Wheeler, 2004). Such parental knowledge of child activity is intricately linked with parents' ability to effectively monitor and control their children's behavior, which in turn is associated with less delinquency and affiliation with deviant peers (Fletcher et al., 2004; Stattin & Kerr, 2000; Kerr & Stattin, 2000). Parental warmth and sensitivity has also been found to facilitate the efficacy of disciplinary techniques, improving the internalization of values and promoting child moral development (Grusec & Goodnow, 1994).

Such findings point to the importance of examining *patterns* of parenting, including the interplay between parenting dimensions. Baumrind (1967; 1971) proposed that neither parent-child relationship characteristics (e.g., availability, positive communication), nor behavioral control (e.g, monitoring, discipline) alone are sufficient for healthy child development; rather, positive child-rearing can only be achieved when parents effectively balance warmth and support with firm, consistent control. While the parent-child relationship is instrumental in fostering child autonomy, self-worth, and self-

regulation, parental monitoring and control encourage the development of the person as a contributing member of society (Baumrind, 1991). Parenting characterized by high behavioral control in the context of a warm parent-child relationship has been termed authoritative, or positive, parenting and is consistently associated with positive psychosocial outcomes for children across developmental periods from preschool through adolescence (e.g., Baumrind, 1991; Lamborn et al, 1991; Patterson, Reid, & Dishion, 1992). However, debate is ongoing regarding whether common conceptualizations of parenting, which were developed using primarily European American families, operate similarly within African American families (e.g., Murry, Bynum, Brody, Willert, & Stephens, 2001), with equally beneficial effects on child development (e.g., Gray & Steinberg, 1999).

#### *Parenting Within Low-Income African American Single-Mother Families*

In addition to its advancement toward more sophisticated parenting models, family science also is beginning to progress from a uniform utilization of European American, intact, middle-class families to include more families of color, as well as those from varying economic backgrounds and of varying family structure. A paradigm shift away from simply assuming generalizability of the effects obtained with European American, middle-class, intact families to ethnically- and culturally-diverse groups has led to a growing literature on parenting practices among specific groups, with a growing body of research devoted to low-income African American single-mother families.

A body of literature focused exclusively on low-income African American single-mother families suggests that positive parenting continues to promote child competence and psychosocial well-being across ethnicity, socioeconomic status, and family structure.

Inconsistent discipline and poor mother-child relationships have been consistently associated with greater adjustment difficulties, including greater levels of aggression, delinquency, and depression among low-income African American youth (e.g., Armistead, Forehand, Brody, & Maguen, 2002; Jones, Forehand, Brody, & Armistead, 2002a; Jones, Forehand, Brody, & Armistead, 2002b). However, some research has suggested that, while certainly not detrimental, authoritative parenting may be less beneficial for ethnic minority youth relative to European American youth (e.g., Chao, 1994; Lamborn, Dornbusch, & Steinberg, 1996). Specifically, a growing literature suggests that a parenting style characterized by higher levels of vigilance and discipline may be more protective, and not necessarily more problematic, for African American families (e.g., Brody, Flor, & Douglas, 1998; Steinberg, Lamborn, Dornbusch, & Darling, 1992).

Some have suggested that African American parents raising children in stressful contexts find it necessary to adopt more controlling parenting techniques in order to decrease their children's likelihood of engaging in high-risk behaviors (e.g., Mason, Cauce, Gonzales, & Hiraga, 1996) and that this heightened level of behavioral control is not as detrimental to the healthy development of these youth as it may be to more privileged European American youth (Lamborn et al., 1996). More vigilant parenting, when implemented in circumstances characterized by high levels of risk, has been associated with greater academic and prosocial competence, as well as lower levels of aggression, delinquency, and depression (Brody, Dorsey, Forehand, & Armistead, 2002; Brody, Flor, & Gibson, 1999; Brody, Murry, Kim, & Brown, 2002; Kim & Brody, 2005). Because African American mothers highly value the development of individual



competence among their children (Boyd-Franklin, 1989; Young, 1974), and they use more monitoring in order to socialize their children in the areas of self-reliance, independence, educational achievement, and personal well-being (Brody et al., 1998), such parenting practices have been referred to as “competence-promoting” (e.g., Brody et al., 1999).

Despite increased attention towards parenting and its effects among diverse families, the field has a ways to go in producing a comprehensive understanding of parenting among many American families, including those headed by low-income African American single mothers. Of primary concern at present is the need for a more contextualized view of parenting (Cummings et al., 2000), which takes into account the larger family and community context in which parenting practices impact children. For instance, an examination of the literature on African American families to date may lead one to conclude that African American single mothers are raising their children relatively unaided. For the most part, the contribution of important adults outside of the marital dyad to parenting and child adjustment has been ignored, despite high rates of single parenthood in the United States. However, accumulating evidence suggests that many single mothers seek and receive childrearing assistance from not only their own families, but also the communities in which they reside (e.g. Boyd-Franklin, 1989).

#### *Single Motherhood and Coparenting in African American Families*

The underrepresentation of nontraditionally-structured families in the parenting literature is disappointing when one considers the growing number of children being raised by single parents. Recent United States census data indicate that nearly one third of all American children are living with only one parent, although this is particularly true for

African American children, the majority (56%) of whom are being raised in single-parent homes (U.S. Census Bureau, 2005). In this country, the vast majority (83%) of single parents are mothers, with single-mother status highest among African American women (U.S. Census Bureau, 2005). Higher rates of single motherhood among African Americans have been attributed to several factors, including disproportionate rates of pregnancy among African American adolescents, as well as lower rates of marriage and rising rates of divorce within the African American community (see McLoyd, Cauce, Takeuchi, & Wilson, 2000 for a review).

The well-documented heritage of cross-residential collaboration and the perceived importance of extended family and community networks within the African American community suggest that African American single mothers likely receive childrearing assistance from numerous sources (see Boyd-Franklin, 1989; Greenwood et al., 1996 for reviews). It has been suggested that African Americans tend to define the family more broadly, including not only the nuclear family, but also the extended family, such as aunts, uncles, cousins, and grandparents (Johnson & Staples, 2005; Sudarkasa, 1997). In fact, African American single parents are more likely to reside with their children in the homes of their children's grandmothers or grandfathers than are two-parent, intact families or European American single parents (U.S. Census Bureau, 2005). African American single-parent families also are more likely to reside in the homes of other family members, such as aunts, uncles, and siblings, as well as non-relatives friends, than are European American single-parent families or intact families (U.S. Census Bureau, 2005). Even when African American single parents rent or own their homes, they are

more likely than intact families to invite other family members and friends to reside with them and their children (U.S. Census Bureau, 2005).

The tendency for African American single mothers to reside with other adults may be due, at least in part, to economic necessity. Nearly a quarter of African American single mothers fail to complete high school, and of those who do earn a high school diploma, only about a third goes on to attend college (U.S. Census Bureau, 2005). Consequently, nearly half of African American single mothers are living in poverty, with many lacking adequate health insurance for their children and many receiving some form of public assistance (U.S. Census Bureau, 2005). In fact, of all the largest demographic groups in the United States, African American families appear to suffer the greatest financial hardship, with never-married single mothers the most economically vulnerable (Franklin, 1997). Still, research suggests that friends and family contribute beyond financial support, providing emotional support, child care, and parenting assistance to African American single mothers (e.g., Forehand & Kotchick, 1996; Jones, Shaffer, Forehand, Brody, & Armistead, 2003).

“Coparenting” has been defined as the process by which two parents successfully negotiate childrearing responsibilities (Belsky, Putnam, & Crinic, 1996; Coiro & Emery, 1998). An emerging body of research supports the notion that African American single mothers engage in a form of coparenting, sometimes with their children’s biological fathers (Coley, 2001), but also often with non-parents, such as extended family members (Gee & Rhodes, 2003; Jarrett & Burton, 1999) and the so-called “fictive kin,” comprised of close friends and neighbors (Boyd-Franklin, 1989; Davis, Rhodes, & Hamilton-Leaks, 1997). In prior research, the vast majority (97%) of African American single mothers

interviewed were able to identify at least one adult who assist them with childrearing responsibilities (e.g., Forehand & Jones, 2003; Jones, Forehand, Dorsey, Foster, & Brody, 2005; Jones, Shaffer, et al., 2003). Mothers most commonly identify their own mothers or the child's biological father as the primary coparent, although others identify their own sister or the child's older sister (Jones, Shaffer, et al., 2003). The remainder of mothers identify other relatives, friends, or neighbors (Jones, Shaffer, et al., 2003). This is consistent with prior research suggesting that single mothers rely most heavily on their mothers and siblings for childrearing advice and assistance, and friends and neighbors also are significant sources of support (e.g., Marks & McLanahan, 1993).

Importantly, a relatively small but growing literature suggests that the quality of the relationships that mothers have with these nontraditional coparents is associated with several domains of family functioning, including maternal parenting practices and child psychosocial functioning (e.g., Brody et al., 1998; Jones, Forehand, Dorsey, et al., 2005; Jones, Shaffer, et al., 2003).

#### *Conflict and Support in the Coparenting Relationship*

Relations between single mothers and their nonmarital, and sometimes nonresidential, coparents are often overlooked, despite calls for further research in this area due to the potential implications for family functioning and subsequent child psychosocial outcomes (Depner, Leino, & Chun, 1992; Scales & Gibbons, 1996). A robust literature now documents the association between parental conflict and parenting practices among intact and recently separated families (see Cummings et al., 2000; Davies & Cummings, 1994 for reviews). Among two-parent and newly divorced families, parental conflict has been associated with parent-child relationship difficulties, including

parental withdrawal, emotional unavailability, and low parental warmth (Brody et al., 1994; Fauber, Forehand, Thomas, & Wierson, 1990; Mann & Mackenzie, 1996; Miller, Cowan, Cowan, Hetherington, & Clingempeel, 1993), as well as disruptions in parental monitoring and the provision of consistent discipline (e.g., Dishion & McMahon, 1998). It has been posited that these disruptions in the support and control dimensions of parenting are the primary mechanisms through which youth are adversely affected by parental conflict in intact and divorced families (e.g., Davies & Cummings, 1994; Fauber et al., 1990). Parental conflict has been consistently associated with numerous child difficulties, including internalizing and externalizing disorders, academic problems, insecure attachments, and peer relationship difficulties (Emery, 1988; Emery & O’Leary, 1984; Fauber, et al., 1990). Still, the majority of this research has been conducted with middle-income, intact, predominately European American samples, with questionable generalizability to the economically disadvantaged, African American single mother families in which many children are raised today.

Coparenting research on single-mother African American families has typically utilized samples of either never married, teenage mothers or young adult single mothers. Among African American teenage mothers, negative relationships with the child’s biological father (e.g., Gee & Rhodes, 1999; 2003; Leadbeater & Linares, 1992; Shapiro & Mangelsdorf, 1994) or maternal grandmother (e.g., Bogat, Caldwell, Guzman, Galasso, & Davidson, 1998; Davis, 2002) have been associated with compromised parenting and heightened levels of maternal distress. Similar findings have been reported for young adult and adult African American single mothers. For instance, Jones, Shaffer, and colleagues (2003) found that conflict with a coparent was associated with lower levels of

parental monitoring and poorer mother-child communication, which in turn were associated with greater levels of child internalizing and externalizing symptoms. Thus, compromised parenting partially mediated the association between coparenting conflict and adverse child outcomes. Furthermore, a single mother's conflict with her coparent may influence child adjustment by affecting maternal mental health (Jones, Forehand, Dorsey, et al., 2005). Mothers who experience greater conflict with a coparent are more likely to experience depressive symptoms, and these depressive symptoms may in turn compromise their parenting efficacy (Dorsey, Forehand, & Brody, 2007).

While the aforementioned literature demonstrates the detrimental effect of coparental conflict on both maternal parenting and child psychosocial adjustment in African American single mother families, much less is known regarding the potentially beneficial effects of coparental support on child and family functioning. At present, we know very little about how single mothers, when faced with economical and environmental stressors, parent effectively. Much of the research to date has been risk-focused, neglecting factors that may promote, rather than impede, effective parenting. Although it has been suggested in both the marital and single mother literatures that, when it comes to family relations, "not being nasty matters more than being nice" (Ewart, Taylor, Kraemer, & Agras, 1991, p. 155; Jones, Forehand, Dorsey, et al., 2005), the beneficial effects of having a supportive family or coparenting relationship merit additional research attention. For instance, spousal support has been shown to alleviate psychological distress, which in turn enhances parenting behavior (see Simons & Johnson, 1996 for a review). Furthermore, research has clearly demonstrated an association between perceived availability of emotional and instrumental support from

family, friends, and neighbors and effective parenting, including increased nurturance and less use of harsh or rejecting discipline practices (Belsky & Vondra, 1989; Hashima & Amato, 1994), with some evidence supporting a mediating role of enhanced parental psychosocial well-being (Burchinal, Follmer, & Bryant, 1996; Feiring, Fox, Jaskir, & Lewis, 1987; Jennings, Stagg, & Connors, 1991).

Among African American families, extended family support has been associated with higher levels of maternal self-esteem and subsequently warmer and more supportive parent-child relationships (Taylor & Roberts, 1995). Similarly, low levels of perceived social support have been predictive of maternal depressive symptoms, which in turn have been associated with greater levels of parenting stress (Jackson, 1998). Among African American single mothers in particular, support from a coparent has been associated with increased maternal monitoring of child behavior and better mother-child communication quality (Jones, Forehand, Dorsey, et al., 2005). Furthermore, coparent support has been shown to interact with coparent conflict to predict maternal monitoring longitudinally; that is, African American single mothers whose relationships with their coparents were characterized by high levels of support and low levels of conflict were most likely to be engaging in high levels of monitoring 15 months later (Jones, Forehand, Dorsey, et al., 2005). Taken together, these findings demonstrate that conflict and support are not merely two ends of a continuum, but rather represent two different relationship behaviors which can co-occur in the same relationship. In turn, comprehensive studies of coparenting should consider both the main and interactive effects of the positive and negative aspects of coparenting relationships on the family.

In addition to the broader family and coparenting networks, a contextualized analysis of parenting also must take into account the communities in which children are being raised (Cummings et al., 2000). As will now be discussed, accumulating evidence suggests that the associations between coparenting relationships, parenting practices, and child psychosocial functioning may vary as a function of the community contexts in which low-income African American single-mother families reside.

*The Effect of Community Context on Child and Family Functioning*

Although poor, single mothers, regardless of community, are disproportionately exposed to more uncontrollable and dangerous life events (Demo & Acock, 1996; McLoyd, 1990; McLoyd & Wilson, 1990), those residing in urban areas are more likely to perceive greater risks (e.g. crime, violence, drug use or dealing) and fewer resources (e.g., community agencies, organized sports for children) in their neighborhoods than are those residing in rural areas (Forehand et al., 2000). In response to increased exposure to these risks, low-income African American single mothers residing in urban environments are more likely to engage in higher levels of monitoring, in fact increasing their monitoring as children transition into adolescence than are those residing in rural regions characterized by lower levels of risk (Armistead et al., 2002; Jones, Forehand, et al., 2003; Jones, Forehand, O'Connell, Armistead, & Brody, 2005). This greater vigilance over child behavior seems to have more pronounced positive effects for children living in urban neighborhoods than rural neighborhoods (Armistead et al., 2002). However, the quality of mother-child relationships predicts child psychosocial functioning regardless of community context and does not appear to differ quantitatively across urban and rural samples (Armistead et al., 2002).



The higher levels of risks present within urban environments may act as stressors, influencing not only parenting abilities but also interpersonal relationships. Some evidence suggests that support from friends and neighbors may buffer the detrimental effects of risky neighborhoods on effective parenting (e.g., Jones, Forehand, O'Connell, et al., 2005). Furthermore, children exposed to community violence may experience less psychological distress if the mother-coparent relationship is low in conflict and high in support (Forehand & Jones, 2003). There also is some evidence that coparent support and conflict interact to predict maternal monitoring similarly across both urban and rural environments (Jones, Forehand, Dorsey, et al., 2005). At present, it is not known whether the quality of a single mother's relationship with a coparent is associated with the community in which she resides, although high-risk urban communities typically do offer less opportunity for social interaction and may be perceived as isolating by parents and their children (Klebanov, Brooks-Gunn, & Duncan, 1994).

#### *Aims and Hypotheses of the Present Study*

While the majority of African American children are being raised outside of the traditional two-parent family structure (U.S. Census Bureau, 2005), research suggests their mothers are likely not parenting entirely alone. The goal of the present study is to provide a more comprehensive understanding of the relationship dynamics that exist between low-income African American single mothers residing in two community contexts and the people who assist them in raising their children, including an examination of the effects of conflictual and supportive aspects of these coparenting relationships on parenting behavior and child psychosocial functioning. In this way, the present study effectively synthesizes several separate lines of work into a more inclusive

conceptual model using structural equation modeling. Furthermore, this study examines family- and individual-level variables amenable to clinical intervention, including dimensions of the mother-coparent relationship, parenting behaviors, and child psychological functioning and competence.

Parenting among African American families, particularly those of low-income and single-parent status, has often been studied using a deficit model, despite the fact that most of these families succeed in the midst of adversity (Murry et al., 2001). As demonstrated in Figure 1, the present study utilizes a more balanced approach to the study of family functioning among low-income African American single-mother families by examining not only the association between mother-coparent conflict and parenting behavior, but also mother-coparent support and parenting behavior. Specifically, it is hypothesized that conflictual aspects of the coparenting relationship will be associated with lower levels of maternal monitoring and poorer mother-child relationship, as measured by communication quality. Conversely, it is hypothesized that supportive aspects of the coparenting relationship will enhance parenting through greater levels of maternal monitoring and better mother-child communication.

Unlike prior research examining coparenting support and conflict among low-income African American single-mother families (e.g., Jones, Forehand, Dorsey, et al., 2005), the present study also includes measures of child competence in addition to child maladjustment. Based on prior literature, it is hypothesized that conflictual aspects of the coparenting relationship will be associated with greater levels of child internalizing and externalizing symptoms. The present study, however, also extends the literature by examining whether supportive aspects of the coparenting relationship will be associated

with greater levels of child social and cognitive competence. Prior work claiming that “not being nasty matters more than being nice” (e.g., Ewart et al., 1991, p. 155; Jones, Forehand, Dorsey, et al., 2005) may in fact underestimate the importance of coparenting support by neglecting to include measures of prosocial development. That is, while coparenting conflict may be a more robust predictor of child maladjustment, it is equally plausible that coparenting support may be more predictive of child competence.

As the present study seeks to better elucidate a model of family process, intervening variables also are considered. It is hypothesized that parenting practices will partially mediate the associations between coparenting relationship variables and child outcomes such that coparenting conflict will compromise maternal monitoring and mother-child communication, resulting in higher levels of child adjustment difficulties, while coparenting support will promote more monitoring and better mother-child communication, resulting in higher levels of child competence. Additionally, it is hypothesized that community context will moderate the associations between coparenting support and conflict, parenting behavior, and child outcomes. As previously discussed, there is reason to believe that low-income African American single mothers may adopt more controlling parenting techniques when faced with higher levels of community risk, and that the availability and influence of coparenting support and conflict may vary across communities. Therefore, the present study extends prior research by examining the heterogeneity that exists among low-income African American single-mother households, particularly as it relates to parenting practices, coparental relationships, and subsequent child outcomes.

The moderating role of community context was examined by testing the conceptual model presented in Figure 1 across two groups of families. The proposed sample is drawn from two regions of the South, one group residing in inner-city areas of New Orleans, LA, the other in rural Georgia. It is hypothesized that the urban mothers from New Orleans will engage in higher levels of monitoring in response to the greater amount of environmental risk present in their communities (e.g., Forehand et al., 2000) and that the association between this more vigilant parenting style and positive child outcomes will be more robust in the urban sample. Given the paucity of research examining coparenting within rural African American single-mother families, analysis of the effect of coparenting support and conflict on parenting and child outcomes across the two samples will be considered exploratory.

The moderating role of child age also was examined by testing the conceptual model across two groups (i.e., older vs. younger children). Although existing literature supports the importance of positive parenting throughout childhood and adolescent, with improved physical safety of preschool-age children, less externalizing symptoms, greater academic achievement, and better self-esteem during early and middle childhood, and lower levels of delinquency and substance use during adolescence (see Dishion & McMahon, 1998; Maccoby & Martin, 1983 for reviews), little is known at present whether coparenting conflict or support differentially affects youth based on age. Thus, exploratory tests of moderation will determine whether the conceptual models fits the data better for younger or older children.

Finally, the proposed hypotheses were examined both cross-sectionally and longitudinally across two time points (coparenting relationship and parenting at Time 1,

child competence and psychological maladjustment at Time 2). Furthermore, given the long history of research demonstrating that parents and children often provide unique perspectives on child functioning, with parent and child reports only moderately correlated (Achenbach, McConaughy, & Howell, 1987; Edelbrock, Costello, Dulcan, Conover, & Kala, 1986; Forehand et al., 2002), analyses were conducted separately using mother- and child-report of child outcomes. At present, there is no general rule dictating which reporter should be used in the assessment of children, or under what circumstances one should rely on one reporter over the other; therefore, both viewpoints will be considered valuable.

## Chapter II: Method

### *Overview*

The present study represents secondary analysis of a larger study focused on family functioning in low-income African American single-mother families residing in both rural and urban environments. Families were interviewed at two assessments, each separated by approximately 15 months.

### *Participants*

A community sample of 238 African American families headed by single mothers (mean age = 33.94 years) of 7- to 15-year-old children (mean age = 11.36; 50.2% girls) from metropolitan (inner-city New Orleans,  $n = 105$ ) and non-metropolitan (rural Georgia,  $n = 133$ ) areas of the southeastern United States was the focus of this study. Seven years old was selected as a minimum age requirement for children in the sample so that participants had sufficiently advanced cognitive skills to complete measures of psychological adjustment. Fifteen years old was selected as a maximum age requirement for children so that the sample could be restricted to early and middle adolescents who are typically supervised more closely by parents than are older adolescents. As shown in Table 1, the mean monthly income for families was \$1075 and the majority of mothers (61.3%) had obtained at least a high school diploma.

*Recruitment.* Only counties in which 25% or more of the population was African American were sampled to ensure that a viable African American community existed in the county. Families were recruited through community contacts. A project staff member

contacted African American community members, such as pastors and teachers, and explained the research project to them, including inclusion criteria (i.e., African American single-mother family with a 7- to 15-years old child). These community members then contacted prospective participant families and informed them about the purposes of the project. Each community contact person gave the research staff member the names of families who expressed interest in participation and the staff member contacted these families. This staff member screened the family in terms of eligibility (e.g., ethnicity of the family, age of the child) and excluded all families not meeting criteria. If there were two or more children eligible to participate in a family, the oldest child was typically selected. Interested families who met inclusion criteria were scheduled for an assessment session.

*Refusal rate.* Of the families who were contacted, 67% agreed to participate in the study, with a total sample of 277 families completing the first assessment. Of these 277 families, 247 participated in the second assessment approximately 15 months later. The primary reason for participant attrition was refusal to participate due to lack of continued interest in the study. Other reasons for dropout included family relocation, death of participating parent, and parental incarceration. With one exception, participants and dropouts did not significantly differ on demographic variables. The one exception is that mothers who participated in the second assessment reported a higher family income at Assessment 1 than did those who dropped out (monthly means of \$1034 and \$795,  $t(275) = 2.30, p < .05$ ). Of the 247 families that participated in both assessments, nine were unable to identify a coparent (i.e., someone who assists in caring for the participating

child), further reducing the sample to 238. Thus, the 238 families who participated in both assessments, and who identified coparents, were the focus of the present study.

### *Procedure*

Two separate data collection sessions were scheduled at each annual assessment. All sessions occurred at the child's school and each typically lasted between 1 and 2 hours. During the first session, the mother and child completed informed consent and assent forms, respectively, and each completed a confidential sociodemographic interview. In the second session, the study variables of interest (i.e., mother-coparent relationship, parenting practices, and child competence and psychological adjustment) were assessed as part of a psychosocial interview. At both data collection sessions, self-report questionnaires were administered in an interview format to both mother and child. Each interview was conducted privately between the mother or child and a researcher, with no other family members present or able to overhear the conversation. Families were paid \$50 for their participation in the first data collection session. Approximately 15 months later, mothers were contacted and invited to participate with their child in a second assessment, which was identical to the first assessment. Families were paid an additional \$50 for participating in the second data collection session.

### *Interviewers and Interviewer Training*

Because two types of interviews were administered to each participant (i.e., sociodemographic and psychosocial), two sets of interviewers were utilized. The first set of interviewers consisted of two Ph.D. medical sociologists, one licensed social worker, and one graduate student in public health. The second set consisted of nine clinical psychology doctoral graduate students and two Ph.D. licensed clinical psychologists. All



interviewers had extensive experience in psychosocial assessment and interviewing techniques and all were thoroughly trained in the use of their respective instruments during the exploratory and pilot phases of the study, with the goals of ensuring cross-interviewer reliability and enhancing sensitivity to cultural and socioeconomic differences. Also during the training period, interviewers piloted the instruments in rotating pairs to maximize interinterviewer reliability, reduce unintentional bias, and standardize presentation of questions across interviewers.

### *Development of Measures*

The availability of instruments to measure the constructs of interest was a particular concern because most measures of family functioning and child adjustment have been developed for use and standardized on Caucasian, intact, middle-class families. Consequently, the concern was that the available measures would not adequately capture the nature of family processes among the African American, single-mother families in this study. Thus, to ensure that measures were culturally sensitive and otherwise appropriate for the target population, focus groups comprised of African American community members from the counties sampled were formed. Focus groups, which included a total of 60 members, discussed the relevance of the constructs proposed for investigation, as well as the likelihood that measures would elicit information relevant to these constructs. The groups reviewed each item on the scales and suggested wording changes, as well as the deletion of items that were unclear to them or irrelevant to families in their communities.

Based on focus group discussions, as well as information obtained regarding educational attainment of study participants, it was deemed most appropriate for all self-

report questionnaires to be administered in an interview format to mothers and children. Thus, in order to address potential illiteracy in the sample, each questionnaire was modified for use with the present sample in that directions were adapted for verbal administration and cue cards were used to visually represent rating scales.

For the constructs of interest in the present study, information about demographics, mother-coparent relationship, and maternal parenting practices was obtained from the mothers. Information about child competence and psychological maladjustment was obtained from both mothers and children.

### *Measures*

All instruments used in the present study are reproduced in Appendices A-H. Because these measures have been either modified from their original format for use with the present sample, have not been utilized with similar samples in prior research, or have been developed specifically for the purposes of this study, confirmatory or exploratory factor analysis was performed on each measure using data from this sample. This ensures that each scale is comprised of a coherent set of items appropriate for this study population.

*Demographic information.* Mothers completed a set of questions pertaining to demographic characteristics of themselves (e.g., age, educational attainment), their children (e.g., age, gender), and their families (e.g., monthly income, identity of a coparent).

*Mother-coparent relationship.* Mother-coparent relationship was assessed using the Parenting Convergence Scale (PC; Ahrons, 1981). Mothers were first asked to identify a person who assists them in caring for their participating children. Mothers who

could identify one such person were subsequently administered the PC. Based on focus group discussions, this questionnaire was changed for use with the present sample by reducing the Likert scale from five points to four points, with endpoints of 1 (*never*) and 4 (*often*). As shown in Table 1, mothers most commonly identified the child's maternal grandmother (30.7%) or biological father (26.1%) as the primary coparent. Maternal aunts (10.9%) and children's sisters (11.6%) also were identified. A substantial proportion of mothers (20.7%) identified other family members or friends as their primary coparents.

Coparenting conflict was measured using the three-item Conflict subscale of the PC (Ahrons, 1981). Items are completed in reference to a person who helps raise the child and include "When you and [coparent] talk about how to raise the target child, how often is the conversation hostile or angry?;" "When your child complains about [the coparent], how often do you usually agree with him/her?;" and "How often do you and [coparent] have different ideas as to how to raise him or her?" Scores on the Conflict subscale can range from 3 to 12, with higher scores indicating greater mother-coparent conflict. Alpha coefficients of .65 were obtained for the present sample at each time-point.

Coparenting support was measured using the two-item Support subscale of the PC (Ahrons, 1981). The Support subscale also is completed in reference to a person who helps coparent the child. Items include "When you need help with your child, how often do you go to [coparent] for help?" and "How often would you say that [coparent] is a help to you in raising this child?" Scores on the Support subscale can range from 2 to 8,

with higher scores indicating greater mother-coparent support. An alpha coefficient of .83 was obtained at Time 1, while an alpha coefficient of .82 was obtained at Time 2.

*Parenting practices.* Two indicators—maternal monitoring and mother-child communication—indexed positive parenting in the proposed model. The Monitoring and Control Questionnaire (MCQ) was used to assess the extent to which a mother monitors her child's behavior. This 17-item scale was developed for the present study with help from colleagues (see Kotchick et al., 1997) and is based on monitoring measures used by Patterson and Stouthamer-Loeber (1984) and Steinberg and colleagues (1992). It assesses mothers' perceptions of their knowledge about various aspects of their children's lives. Items are rated on a four-point Likert scale ranging from 1 (*never*) to 4 (*always*). Sample items include, "How often do you know about where [target child] is and what he or she is doing when away from home?," "How often do you know about [target child's] use of alcohol?," and "How often do you know about what his or her grades are?" Scores can range from 17 to 68, with higher scores indicating higher levels of maternal monitoring. Good internal consistency was found with this measure, with alpha coefficients of .91 obtained at both Time 1 and Time 2.

The short form of the Conflict Behavior Questionnaire (CBQ; Prinz, Foster, Kent, & O'Leary, 1979) was used to assess mothers' perceptions of the quality of their communication with their children. This form consists of the 20 items that have the highest phi coefficients and the highest item-to-total correlations among the 75 items in the original CBQ. The short form correlates .96 with the longer version (Prinz et al., 1979). The items, which are endorsed as *true* or *false*, include both positively-worded statements (e.g., "For the most part, your child likes to talk to you") and negatively-

worded statements, which are reverse-scored (e.g., “You and your child argue a lot about rules”). Scores can range from 0 to 20, with higher scores indicating more positive communication. For the present study, alpha coefficients ranged from .85 at Time 1 to .88 at Time 2.

*Child competence.* Two indicators comprised the child competence construct: cognitive competence and social competence. The Parent’s Rating Scale of Child’s Actual Competence (PRS; Harter, 1982) and the Perceived Competence Scale for Children (PCSC; Harter, 1982) have been designed to assess competence in children aged 8 to 18 years and were administered to mothers and children, respectively, to measure both indicators. Mothers were asked seven questions pertaining to their children’s cognitive competence (e.g., “My child is very good at his or her schoolwork”) and seven questions pertaining to social competence (e.g., “He or she has a lot of friends”). Similarly, children were asked seven questions related to their cognitive competence (e.g., “You feel that you are just as smart as other kids your age”), as well as seven questions related to social competence (e.g., “You find it hard to make friends”). Items on both the PRS and the PCSC are rated on a four-point Likert scale ranging from 1 (*not at all*) to 4 (*always*). Scores on the PRS and the PCSC can range from 7 to 28 on each subscale, with higher scores indicating greater competence. Alpha coefficients for mother-reported cognitive competence ranged from .82 to .83; those for mother-reported social competence were initially low (.48) at each time-point, but improved to .67-.74 by deleting items 8, 11, and 12 at both time-points. Despite attempts to improve the child-reported competency measures, alpha coefficients remained quite low (.57-.60 for cognitive; .59-.60 for social).

*Child psychological maladjustment.* Two indicators comprise the child psychological maladjustment construct: internalizing problems and externalizing problems. Mother report of child's maladjustment was assessed using the Internalizing and Externalizing subscales of the Child Behavior Checklist (CBCL; Achenbach, 1991a). The CBCL is a widely used measure of child behavior problems, and Achenbach (1991a) has reported adequate reliability data, as well as evidence of content and criterion validity, with samples including children similar to those in the current study. Mothers indicate the extent to which each behavior is true of the target child using a three-point Likert scale ranging from 0 (*not true*) to 2 (*very or often true*). Scores on the internalizing subscale can range from 0 to 56. Scores on the externalizing subscale can range from 0 to 64. For each subscale, higher scores indicate greater levels of mother-reported problems. Alpha coefficients for the Internalizing subscale ranged from .90 to .91; Externalizing alphas were .93 at both time-points.

Child report of externalizing problems was examined using the Aggression and Delinquency subscales of the Youth Self-Report (YSR; Achenbach, 1991b), a self-report measure for youth aged 11 to 18 years. These subscales were selected because they assess the types of externalizing problems typically displayed by children in the age range included in this study and they have demonstrated acceptable reliability and validity (Achenbach, 1991b). Using a three-point Likert scale ranging from 0 (*not true*) to 2 (*very or often true*), children indicate how true each behavior is of them. The two subscales were summed to yield a 30-item measure of externalizing problems, which scores ranging from 0 to 60. Higher scores indicate higher levels of child-reported externalizing problems. Given that the YSR has not been standardized with children as young as some

of those included in this investigation, several items were modified (e.g., wording changes, providing examples) to increase child understanding. Alpha coefficients ranged from .89 at Time 1 to .90 at Time 2.

Child report of internalizing problems was examined using the Child Depression Inventory (CDI; Kovacs, 1981), a self-report measure of depression for children aged 7 to 17 years. The CDI consists of 27 sets of statements, of which the child is asked to select the one statement in each set that best describes them. Responses are scored on a three-point Likert scale, ranging from 0 to 2. The CDI correlates highly with clinicians' ratings of severity of depression (Kovacs, 1981), and high internal consistency ( $\alpha$  range = .86-.91) and adequate test-retest reliability ( $\alpha$  range = .72-.84) have been reported (Clarizio, 1984). Adequate psychometric data has also been reported for diverse samples, including ones similar to the present sample of children (e.g., Fitzpatrick, 1993). For the current study, one question about suicidal ideation was omitted, resulting in a modified 26-item version of the scale. Scores for the present sample can range from 0 to 52, with higher scores indicating higher levels of child-reported depressive symptomatology. Alpha coefficients ranged from .81 at Time 1 to .82 at Time 2.

### Chapter III: Plan of Analysis

Following initial examination of descriptive data, structural equation modeling (SEM) was used to examine hypothesized relations. As reviewed by Byrne (2001) and Hoyle (1995), SEM offers several attractive multivariate features and it appears to be a particularly appropriate technique for the proposed study. First, by demanding that the pattern of relations among variables be specified *a priori*, SEM takes a more confirmatory (i.e., hypothesis-testing), rather than exploratory, approach to data analysis. In this way, SEM will lend itself particularly well to the analysis of data for inferential purposes. This is a unique approach to multivariate data analysis in that most other multivariate procedures (e.g., multiple regression, exploratory factor analysis) are essentially descriptive by nature, thus limiting hypothesis testing. Second, as an extension of the general linear model, SEM allows for the simultaneous testing of sets of regression equations, including simultaneous comparisons of regression coefficients, means, and variances across multiple relations. Thus, SEM provides a unifying framework under which multiple linear models, rather than simply individual coefficients, may be tested.

A third advantage of SEM is that it provides the opportunity to estimate not only a structural model, but also a measurement model using confirmatory factor analysis. Such a measurement model can provide explicit estimates of error variance parameters; thus, estimated relations among latent variables will be less contaminated by the confounding effects of measurement error. Fourth, although SEM cannot be used to determine causation, it does provide a method of testing whether inferences about causation are



consistent with the data. Other advantages of SEM compared to other multivariate techniques, such as multiple regression, include the clarity provided by pictorial representation of the theory under study, the ability to analyze both latent and observed variables, and, of particular importance for the present study, the ability to model mediating variables.

For the present study, all model analyses, including measurement and structural models, were estimated using AMOS 7.0 software. Models were examined cross-sectionally at Time 1 and Time 2, as well as longitudinally, with exogenous (mother-coparent relationship) and mediating (parenting) constructs measured at Time 1 and endogenous (child competence and psychological maladjustment) constructs measured at Time 2. In longitudinal analysis, change in competence and psychological maladjustment was assessed by controlling for children's prior levels of competence and maladjustment; that is, Time 1 competence and maladjustment measures were entered into the structural equations, with direct paths leading to competence and maladjustment at Time 2.

#### *Evaluation of Model Fit*

Model fit was evaluated using five fit indices. First, the chi-square test of overall model fit was used as an absolute test of model fit. Chi-square tests the extent to which the null hypothesis (e.g., that the proposed model fits the data) is true. The probability value associated with the chi-square test, then, represents the likelihood of obtaining a chi-square value exceeding the chi-square value when the null hypothesis is true. Thus, the higher the probability value associated with chi-square, the greater the likelihood that the null hypothesis (e.g., the model fits the data) is true. For the present study, if the chi-square probability value fell below the conventional level of .05, the model was rejected.

Because the chi-square test of absolute model fit is sensitive to both sample size and non-normality in the distribution of variables (Bryne, 2001), other, more descriptive fit indices also were examined. The Goodness-of-Fit Index (GFI) is considered an absolute test of model fit because it compares the hypothesized model with no model at all (Hu & Bentler, 1999). GFI values can range from zero to 1.00, with values approaching 1.00 indicating good model fit. A related index, the Parsimony Goodness-of-Fit Index (PGFI) essentially represents both the goodness-of-fit of a model (i.e., the GFI index) and the parsimony of the model in a single index. In this way, the PGFI, which can range from zero to 1.00, takes into account the complexity of the model in assessing its overall fit with the data, providing a somewhat more realistic evaluation of the model (Mulaik et al., 1989). Mulaik and colleagues (1989) have suggested that the acceptable range of PGFI values may be lower than that typically considered acceptable for other indices of fit. Thus, based on Mulaik and colleagues (1989), PGFI values equal to or greater than .50, in combination with nonsignificant chi-square tests and GFI values greater than .90, were considered acceptable for the present study.

Based on the recommendations for small sample sizes put forth by Bentler (1990), the Comparative Fit Index (CFI) also was examined. The CFI was developed to address the problem of underestimation of fit in small samples. In this way, it is a revised form of the commonly-used Normed Fit Index (NFI). As with the GFI and PGFI, the CFI is based on a comparison between the proposed model and some standard. In the case of the CFI, this standard represents the independence model (i.e., a restrictive model in which all correlations among variables would equal zero). CFI values, which in essence provide a measure of complete covariation in the data, can range from zero to 1.00. Hu and Bentler

(1999) recommend a CFI value equal to or greater than .95 as representative of a well-fitting model.

One final fit index, the Root Mean Square Error of Approximation (RMSEA), was examined. This index takes into account the error of approximation in the population and addresses how well the model would fit the population covariance matrix if it were known. MacCallum, Browne, and Sugawara (1996) have suggested that RMSEA values between .08 and .10 indicate mediocre fit and those greater than .10 indicate poor fit. Values between .05 and .06 or lower have been recommended as indicating good model fit (Browne & Cudeck, 1993; Hu & Bentler, 1999). It has been strongly recommended that confidence intervals be used to more fully evaluate the precision of RMSEA estimates (MacCallum et al., 1996; Steiger, 1990). For example, a wide confidence interval would indicate that the estimated RMSEA value, even if quite low, is too imprecise to allow for the accurate determination of degree of model fit in the population. However, a narrow confidence interval would suggest that the RMSEA value is an accurate reflection of model fit in the population.

*Evaluation of the measurement model.* Factor analytic measurement models were estimated prior to estimating the structural models to ensure that all indicators were statistically reliable representations of the latent constructs under investigation. This produced factor loadings of all observed variables (indicators) on their respective latent constructs.

*Evaluation of the structural model.* Full latent variable models were used to test the study hypotheses. Coparenting conflict and coparenting support were entered as exogenous variables included as predictors and were allowed to covary. Child

competence and psychological maladjustment were entered as endogenous variables included as predicted outcomes. Parenting was entered as a potential mediator. For each model, the mediating role of parenting was assessed using the criteria set forth by Baron and Kenny (1986): (a) the independent variable is correlated with the dependent variable, (b) the independent variable is correlated with the mediator, (c) the mediator has a significant effect on the dependent variable, after controlling for the effect of the independent variable on the dependent variable, and (d) if the mediator fully mediates the relation between the independent variable and the dependent variable, the effect of the independent variable on the dependent variable is reduced to nonsignificance in the presence of the mediator. Thus, each model was subjected to a series of analyses to determine whether parenting served as a partial or full mediator. The first analysis examined direct paths from coparenting variables to child outcomes, in the absence of parenting; the second examined indirect paths from coparenting to child outcomes through parenting; and the third examined these direct and indirect paths simultaneously.

#### *Analysis of Demographic Variables*

Although not included in the basic conceptual model presented in Figure 1, the effects of demographic variables on the model were examined. During preliminary data analysis, bivariate correlations between demographic variables and all observed variables were computed. An additional model was tested to determine whether the inclusion of those demographic variables significantly associated with major study variables would alter the relations among the latent variables in the structural model. This was accomplished by treating all latent variables as endogenous variables and significant demographics variables as exogenous variables. If paths in the structural model remain

significant with the inclusion of these demographic variables, it may be concluded that the relations between the constructs in the model remain significant regardless of demographic characteristics.

#### *Testing Moderating Effects*

It was hypothesized that community context and child age each may moderate the mediating role of parenting in the association between coparenting and child outcomes. To test these hypotheses, structural models were subjected to two separate two-group analyses (Bollen, 1989). The community context variable was split into an urban group ( $n = 105$ ) and a rural group ( $n = 133$ ), while the child age variable was split into one group of younger children (7.00 to 11.92 years old,  $n = 122$ ) and one group of older children (12.00 to 16.00,  $n = 91$ ). As with the basic structural models, series of models were tested in order to determine whether parenting served as a partial or full mediator for each group (i.e., moderated mediation). A decrement in model fit, as evidenced by change in fit indices, would indicate that the model does not fit the data similarly in rural vs. urban environments or for younger vs. older children, thus providing evidence for a moderating effect. Specific paths within in the model were analyzed to determine the particular relations (e.g., parenting predicting child psychological maladjustment; coparenting support predicting parenting) that are moderated by community context or child age.

## Chapter IV: Results

### *Preliminary Analyses*

Means, standard deviations, and alpha coefficients for major study variables are presented in Table 2. Only those instruments with alpha coefficients greater than .65 were utilized in the primary analyses; thus child-reported social and cognitive competence variables, which demonstrated low alpha coefficients despite attempts at improvement, were omitted from subsequent analyses.

Tables 3 through 8 present the bivariate correlation matrices that underlie the models being estimated. As shown in Table 3 to 5, there are several significant correlations between demographic variables and major study variables, cross-sectionally at each time-point and longitudinally. Child gender was correlated with mother-reported internalizing symptoms at Time 1 such that mothers reported higher levels of symptoms for girls ( $r = .20, p < .01$ ); however, child gender was not associated with major study variables at Time 2 or longitudinally. Older child age was associated with poorer mother-child communication at Time 1 ( $r = -.14, p < .05$ ), Time 2 ( $r = -.18, p < .01$ ), and longitudinally ( $r = -.14, p < .05$ ), while older mother age was associated with more maternal monitoring at Time 1 ( $r = .21, p < .01$ ), Time 2 ( $r = .22, p < .001$ ), and longitudinally ( $r = .21, p < .01$ ). Higher mother education level was associated with more maternal monitoring at Time 1 ( $r = .19, p < .01$ ), Time 2 ( $r = .19, p < .01$ ), and longitudinally ( $r = .19, p < .01$ ); it also was associated with lower child-reported

internalizing at Time 1 ( $r = -.14, p < .05$ ) and with lower mother-reported internalizing at Time 2 ( $r = -.21, p < .01$ ) and longitudinally ( $r = -.16, p < .05$ ).

Community context correlated with several variables. Residing in an urban neighborhood was associated with more coparent support at Time 1 ( $r = -.22, p < .001$ ), Time 2 ( $r = -.20, p < .01$ ), and longitudinally ( $r = -.22, p < .001$ ), as well as with more maternal monitoring at Time 1 ( $r = -.39, p < .001$ ), Time 2 ( $r = -.45, p < .001$ ), and longitudinally ( $r = -.39, p < .001$ ). Furthermore, residing in a more urban neighborhood was associated with less child-reported externalizing at Time 1 ( $r = .23, p < .001$ ), less child-reported internalizing at Time 2 ( $r = .15, p < .05$ ) and longitudinally ( $r = .15, p < .05$ ), and less mother-reported internalizing at Time 2 ( $r = .15, p < .05$ ) and longitudinally ( $r = .15, p < .05$ ). Finally, monthly income was not correlated with any of the major study variables.

Bivariate correlations between major study variables are presented in Tables 6 through 8. As expected, coparent support was negatively correlated with coparent conflict at Time 1 ( $r = -.21, p < .001$ ) and Time 2 ( $r = -.20, p < .01$ ). Higher coparent support was associated with more maternal monitoring at Time 1 ( $r = .13, p < .05$ ) and Time 2 ( $r = .27, p < .001$ ), as well as with higher cognitive competence at Time 1 ( $r = .16, p < .05$ ) and longitudinally ( $r = .16, p < .05$ ). Higher coparent conflict was associated with less monitoring at Time 1 ( $r = -.21, p < .01$ ) and poorer mother-child communication at Time 1 ( $r = -.28, p < .001$ ) and Time 2 ( $r = -.35, p < .001$ ). Higher coparent conflict also was associated with more mother-reported internalizing at Time 1 ( $r = .20, p < .01$ ), Time 2 ( $r = -.31, p < .001$ ), and longitudinally ( $r = .25, p < .001$ ); with more mother-reported externalizing at Time 1 ( $r = .17, p < .01$ ) and Time 2 ( $r = -.28, p < .001$ ); with more child-

reported internalizing at Time 1 ( $r = .17, p < .01$ ), Time 2 ( $r = -.14, p < .05$ ), and longitudinally ( $r = .15, p < .05$ ); and with more child-reported externalizing at Time 1 ( $r = .17, p < .01$ ) and longitudinally ( $r = .22, p < .001$ ). More conflict also was associated with less cognitive competence at Time 2 ( $r = -.27, p < .001$ ).

Maternal monitoring was positively correlated with mother-child communication at Time 1 ( $r = .25, p < .001$ ) and Time 2 ( $r = .27, p < .001$ ). More monitoring was associated with less mother-reported externalizing at Time 1 ( $r = -.14, p < .05$ ); with less child-reported internalizing at Time 1 ( $r = -.18, p < .01$ ), Time 2 ( $r = -.20, p < .01$ ), and longitudinally ( $r = -.14, p < .05$ ); and with less child-reported externalizing at Time 1 ( $r = -.17, p < .01$ ). More monitoring also was associated with more cognitive competence at Time 2 ( $r = .20, p < .01$ ) and less mother-reported internalizing at Time 2 ( $r = -.19, p < .01$ ). Better mother-child communication was associated with more social competence at Time 1 ( $r = .15, p < .05$ ), Time 2 ( $r = .28, p < .001$ ), and longitudinally ( $r = .21, p < .001$ ), as well as more cognitive competence at Time 1 ( $r = .28, p < .001$ ), Time 2 ( $r = .30, p < .001$ ), and longitudinally ( $r = .33, p < .001$ ). Better communication also was associated with less mother-reported internalizing at Time 1 ( $r = -.39, p < .001$ ), Time 2 ( $r = -.45, p < .001$ ), and longitudinally ( $r = -.38, p < .001$ ); with less mother-reported externalizing at Time 1 ( $r = -.48, p < .001$ ), Time 2 ( $r = -.56, p < .001$ ), and longitudinally ( $r = -.47, p < .001$ ); with less child-reported internalizing at Time 1 ( $r = -.17, p < .01$ ) and longitudinally ( $r = -.15, p < .05$ ); and with less child-reported externalizing at Time 1 ( $r = -.15, p < .01$ ).

As expected, many of the outcomes variables were correlated. Social and cognitive competence were positively correlated at Time 1 ( $r = .46, p < .001$ ) and Time 2



( $r = .46, p < .001$ ). Social competence was negatively associated with mother-reported internalizing at Time 1 ( $r = -.24, p < .001$ ) and Time 2 ( $r = -.34, p < .001$ ); with mother-reported externalizing at Time 1 ( $r = -.26, p < .001$ ) and Time 2 ( $r = -.41, p < .001$ ); and with child-reported externalizing at Time 2 ( $r = -.14, p < .05$ ). Similarly, cognitive competence was negatively associated with mother-reported internalizing at Time 1 ( $r = -.26, p < .001$ ) and Time 2 ( $r = -.36, p < .001$ ); with mother-reported externalizing at Time 1 ( $r = -.27, p < .001$ ) and Time 2 ( $r = -.40, p < .001$ ); with child-reported internalizing at Time 1 ( $r = -.21, p < .01$ ) and Time 2 ( $r = -.18, p < .01$ ); and with child-reported externalizing at Time 2 ( $r = -.15, p < .05$ ). Furthermore, mother-reported internalizing and externalizing were positively correlated at Time 1 ( $r = .64, p < .001$ ) and Time 2 ( $r = .64, p < .001$ ), as were child-reported internalizing and externalizing at Time 1 ( $r = .34, p < .001$ ) and Time 2 ( $r = .38, p < .001$ ). Mother-reported externalizing was positively associated with child-reported externalizing at Time 1 ( $r = .20, p < .01$ ) and with child-reported internalizing at Time 2 ( $r = .18, p < .01$ ). Finally, mother-reported internalizing was positively associated with child-reported internalizing, but only at Time 2 ( $r = .29, p < .001$ ).

#### *Evaluation of the Measurement Models*

Six measurement models were estimated to determine whether the indicators selected to represent the latent constructs did so in a statistically significant manner. In each of these models, the first observed variable for each latent factor was set to 1.0 to establish the scaling. All factors were allowed to covary. Two models (i.e., one including mother-reported maladjustment and one including child-reported maladjustment) were

estimated cross-sectionally at Time 1 and Time 2, as well as longitudinally. All models included only mother reports of competence, as child reports were not reliable.

Measurement models are presented in Figures 2 through 7. Standardized regression weights, error terms, and covariance estimates for each model are presented in the figures. As shown in Table 9, both cross-sectional models at Time 1, as well as both longitudinal models demonstrated excellent fit according to the criteria outlined earlier. In these two models, all indicators achieved statistically significant regression weights. Models 3 and 4, representing Time 2 cross-sectional data, each demonstrated rather poor fit, with only the RMSEA statistic achieving acceptable values. Modifications to these two models failed to improve the fit statistics; thus, Models 3 and 4 were eliminated from subsequent structural analyses.

#### *Evaluation of the Structural Models*

Once it was determined that the proposed factor structures fit the data well cross-sectionally at Time 1 and longitudinally, a series of structural models were tested using SEM. As in the measurement models, factor variance was scaled by setting the first indicator for each latent factor to 1.0 in each of the structural models. Fit indices for all structural models are presented in Table 10.

As outlined in the plan of analysis, each model was put through a series of three SEM analyses to determine whether parenting served as a partial or full mediator according to the criteria set forth by Baron and Kenny (1986). Preliminary evidence that coparenting was independently associated with child outcomes (criterion a), as well as parenting (criterion b), can be seen in the bivariate analyses documented in Tables 4 through 6. Additionally, criterion (a) was tested by using SEM to estimate simplified

structural models, omitting the parenting construct (e.g., model 1A). Criterion (b) also can be seen in a subsequent structural model including paths from coparenting to parenting (e.g., model 1B). To test whether parenting continued to be associated with child outcomes while controlling for the effects of coparenting (criterion c), a third model (e.g., model 1C) was constructed including direct paths from coparenting to child outcomes, as well as indirect paths through parenting. Finally, this third model was examined to determine whether the relation between coparenting and child outcomes was reduced to nonsignificance in the presence of parenting, thereby supporting full mediation.

*Time 1 cross-sectional SEM.* As shown in Table 10 (models 1A-C), all three of the cross-sectional structural models utilizing mother reports of competence and child reports of maladjustment fit the data well, although the best fitting model is that depicting the parenting construct as fully mediating the relation between coparenting constructs and child outcomes [ $\chi^2$  (df = 40) = 52.48,  $p > .10$ ; GFI = .89; PGFI = .53; CFI = .97; RMSEA = .04 (CI .00-.06)]. Further evidence for full mediation comes from examination of the individual models. As shown in Figure 8, the first criterion for mediation is met in that coparenting support was positively associated with competence ( $\beta = .14, p < .01$ ) and coparenting conflict was positively associated with maladjustment ( $\beta = .37, p < .05$ ). Furthermore, as seen in Figure 9, the second criterion was met; positive parenting was positively associated with coparenting support ( $\beta = .41, p < .001$ ) and negatively associated with coparenting conflict ( $\beta = -.65, p < .001$ ).

The test for full vs. partial mediation (see Figure 10) revealed that positive parenting not only was significantly associated with competence ( $\beta = .24, p < .01$ ) and

maladjustment ( $\beta = -.44, p < .05$ ) while controlling for the effects of support and conflict on the outcome variables, but also that the association between the coparenting variables and child outcomes was reduced to nonsignificance in the presence of the mediator. Thus, positive parenting appeared to fully mediate the association between coparenting support and social and cognitive competence such that greater support was associated with more positive parenting ( $\beta = .41, p < .001$ ), which in turn was associated with greater competence ( $\beta = .28, p < .001$ ). Similarly, coparenting conflict was associated with less positive parenting ( $\beta = -.65, p < .001$ ), which in turn was associated with more maladjustment ( $\beta = -.49, p < .01$ ), including more internalizing and externalizing difficulties.

A second set of cross-sectional models was analyzed (see Table 10, 2A-C), utilizing mother reports of internalizing and externalizing, as well as competence. A similar pattern of findings was observed, although as a group, these three models fit the data slightly less well than did the models using child reports of maladjustment. As before, the best fitting model of this second group was the model depicting parenting as a full mediator [ $\chi^2 (df = 40) = 57.02, p > .05$ ; GFI = .91; PGFI = .66; CFI = .97; RMSEA = .04 (CI .01-.07)]. As shown in Figure 10, in the absence of the mediator, coparenting support was again positively associated with competence ( $\beta = .18, p < .01$ ), while coparenting conflict was positively associated with maladjustment ( $\beta = .34, p < .01$ ). Furthermore, as displayed in Figure 11, positive parenting was positively associated with coparenting support ( $\beta = .25, p < .01$ ) and negatively associated with coparenting conflict ( $\beta = -.51, p < .001$ ).

As shown in Figure 12, the pattern of findings regarding full vs. partial mediation was the same as in the first set of analyses. The introduction of the mediator reduced the associations between coparenting variables and outcome variables to nonsignificance and positive parenting was significantly associated with child outcomes while controlling for the effects of the coparenting variables. As before, greater coparenting support was associated with more positive parenting ( $\beta = .25, p < .01$ ), which in turn was associated with greater competence ( $\beta = .39, p < .001$ ), while greater coparenting conflict was associated with less positive parenting ( $\beta = -.51, p < .001$ ), which in turn was associated with more maladjustment ( $\beta = -.69, p < .001$ ), including more internalizing and externalizing difficulties.

*Longitudinal SEM.* Longitudinal models including child reports of internalizing and externalizing symptoms and mother reports of competence demonstrated fairly poor model fit (see Table 10, 3A-C). While PGFI values were acceptable, ranging from .51 to .52, other fit indices fell outside of acceptable ranges, including significant  $\chi^2$  values. Examination of model 3A (see Figure 14) reveals that coparenting conflict was again positively associated with maladjustment in the absence of the mediator ( $\beta = .36, p < .01$ ). However, in contrast to the pattern seen with the cross-sectional models, lower coparenting support was associated with more maladjustment ( $\beta = -.20, p < .05$ ), but not with child competence in the absence of the mediator.

As shown in Figure 15, parenting again was positively associated with coparenting support ( $\beta = .47, p < .001$ ) and competence ( $\beta = .39, p < .01$ ), but negatively associated with coparenting conflict ( $\beta = -.71, p < .001$ ) and maladjustment ( $\beta = -.38, p < .05$ ); thus, the first two criteria supporting the role of parenting as a mediator between

coparenting support and maladjustment, as well as between coparenting conflict and maladjustment, were met. However, the third model in this set (Figure 16) shows that the effect of positive parenting on maladjustment is reduced to nonsignificance when controlling for the effects of both coparenting variables on maladjustment. In sum, positive parenting did not mediate the relation between coparenting support or conflict on child-reported internalizing and externalizing.

The longitudinal models including mother reports of internalizing and externalizing, as well as competence, also fit the data poorly (see Table 10, 4A-C), with none of the fit indices within acceptable limits. The first criterion for mediation was not met in that neither coparenting support nor coparenting conflict was significantly associated with either child outcome variables in the absence of the mediator (see Figure 17). Thus, while positive parenting was again positively associated with coparenting support ( $\beta = .32, p < .01$ ) and competence ( $\beta = .65, p < .001$ ) and negatively associated with coparenting conflict ( $\beta = -.50, p < .001$ ) and maladjustment ( $\beta = -.55, p < .001$ ) (see Figures 18 and 19), evidence to support either a partial or full mediational role of positive parenting was not found.

Due to poor model fit and the absence of mediation in the two longitudinal models, all subsequent analyses were conducted using only the Time 1 cross-sectional models depicting full mediation (i.e., models 1B and 2B as seen in Figures 9 and 12, respectively).

*Inclusion of demographic controls.* Given that bivariate analyses revealed several significant correlations between demographic and major study variables at Time 1 (see Table 3), additional structural models were tested to determine whether the relations

among the latent variables would be altered with the inclusion of these demographic variables. Child gender, mother age, monthly income, and mother education level were included where appropriate; the additional demographic variables significantly associated with major study variables (i.e., community and child age) were excluded from these analyses for later examination of moderating effects.

Consistent with bivariate analyses, SEM revealed that child gender was significantly associated with mother-reported internalizing symptoms ( $\beta = .25, p < .001$ ) such that girls were rated higher on internalizing than were boys. Also consistent with correlational analyses, maternal age was significantly, and positively associated with maternal monitoring, although this was found only for the model including child reports of maladjustment ( $\beta = .19, p < .01$ ) and not for the model with mother-reported maladjustment ( $\beta = -.03, n.s.$ ). Similarly, mother education level was significantly, and positively, associated with monitoring in the model with child reports of maladjustment ( $\beta = .14, p < .05$ ), but not in the model with mother-reported maladjustment ( $\beta = .05, n.s.$ ). Finally, mother education level was significantly, and negatively, associated with child-reported internalizing ( $\beta = -.12, p < .05$ ), as was seen in the bivariate analyses.

Overall, model fit was reduced with the inclusion of the demographic variables (see Table 10). However, as seen in Figures 20 and 21, the significance and direction of effect for all models paths remained unchanged with the inclusion of these demographic variables, indicating that the relations between constructs in the model are supported even when demographic variables are controlled.

*The moderating effects of community context and child age.* Fit indices for all moderation models testing full mediation are presented in Table 11, suggesting that the

models fit the data fairly well for most groups. Notably, model fit is approximately equal, and good, across rural and urban groups when using child reports of maladjustment.

While data from each community group fit the model well when using mother-reported maladjustment, the urban data does demonstrate much better fit than does the rural data. Furthermore, when using child reports of maladjustment, the model fit the younger children's data slightly better than it did the older children's data, although both demonstrate good fit. The only model that demonstrated poor fit was that for younger children using mother reports of maladjustment; among older children in these analyses, excellent model fit was obtained.

In addition to examining fit indices, steps were taken to determine whether criteria for full vs. partial mediation were met. As seen in Table 12, significant direct paths between coparenting and outcomes, as well as coparenting and positive parenting were found for several models, providing preliminary evidence to suggest a mediating role of parenting. Follow-up SEM analyses were used to test the remaining two criteria for mediation. As seen in Figures 22 and 23, parenting fully mediated the association between coparenting support and competence for rural children. Furthermore, among urban children, parenting fully mediated the association between coparenting conflict and mother-reported maladjustment (see Figure 24), but not child-reported maladjustment. Thus, the support-parenting-competence pathway was more robust for rural families, while the conflict-parenting-maladjustment pathway was more robust for urban families.

Among older children, parenting fully mediated the association between coparenting conflict and mother-reported maladjustment (see Figure 25). Furthermore, among older children, parenting fully mediated the associations between conflict and



competence, as well as between support and competence (see Figures 25 and 26).

Support for a mediating role of parenting in any of the hypothesized relations was not found for younger children. Thus, the role of positive parenting as a mediator between coparenting variables and child outcomes appears restricted to adolescents, with little evidence for such pathways among younger children.

## Chapter V: Discussion

The present study sought to explore the associations between two dimensions of coparenting relationships and child outcomes among a sample of African American single mother families. It was hypothesized that coparenting support would be associated with positive outcomes in youth (i.e., competence), while coparenting conflict would be associated with negative child outcomes (i.e., maladjustment). Additionally, it was predicted that one mechanism by which both coparenting support and conflict may impact child outcomes is through mothers' parenting, namely monitoring of child behavior and the quality of communication with the child. It was further hypothesized that the relations between coparenting variables and child outcomes may vary as a function of child age and the community in which the family resides.

As hypothesized, coparenting support and conflict each were associated with child outcomes. Consistent with prior research (e.g., Emery, 1988; Emery & O'Leary, 1984; Fauber, et al., 1990; Jones, Shaffer, et al., 2003), the present study found that higher levels of coparenting conflict were associated with more child internalizing and externalizing symptoms. Contributing to a small but growing literature (e.g., Brody, Murry, et al., 2002; Brody et al., 1998), this study also found that greater levels of coparenting support were associated with more child social and cognitive competence. Contrary to earlier suggestions in the marital and family literatures that "not being nasty matters more than being nice" (Ewart et al., 1991, p. 155; Jones, Forehand, Dorsey, et al.,

2005), results from the present study demonstrate that both positive and negative dimensions of the coparenting relationship impact child psychosocial functioning. In fact, earlier studies may have underestimated the importance of coparenting support by not considering its association with more positive aspects of child well-being, such as competence. Thus, comprehensive studies of family functioning should include measures of positive and negative aspects of both coparenting and child outcomes.

Also consistent with hypotheses, mothers' parenting fully mediated the associations between coparenting variables and child outcomes. Higher levels of coparenting support were associated with more positive parenting, which in turn was associated with greater child competence. More conflict in the coparenting relationship was associated with less positive parenting, which in turn was associated with more internalizing and externalizing difficulties. All this is consistent with prior research documenting the beneficial effects of coparenting support (e.g., Belsky & Vondra, 1989; Hashima & Amato, 1994; Taylor & Roberts, 1995; Jones, Forehand, Dorsey, et al., 2005) and the detrimental effects of coparenting conflict (e.g., Brody et al., 1994; Fauber, et al., 1990; Mann & Mackenzie, 1996; Miller et al., 1993; Dishion & McMahan, 1998) on parental monitoring and discipline, as well as the mother-child relationship. The present findings regarding the mediating role of parenting also are consistent with prior literature suggesting that compromised parenting may be a primary mechanism through which children are adversely affected by coparenting conflict (Davies & Cummings, 1994; Fauber et al., 1990; Jones, Shaffer, et al., 2003).

Although not a focus of the present study, it can be hypothesized that coparenting support and conflict influence parenting behavior primarily through their effect on

maternal psychological well-being. More conflictual relationships with coparents have been associated with greater psychological distress (e.g., Bogat et al., 1998; Davis, 2002; Jones, Forehand, Dorsey, et al., 2005) and depressive symptoms which in turn compromise parenting efficacy (Dorsey et al., 2007). Conversely, coparenting support has been shown to enhance maternal psychosocial well-being (Burchinal et al., 1996; Feiring et al., 1987; Jennings et al., 1991) and alleviate psychological distress which in turn enhances parenting behavior (see Simons & Johnson, 1996 for a review). Furthermore, more perceived family support has been associated with better maternal self-esteem (Taylor & Roberts, 1995), while lower levels of perceived social support have been predictive of maternal depressive symptoms, which in turn have been associated with greater levels of parenting stress (Jackson, 1998).

In an effort to further explore the heterogeneity among single-mother African American families, the conceptual model was examined among families residing in both urban and rural communities. Overall, higher levels of maternal monitoring were observed in the urban families compared to the rural families. Prior research (e.g., Armistead et al., 2002; Jones, Forehand, et al., 2003; Jones, Forehand, O'Connell, et al., 2005) suggests that mothers in inner-city areas may adaptively engage in more monitoring in response to increased dangers in their communities. Also noteworthy, higher levels of coparenting support were found among urban families. Although it has been suggested that families residing in urban communities typically feel more socially isolated (Klebanov et al., 1994), the present results suggest that mothers may in fact seek more parenting support from loved ones in an effort to counteract the detrimental effects of community risk, as prior evidence suggests that social support may promote more

effective parenting (Jones, Forehand, O'Connell, et al., 2005) and less child psychological distress (Forehand & Jones, 2003) among urban families. In fact, lower levels of internalizing and externalizing symptoms were found among the urban children compared to the rural children, perhaps providing additional support for a buffering effect of coparenting support and heightened monitoring in risky urban environments.

In SEM analyses, the conceptual model demonstrated adequate fit among both the urban and rural groups, although significant differences among model paths were found. For urban families, positive parenting fully mediated the association between coparenting conflict and child maladjustment, although no significant relations between coparenting support and child outcomes were observed. Conversely, among rural families positive parenting fully mediated the association between coparenting support and child competence, with no significant relations between coparenting conflict and child outcomes. Thus, among urban families, coparenting conflict was associated with less positive parenting, which was associated with more maladjustment, while among rural families, coparenting support was associated with more positive parenting, which was associated with greater child competence.

While both the urban and rural families were, for the most part, low-income and headed by low-educated mothers, the differential ratios of risks to resources they encountered in their communities may have impacted how positive and negative dimensions of coparenting relationships influenced parenting practices and child well-being. Further research will be needed to examine why conflict among coparents residing in urban communities, which likely have more risks and fewer resources than rural communities (Forehand et al., 2000), would be more strongly associated with child

outcomes than would coparenting support. It is possible that coparenting conflict is more detrimental in an inner-city urban environment because it represents one more stressor on an already stressed family system, which negatively impacts a mother's ability to effectively parent her child. Thus, in such an environment, the absence of conflict could in fact be more important than the presence of support when one considers child maladjustment as an outcome. In this study, higher levels of conflict were not, however, associated with decrements in effective parenting among the rural sample, although higher levels of support were significantly associated with better parenting, and in turn, greater competence. Future studies should attempt to more fully explore why coparenting support would be more important among rural families, although it could be hypothesized that coparenting conflict is itself less detrimental in environments characterized by lower levels of community risk and greater resources.

In addition to examining the moderating effect of community, the mediational model was tested among younger versus older children. These analyses revealed that the model fit the data only for adolescents, aged 12 to 16 years, and was not significant for children aged 7 to 11 years. Among adolescents, coparenting conflict was associated with maladjustment, and interestingly, competence, with evidence for full mediation of parenting. However, among younger children, positive parenting did not mediate any relations between coparenting variables and child outcomes. Prior research has shown that positive parenting remains instrumental in healthy psychosocial development across the age span (see Dishion & McMahon, 1998; Maccoby & Martin, 1983 for reviews) and the detrimental effects of conflict among married and divorced parents is seen at all ages (e.g., Hetherington, 1999). However, the effects of the coparenting relationship may be

more direct when children are younger, perhaps due to greater observation of coparent interactions. As children transition into adolescence, opportunities for direct interactions with mothers and their coparents may decrease, but the coparenting relationship may continue to affect child outcomes through maternal parenting abilities. While the present study demonstrated mediation moderated by community context and child age separately, it was beyond the scope of this project to explore whether an interaction between child age and community could moderate the mediational model. Future studies, with much larger sample sizes, may be able to elucidate whether this moderating effect of child age depends at all upon the environment in which a family resides (e.g., how does the model fit adolescents versus children in urban versus rural communities?).

Notably, support for the conceptual model was found cross-sectionally at Time 1, but not cross-sectionally at Time 2 or longitudinally. It is not entirely clear why the measurement models demonstrated poor fit for Time 2 data, as all questionnaires showed adequate internal reliability at Time 2 during preliminary factor analysis. It could be that the indicators chosen to load onto latent constructs (e.g., monitoring and mother-child communication onto parenting) failed to do so in a statistically significant manner during the second assessment and that other indicators not explored in this study may have been more appropriate. As for the poor fit of the longitudinal models, at least two factors should be considered. First, the need to control for Time 1 child outcomes added more variables to an already large model. Given the sample size, this likely resulted in significantly less statistical power. Second, it is possible that the dimensions of coparenting and parenting examined are more robustly associated with short-term child outcomes and that other demographic or family-based variables (e.g., socioeconomic

status, maternal psychological characteristics) are better predictors of child functioning approximately one year later.

Several limitations of the present study deserve mention. First, the proposed study makes extensive use of self-report measurement. Including both mother-report and child-report of child outcomes begins to address the issue of common reporter variance; however, observational measures of parenting and coparenting, as well as coparent-report on the quality of the mother-coparent relationship would likely improve confidence in obtained results and should be included in future studies. Second, the child-reported competence measure demonstrated very poor reliability, requiring its omission from primary analyses. This is surprising given its reliability in other studies using similar samples (e.g., Smith & Brody, 2000). It could be that many of the children, particularly those who were younger, had difficulty reflecting on their own cognitive and social abilities. Such children may respond better to the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (PSPCSA; Harter & Pike, 1984), a downward extension of the scales used in this study. There are PSPCSA versions for preschool/kindergarten children and first/second graders although this instrument has been successfully used with children as old as 9 years old (Jerome, Fujiki, Brinton, & James, 2002).

A third limitation is that while the present study examined two demographic variables as moderators, other demographic variables were controlled in analyses. Based on preliminary results, it is feasible that the models could change depending on mother age and mother education, as older mothers and better educated mothers appeared to engage in more monitoring, with less internalizing problems for their children. Thus,



future research with larger sample sizes that would support more complex models should examine other demographically-based moderators. Finally, this study's conceptual model presupposes a unidirectional association between the coparenting relationship, maternal parenting practices, and child outcomes. In reality, these associations may be bidirectional in nature. For instance, the ways in which a mother parents her child may predict the amount of conflict or support she experiences with her coparent. Furthermore, child behavior, including psychological symptoms or prosocial competence, may influence the parenting style that a mother adopts.

Despite these limitations, the current study significantly contributes to the existing literature in several ways. First, this study answers the call for further research on coparenting relationships in diverse and single parent families (Feinberg, 2002; Jones et al., 2007; Van Egeren & Hawkins, 2004). It focuses specifically on an understudied, but growing, population of families in America, namely African American single mothers. Second, the present study made extensive use of focus groups and pilot testing in order to ensure cultural relevance of constructs. Third, this study sought to better elucidate the relations between coparenting and child outcomes using a highly contextual model, examining both mediators and moderators.

A fourth strength of the present study is that it adopted a much more balanced model than is typically seen in research on minority children, which tends to focus on risks. By examining both positive and negative dimensions of child functioning, as well as viewing two distinct dimensions of coparenting rather than a single continuum, the present study revealed that coparent support is as important as coparent conflict in the ability of mothers to effectively parent their children, as well as in child well-being.

While prior research has suggested that the absence of coparenting conflict is associated with lower levels of internalizing and externalizing problems, the present results suggest that coparenting support is itself associated with more positive domains of child functioning, namely cognitive and social development.

One final strength of the present study is its focus on family- and child-level variables amenable to intervention. Results support previous research showing the positive effects of parenting characterized by monitoring and warmth, two dimensions of parenting routinely targeted in parent-focused treatment (e.g., McMahon & Forehand, 2003; Reid & Webster-Stratton, 2001). A major contribution of the present study is the finding that both support and conflict among non-married, and often non-custodial, coparents are significantly associated with child psychosocial functioning. This suggests that efforts should be made to involve extended family and close friends in the treatment of African American youth when feasible, in order to promote healthier relationships between those raising the target child.

Several directions for future studies can be offered. Just as there has been a push in recent years to involve husbands and fathers in family-based research (see Phares, Lopez, Fields, Kamboukos, & Dulig, 2005 for a review), so too should researchers examining single mother families attempt to involve those who assist with coparenting. Ethnographic studies suggest this to be particularly important for African American families who often value the importance of extended family and close personal friends (Jones et al., 2007). Furthermore, there is a need for further qualitative studies specifically examining how non-marital coparents assist single mothers. Much of our current understanding of coparents is based on divorced couples and young husbands and

wives transitioning to parenthood with the birth of an infant child, although most African American single mothers are raising their children from infancy through young adulthood with the assistance of female family members, with the majority never having been married. Thus, the relationship dynamics that exist in such families deserve greater attention and should be contrasted with those in formerly-romantic partnerships. While it may prove challenging to obtain adequately large samples, researchers should begin exploring associations between coparenting and outcomes based on the identity of the coparent (e.g., biological fathers versus grandmothers). Qualitative and ethnographic studies may also assist us in further elucidating exactly how non-marital coparents assist single mothers, be it through tangible or emotional support, and whether additional dimensions to the relationships, beyond conflict and support, are associated with parenting or psychosocial functioning.

## Appendix A: Parenting Convergence Scale

DIRECTIONS: You are the primary caregiver for [TARGET CHILD]. Who would you identify as the second most important caregiver for [TARGET CHILD]?

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What is his or her relationship to [TARGET CHILD]?

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Tell me how often the following occur:

1 = Never      2 = Rarely      3 = Sometimes      4 = Often

### Conflict Subscale

1. When you and [COPARENT] talk about how to raise [TARGET CHILD], how often is the conversation hostile or angry?
2. When you child complains about this person, how often do you usually agree with [TARGET CHILD]?
3. How often do you and [COPARENT] have different ideas as to how to raise [TARGET CHILD]?

### Support Subscale

4. When you need help with [TARGET CHILD], how often do you go to [COPARENT] for help?
5. How often would you say that [COPARENT] is a help to you in raising this child?

## Appendix B: Monitoring and Control Questionnaire

DIRECTIONS: Parents differ in how much they are involved in different areas of their children's lives. For each item, tell me the number that fits with how often you know about [TARGET CHILD]'s life in the following areas. I am not asking you how often [TARGET CHILD] does these things, but how much you know about whether he or she does these things.

1 = Never

2 = Seldom

3 = Usually

4 = Always

1. [TARGET CHILD]'s choice of friends, who they are, what they are like?
2. [TARGET CHILD]'s intellectual interests, both in and out of school (e.g., books he or she reads)?
3. His or her activities outside of school (e.g., sports, jobs, clubs, etc.)?
4. His or her interest in and activities with boy/girl friend; dating behaviors; behaviors with opposite sex?
5. How much [TARGET CHILD] is involved in sexual activities such as kissing, having sex? (*Reminder: we are not asking how much he or she does these things, but how much you would know about it.*)
6. [TARGET CHILD]'s health habits, such as amount of sleep, diet, exercise?
7. His or her use of tobacco or cigarettes?
8. His or her use of alcohol?
9. His or her use of drugs?
10. [TARGET CHILD]'s problem behavior at school (e.g., skipping school, discipline reports, being late, being sent to the principal's office, etc.)?
11. Who his or her teachers are and what they think of him or her?
12. His or her school-related activities, other than classes, such as sports, clubs, etc?
13. Where [TARGET CHILD] is and what he or she is doing when away from home?
14. What he or she watches on television?
15. What movies he or she attends?
16. What [TARGET CHILD]'s grades are?
17. What homework he or she has to do each night?

## Appendix C: Conflict Behavior Questionnaire

DIRECTIONS: Think back over the last several weeks at home. I am going to read sentences that have to do with you and [TARGET CHILD]. You tell me if you believe that the statement is true or false about you and this child. Your answers will not be shown to [TARGET CHILD].

1. [TARGET CHILD] is easy to get along with.
2. [TARGET CHILD] is well behaved in your discussions with him or her.
3. [TARGET CHILD] is receptive to criticism or listens when you correct him or her.
4. For the most part, he or she likes to talk to you.
5. You and he or she never seem to agree.
6. [TARGET CHILD] usually listens to what you tell him or her.
7. At least three times a week, you and he or she get angry at each other.
8. He or she says that you have no consideration or respect for his or her feelings.
9. You and [TARGET CHILD] compromise or reach an agreement during arguments.
10. [TARGET CHILD] often doesn't do what you ask.
11. The talks that you and he or she have are frustrating.
12. [TARGET CHILD] often seems angry at you.
13. He or she acts impatient when you talk.
14. In general, you don't think you and he or she get along very well.
15. [TARGET CHILD] almost never understands your side of an argument.
16. [TARGET CHILD] and you have big arguments about little things.
17. He or she is defensive or doesn't listen to what you say.
18. He or she thinks your opinions don't count.
19. You and he or she argue a lot about rules.
20. [TARGET CHILD] tells you that he or she thinks you are unfair.

## Appendix D: Parent's Rating Scale for Child's Actual Competence

DIRECTIONS: I am going to read you several sentences that often describe people. After I read each one to you, I want you to decide how well the sentence describes your child. Of course, there are no right or wrong answers.

1 = Not at all like child, 2 = A little bit like child, 3 = Quite a bit like child, 4 = Always like child

### Cognitive Subscale

1. [TARGET CHILD] is very good at his or her school work.
2. He or she is just as smart as other kids his or her age.
3. He or she is pretty slow at finishing his or her school work.
4. He or she can remember things easily.
5. He or she does well in class.
6. He or she has difficulty understanding what he or she reads.
7. He or she has trouble figuring out the answers in school.

### Social Subscale

8. [TARGET CHILD] finds it hard to make friends.
9. He or she has a lot of friends.
10. [TARGET CHILD] is a pretty important member of his or her class.
11. He or she usually does things by him- or herself.
12. He or she is not liked by very many others.
13. [TARGET CHILD] is popular with others his or her age.
14. He or she is really easy to like.

## Appendix E: Perceived Competence Scale for Children

DIRECTIONS: I am going to read some sentences to you that say things about a lot of children your age. After I read one to you, try to decide how well that sentence is like you now.

1 = Not at all like you, 2 = A little bit like you, 3 = Quite a bit like you, 4 = Always like you

### Cognitive Subscale

1. You are very good at your school work.
2. You feel that you are just as smart as other kids your age.
3. You are pretty slow at finishing your school work.
4. You often forget what you learn.
5. You like school because you do well in class.
6. You wish it were easier to understand what you read.
7. You have trouble figuring out the answers in school.

### Social Subscale

8. You find it hard to make friends.
9. You have a lot of friends.
10. You think that you are a very important member of your class.
11. You are always doing things with a lot of kids.
12. You wish that more kids liked you.
13. You are popular with others your age (other children like you).
14. You are really easy to like.



## Appendix F: Child Behavior Checklist

DIRECTIONS: The sentences I'm going to read describe children. For each item that describes your child now or within the past 6 months, please say whether the item is "very or often true," "somewhat or sometimes true," or "not true" of your child. In the last 6 months:

### Internalizing Subscale

1. [TARGET CHILD] complains of loneliness.
2. He or she cries a lot.
3. He or she fears he or she might think or do something bad.
4. He or she feels he or she has to be perfect.
5. He or she feels or complains that no one loves him or her.
6. He or she feels that others are out to get him or her.
7. He or she feels worthless or inferior.
8. He or she would rather be alone than with others.
9. He or she is nervous, high-strung, or tense.
10. He or she is too fearful or anxious.
11. [TARGET CHILD] feels too guilty.
12. He or she is often tired.
13. He or she has physical problems without a known medical cause:
  - a. Aches or pains (not headaches)
  - b. Headaches
  - c. Nausea, feels sick
  - d. Problems with eyes
  - e. Rashes or other skin problems
  - f. Stomachaches or cramps
  - g. Vomiting, throwing up
14. He or she refuses to talk.
15. [TARGET CHILD] is secretive, keeps things to him- or herself.
16. He or she is self-conscious or easily embarrassed.
17. He or she is shy or timid.
18. He or she is suspicious.
19. He or she is underactive, slow moving, or lacks energy.
20. He or she is unhappy, sad, or depressed.
21. He or she is withdrawn, doesn't get involved with others.
22. He or she worries.

### Externalizing Subscale

23. He or she argues a lot.
24. [TARGET CHILD] brags or boasts.
25. He or she is cruel to others, bullying or being mean to them.
26. [TARGET CHILD] demands a lot of attention.
27. He or she destroys his or her own things.
28. He or she destroys things belonging to his or her family or others.
29. He or she is disobedient at home.

30. He or she is disobedient at school.
31. He or she doesn't seem to feel guilty after misbehaving.
32. [TARGET CHILD] is easily jealous.
33. [TARGET CHILD] gets in many fights.
34. He or she hangs around with others who get in trouble.
35. [TARGET CHILD] lies or cheats.
36. He or she physically attacks people.
37. He or she prefers being with older kids.
38. He or she runs away from home.
39. [TARGET CHILD] screams a lot.
40. He or she sets fires.
41. He or she shows off or clowns too much.
42. He or she steals at home.
43. He or she steals outside the home.
44. He or she is stubborn, sullen, or irritable.
45. He or she has sudden changes in mood or feelings.
46. He or she swears or uses obscene language.
47. He or she talks too much.
48. [TARGET CHILD] teases others a lot.
49. He or she has temper tantrums or a hot temper.
50. He or she threatens people.
51. He or she skips school.
52. He or she is unusually loud.
53. He or she uses alcohol or drugs for non-medical purposes.
54. He or she vandalizes property.

## Appendix G: Youth Self-Report

DIRECTIONS: I am going to read some sentences that tell about things boys and girls sometimes do. Please tell me if this sentence is not true, sometimes true, or often true about you. For example, when I read the sentence, "I wear tennis shoes," you would say "not true" if you don't wear them, "sometimes true" is you wear them some of the time, and "often true" is you wear them almost every day. Okay, let's start.

### Aggression Subscale

1. You argue or fuss with others a lot.
2. You brag or say you are good at doing lots of things or that you are tougher than other children.
3. You are mean to others.
4. You try to get a lot of attention; get others to watch you.
5. You destroy or mess up your own things.
6. You destroy or mess up other people's things.
7. You disobey at school.
8. You are jealous of others; wish you were like them or had things they have.
9. You get in many fights.
10. You attack or hurt people.
11. You scream a lot.
12. You show off or clown around.
13. You are stubborn; don't do what grown-ups tell you to do.
14. Your mood or feelings change quickly.
15. You talk too much.
16. You tease others a lot.
17. You have a hot temper; get mad easily.
18. You threaten to hurt people; say you are going to hurt people.
19. You are louder than other kids.

### Delinquency Subscale

20. You don't feel guilty after doing something you shouldn't.
21. You hang around with kids who get in trouble.
22. You lie or cheat.
23. You would rather be with older kids than with kids your own age.
24. You run away from home.
25. You set fires.
26. You steal at home.
27. You steal from places other than home.
28. You swear or use dirty language.
29. You cut classes or skip school.
30. You use alcohol or drugs for non-medical purposes.

## Appendix H: Child Depression Inventory

**DIRECTIONS:** Now, I am going to read you some sentences. Tell me which of the three sentences that I read describe your feelings and ideas in the past two weeks. You know, which one best says how you were feeling in the last two weeks.

**EXAMPLE:** You are happy all the time.  
You are happy many times.  
You are never happy.

1. You are sad once in a while.  
0  
You are sad many times.  
1  
You are sad all the time.  
2
2. Nothing will ever work out for you.  
2  
You are not sure if things will work out for you.  
1  
Things will work out for you okay.  
0
3. You do most things okay.  
0  
You do many things wrong.  
1  
You do everything wrong.  
2
4. You have fun doing many things.  
0  
You have fun doing some things.  
1  
Nothing is fun at all.  
2
5. You are bad all the time.  
2  
You are bad many times.  
1  
You are bad once in a while.  
0
6. You think about bad things happening to you once in a while.  
0

You worry that bad things will happen to you.

1

You are sure that terrible things will happen to you.

2

7. You hate yourself.

2

You do not like yourself.

1

You like yourself.

0

8. All bad things are your fault.

2

Many bad things are your fault.

1

Bad things are usually not your fault.

0

9. You feel like crying everyday.

2

You feel like crying many days.

1

You feel like crying once in a while.

0

10. Things bother you all the time.

2

Things bother you many times.

1

Things bother you once in a while.

0

11. You like being with people.

0

You do not like being with people many times.

1

You do not want to be with people at all or ever.

2

12. You cannot make up your mind about things.

2

It is hard to make up your mind about things.

1

You make up your mind about things easily.

0

13. You look okay.  
0  
There are some bad things about your looks.  
1  
You look ugly.  
2
14. You have to push yourself all the time to do your schoolwork.  
2  
You have to push yourself many times to do your schoolwork.  
1  
Doing schoolwork is not a big problem.  
0
15. You have trouble sleeping every night.  
2  
You have trouble sleeping many nights.  
1  
You sleep pretty well.  
0
16. You are tired once in a while.  
0  
You are tired many days.  
1  
You are tired all the time.  
2
17. Most days you do not feel like eating.  
2  
Many days you do not feel like eating.  
1  
You don't have problems eating your meals.  
0
18. You do not worry about aches and pains.  
0  
You worry about aches and pains many times.  
1  
You worry about aches and pains all the time.  
2
19. You do not feel alone.  
0  
You feel alone many times.  
1

You feel alone all the time.

2

20. You never have fun at school.

2

You have fun at school only once in a while.

1

You have fun at school many times.

0

21. You have plenty of friends.

0

You have some friends but you wish you had more.

1

You do not have any friends.

2

22. Your schoolwork is alright.

0

Your schoolwork is not as good as before.

1

You do very badly in subjects you used to be good in.

2

23. You can never be as good as other kids.

2

You can be as good as other kids if you want to.

1

You are just as good as other kids.

0

24. Nobody really loves you.

2

You are not sure if anybody loves you.

1

You are sure that somebody loves you.

0

25. You usually do what you are told.

0

You do not do what you are told most times.

1

You never do what you are told.

2

26. You get along with people.

0

You get into fights many times.

1

You get into fights all the time.

2



*Table 1: Demographic Characteristics of the Sample (n = 238)*

Variable	%	Mean	SD	Range
Child gender				
Male	49.8			
Female	50.2			
Child age (years)		11.36	1.83	7-16
Mother age (years)		33.94	6.29	24-67
Monthly family income		1075	857	0-8968
Mother education level				
Less than HS diploma	38.6			
High school diploma	36.2			
More than HS diploma	25.1			
Community type				
Rural	54.0			
Urban	46.0			
Coparent relation to child <sup>a</sup>				
Maternal grandmother	30.7			
Biological father	26.1			
Maternal aunt	10.9			
Sister	11.6			
Other	20.7			

<sup>a</sup>This data collected on a subset of participating families (n = 133).

*Table 2: Descriptive statistics for major study variables (n = 238)*

Variable	Mean	SD	Range	$\alpha$
Coparenting support				
Time 1	6.23	1.96	2-8	.83
Time 2	6.32	1.82	2-8	.82
Coparenting conflict				
Time 1	8.38	2.53	3-12	.65
Time 2	8.52	2.34	3-12	.65
Maternal monitoring				
Time 1	45.73	7.04	17-51	.91
Time 2	53.72	10.83	26-68	.91
Mother-child communication				
Time 1	16.11	3.91	1-20	.85
Time 2	15.46	4.58	1-20	.88
Mother-reported child social competence				
Time 1	13.10	2.46	4-16	.67
Time 2	13.14	2.49	4-16	.74
Mother-reported child cognitive competence				
Time 1	22.14	4.42	7-28	.83
Time 2	22.27	4.22	8-28	.82
Child self-reported social competence				
Time 1	15.97	3.39	5-20	.60
Time 2	16.30	2.96	8-20	.59
Child self-reported cognitive competence				
Time 1	17.48	3.79	6-24	.60
Time 2	21.15	3.83	10-28	.57
Mother-reported child internalizing symptoms				
Time 1	10.07	8.41	0-44	.90
Time 2	10.25	8.78	0-45	.91
Mother-reported child externalizing symptoms				
Time 1	14.22	10.47	0-54	.93
Time 2	14.20	10.40	0-55	.93

*Table 2 cont'd.*

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Variable	Mean	SD	Range	$\alpha$
Child self-reported internalizing symptoms				
Time 1	7.56	6.24	0-30	.81
Time 2	7.99	6.48	0-30	.82
Child self-reported externalizing symptoms				
Time 1	10.92	8.08	0-44	.89
Time 2	11.22	8.96	0-53	.90

---

Table 3: Correlation matrix for demographic and major study variables, cross-sectionally at Time 1 (n = 238)

	1	2	3	4	5	6
1. Child gender	--					
2. Child age	.04	--				
3. Mother age	-.05	.33***	--			
4. Monthly income	.00	.01	-.10	--		
5. Mother education	-.02	.00	.03	.17**	--	
6. Community type	.00	-.18**	-.29***	.28***	-.03	--
7. PC support	-.04	-.05	-.06	.03	.02	-.22***
8. PC conflict	-.06	-.05	.12	-.10	.08	-.12
9. MCQ	.12	-.02	.21**	-.08	.19**	-.39***
10. CBQ	.01	-.14*	-.04	-.01	.11	-.01
11. PRS social	.01	-.05	--	.08	.08	.11
12. PRS cognitive	.06	-.01		-.01	.12	-.12
13. CBCL internal	.20**	.04		-.06	-.13	.11
14. CBCL external	-.08	.00	-.04	-.05	-.05	-.07
15. CDI	-.06	-.06	-.13	.09	-.14*	.11
16. YSR	.00	.02	-.08	.07	.00	.23***

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

Table 4: Correlation matrix for demographic and major study variables, cross-sectionally at Time 2 (n = 238)

	1	2	3	4	5	6
1. Child gender	--					
2. Child age	.04	--				
3. Mother age	-.02	.29***	--			
4. Monthly income	-.11	-.09	-.24***	--		
5. Mother education	.00	-.03	.01	.22***	--	
6. Community type	.00	-.18**	-.29***	.34***	-.11	--
7. PC support	.01	-.02	-.04	-.09	.04	-.20**
8. PC conflict	-.02	.01	.00	-.02	.07	-.13
9. MCQ	.04	-.01	.22***	-.10	.19**	-.45***
10. CBQ	-.04	-.18**	-.02	.09	.08	.05
11. PRS social	.09	-.02	-.03	.11	.00	.10
12. PRS cognitive	.07	-.02	.03	.05	.15*	-.09
13. CBCL internal	.06	.07	-.07	-.11	-.21**	.15*
14. CBCL external	-.11	.03	-.11	-.04	-.06	-.09
15. CDI	-.07	-.01	-.12	-.07	-.13	.15*
16. YSR	.06	.05	-.03	-.06	.04	.05

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

Table 5: Correlation matrix for demographic and major study variables, longitudinally (n = 238)

	1	2	3	4	5	6
1. Child gender	--					
2. Child age T1	.04	--				
3. Mother age T1	-.05	.33***	--			
4. Monthly income T1	.00	.01	-.10	--		
5. Mother education T1	-.02	.00	.03	.17**	--	
6. Community type	.00	-.18**	-.29***	.28***	-.03	--
7. PC support T1	-.04	-.05	-.06	.03	.02	-.22***
8. PC conflict T1	-.06	-.05	.12	-.10	.08	-.12
9. MCQ T1	.12	-.02	.21**	-.08	.19**	-.39***
10. CBQ T1	.01	-.14*	-.04	-.01	.11	-.01
11. PRS social T2	.09	-.02	-.06	.05	.03	.10
12. PRS cognitive T2	.07	-.02	.00	.01	.10	-.09
13. CBCL internal T2	.06	.07	-.06	.03	-.16*	.15*
14. CBCL external T2	-.11	.03	-.08	-.01	-.04	-.09
15. CDI T2	-.07	-.01	-.10	.07	-.12	.15*
16. YSR T2	.06	.05	-.04	.08	.05	.05

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

Table 6: Correlation matrix for major study variables, cross-sectionally at Time 1 (n = 238)

	1	2	3	4	5	6	7
1. PC support T1	--						
2. PC conflict T1	-.21**	--					
3. MCQ T1	.13*	-.21**	--				
4. CBQ T1	.10	-.28***	.25***	--			
5. PRS social T1	.01	.04	-.09	.15*	--		
6. PRS cognitive T1	.16*	.06	.09	.28***	.46***	--	
7. CBCL internal T1	-.05	.20**	-.11	-.39***	-.24***	-.26***	--
8. CBCL external T1	.05	.17**	-.14*	-.48***	-.26***	-.27***	.64***
9. CDI T1	-.02	.17**	-.18**	-.17**	-.03	-.21**	.05
10. YSR T1	-.01	.17**	-.17**	-.15*	-.02	.04	.12

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

Table 6 cont'd.

---

	8	9	10
1. PC support T1			
2. PC conflict T1			
3. MCQ T1			
4. CBQ T1			
5. PRS social T1			
6. PRS cognitive T1			
7. CBCL internal T1			
8. CBCL external T1	--		
9. CDI T1	.01	--	
10. YSR T1	.20**	.34***	--

---

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .



Table 7: Correlation matrix for major study variables, cross-sectionally at Time 2 (n = 238)

	1	2	3	4	5	6	7
1. PC support T2	--						
2. PC conflict T2	-.20**	--					
3. MCQ T2	.27***	-.13	--				
4. CBQ T2	.09	-.35***	.27***	--			
5. PRS social T2	-.02	.10	-.02	.28***	--		
6. PRS cognitive T2	.10	-.27***	.20**	.30***	.46***	--	
7. CBCL internal T2	-.03	.31***	-.19**	-.45***	-.34***	-.36***	--
8. CBCL external T2	.00	.28***	-.10	-.56***	-.41***	-.40***	.64***
9. CDI T2	-.10	.14*	-.20**	-.12	-.11	-.18**	.29***
10. YSR T2	.01	.11	-.01	-.08	-.14*	-.15*	.09

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

Table 7 cont'd.

---

	8	9	10
1. PC support T2			
2. PC conflict T2			
3. MCQ T2			
4. CBQ T2			
5. PRS social T2			
6. PRS cognitive T2			
7. CBCL internal T2			
8. CBCL external T2	--		
9. CDI T2	.18**	--	
10. YSR T2	.12	.38***	--

---

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

Table 8: Correlation matrix for major study variables, longitudinally (n = 238)

---

	PC support T1	PC conflict T1	MCQ T1	CBQ T1
PRS social T2	.11	-.02	.00	.21**
PRS cognitive T2	.16*	.07	.10	.33***
CBCL internal T2	.03	.25***	-.12	-.38***
CBCL external T2	.01	.10	-.10	-.47***
CDI T2	-.09	.15*	-.14*	-.15*
YSR T2	-.08	.22***	-.05	-.09

---

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

Table 9: Fit indices for all measurement models ( $n = 238$ )

---

Model	$\chi^2$ (df=35)	GFI	PGFI	CFI	RMSEA (CI)
1	45.68**	.90	.52	.97	.03 (.00-.06)
2	45.00**	.92	.58	.98	.03 (.00-.06)
3	63.74	.87	.46	.93	.06 (.04-.09)
4	64.57	.85	.47	.90	.06 (.04-.09)
5	46.95*	.97	.52	.97	.04 (.00-.07)
6	41.03***	.93	.50	.99	.02 (.00-.06)

---

\* $p > .05$ ; \*\* $p > .10$ ; \*\*\* $p > .20$ .

Table 10: Fit indices for all structural models ( $n = 238$ )

Model	$\chi^2$ (df)	GFI	PGFI	CFI	RMSEA (CI)
1A	33.77 (23)*	.91	.50	.97	.04 (.00-.07)
1B	52.48 (40)**	.89	.53	.97	.04 (.00-.06)
1B w/demographics	81.24 (60)	.84	.55	.95	.04 (.01-.06)
1C	50.12 (38)*	.88	.51	.97	.04 (.00-.07)
2A	40.49 (23)	.91	.58	.96	.06 (.03-.09)
2B	57.02 (40)*	.91	.66	.97	.04 (.01-.07)
2B w/demographics	117.07 (73)	.82	.57	.92	.05 (.03-.07)
2C	54.77 (38)	.90	.63	.97	.05 (.01-.07)
3A	171.02 (61)	.76	.51	.82	.09 (.08-.11)
3B	217.09 (86)	.73	.52	.81	.08 (.07-.09)
3C	214.00 (84)	.73	.51	.81	.09 (.07-1.0)
4A	296.39 (61)	.72	.48	.76	.14 (.12-.15)
4B	365.67 (86)	.70	.49	.74	.12 (.11-.14)
4C	362.18 (84)	.70	.49	.74	.13 (.11-.14)

1 & 3 = Models with child reports of internalizing/externalizing.

2 & 4 = Models with mother reports of internalizing/externalizing.

A = Preliminary analyses with direct paths in the absence of the mediator.

B = Primary analyses with indirect mediational paths only.

C = Secondary analyses with both direct paths and indirect mediational paths.

\* $p > .05$ ; \*\* $p > .10$ .

Table 11: Fit indices for moderation models cross-sectionally at Time 1 (n = 238)<sup>a</sup>

Model	$\chi^2$ (df = 40)	GFI	PGFI	CFI	RMSEA (CI)
<u>Child report of maladjustment:</u>					
Rural	45.20**	.82	.50	.96	.04 (.00-.07)
Urban	42.35**	.81	.50	.98	.02 (.00-.07)
Younger	47.76**	.82	.50	.96	.04 (.00-.07)
Older	49.99*	.81	.49	.95	.05 (.00-.09)
<u>Mother report of maladjustment:</u>					
Rural	60.05*	.83	.60	.93	.07 (.03-.10)
Urban	32.69**	.89	.65	1.00	.00 (.00-.05)
Younger	61.90	.82	.59	.92	.07 (.03-.10)
Older	40.33***	.87	.63	1.00	.01 (.00-.07)

<sup>a</sup>All models graphically depict full mediation.  
 \* $p > .10$ ; \*\* $p > .20$ ; \*\*\* $p > .50$ .

Table 12: Standardized regression weights ( $\beta$ ) for direct paths in moderation models cross-sectionally at Time 1 ( $n = 238$ )

	Support-- Competence	Support-- Maladjustment	Support-- Parenting	Conflict-- Competence	Conflict-- Maladjustment	Conflict-- Parenting
<u>Child report of maladjustment:</u>						
Rural	.15*	-.31	.63**	.03	.53	-.83**
Urban	.11	.12	.10	.18	.20	-.51**
Younger	.13*	-.24	.56**	.01	.43	-.93**
Older	.35**	-.07	.40**	-.35*	.33	-.54**
<u>Mother report of maladjustment:</u>						
Rural	.19*	-.19	.47**	.04	.28	-.67**
Urban	.11	-.05	.10	.22	.42**	-.48***
Younger	.14*	-.18	.23	.01	.31*	-.56**
Older	.36**	-.13	.34**	-.36*	.39	-.49**

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

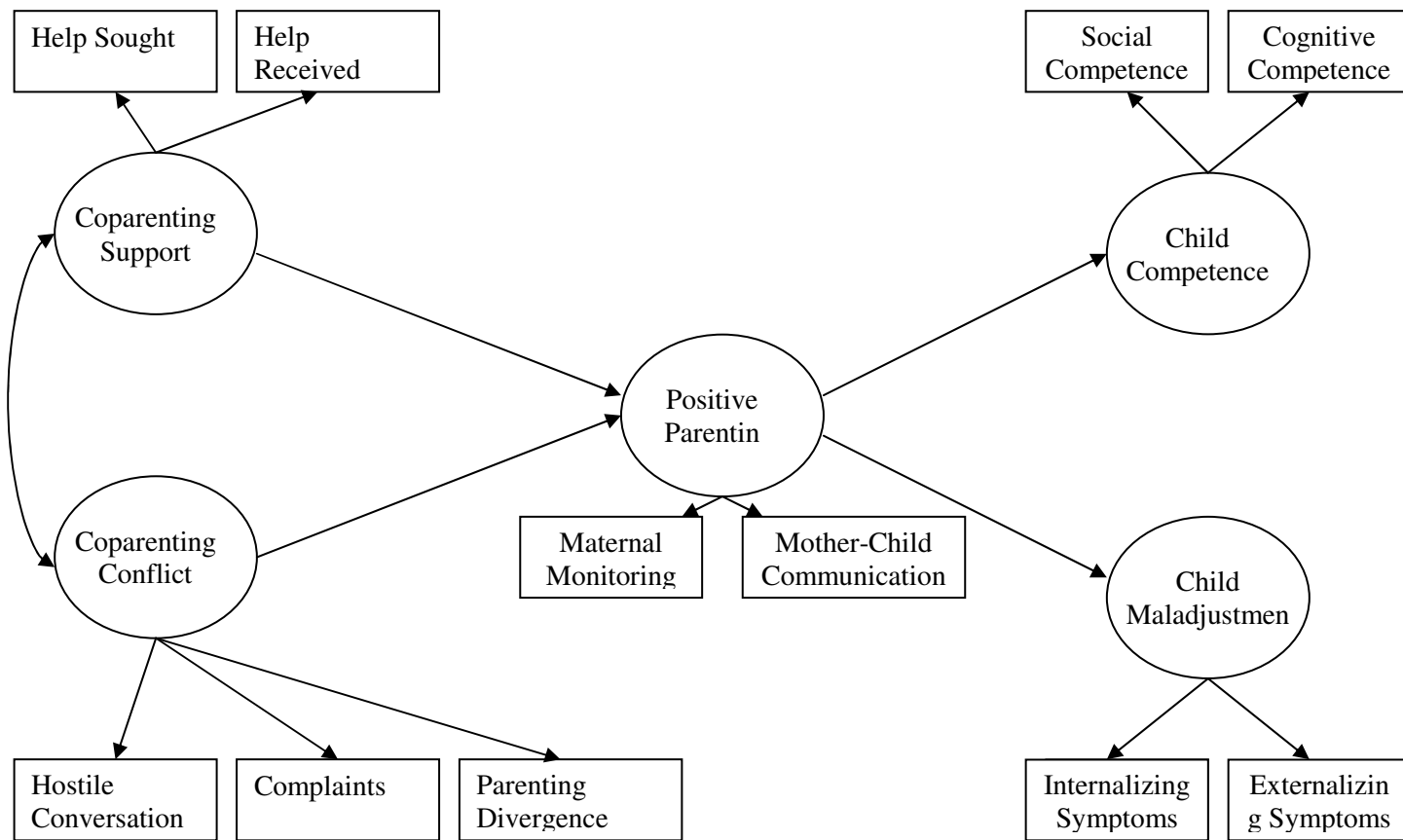


Figure 1: Basic conceptual model.



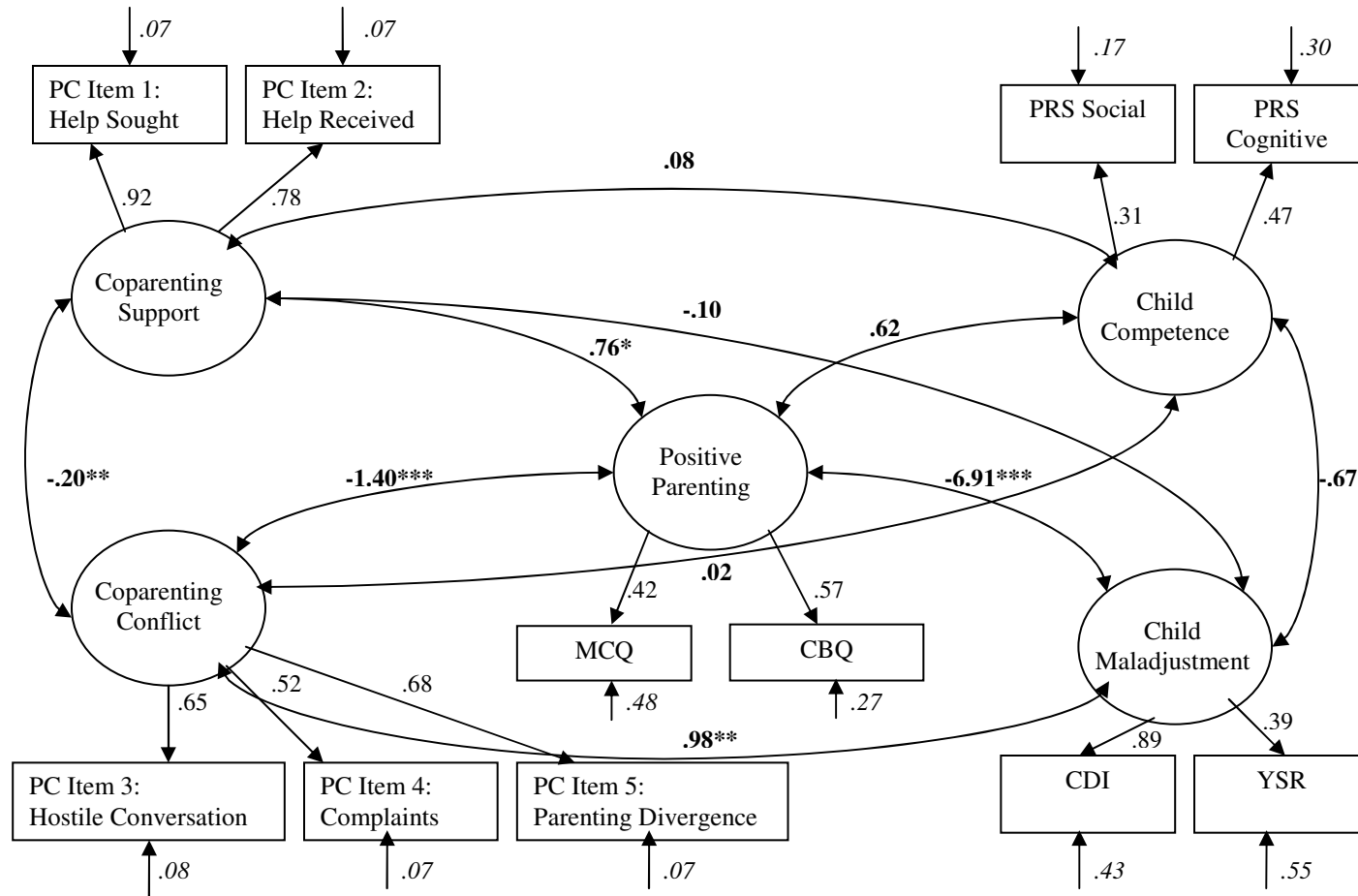


Figure 2: Measurement Model 1. Time 1 cross-sectional measurement model for testing the loading of indicators on their respective latent variables. Numbers set in bold are covariance estimates between latent variables; numbers set in italics are error terms for indicators; numbers set in standard font are standardized regression weights for indicators on latent variables. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

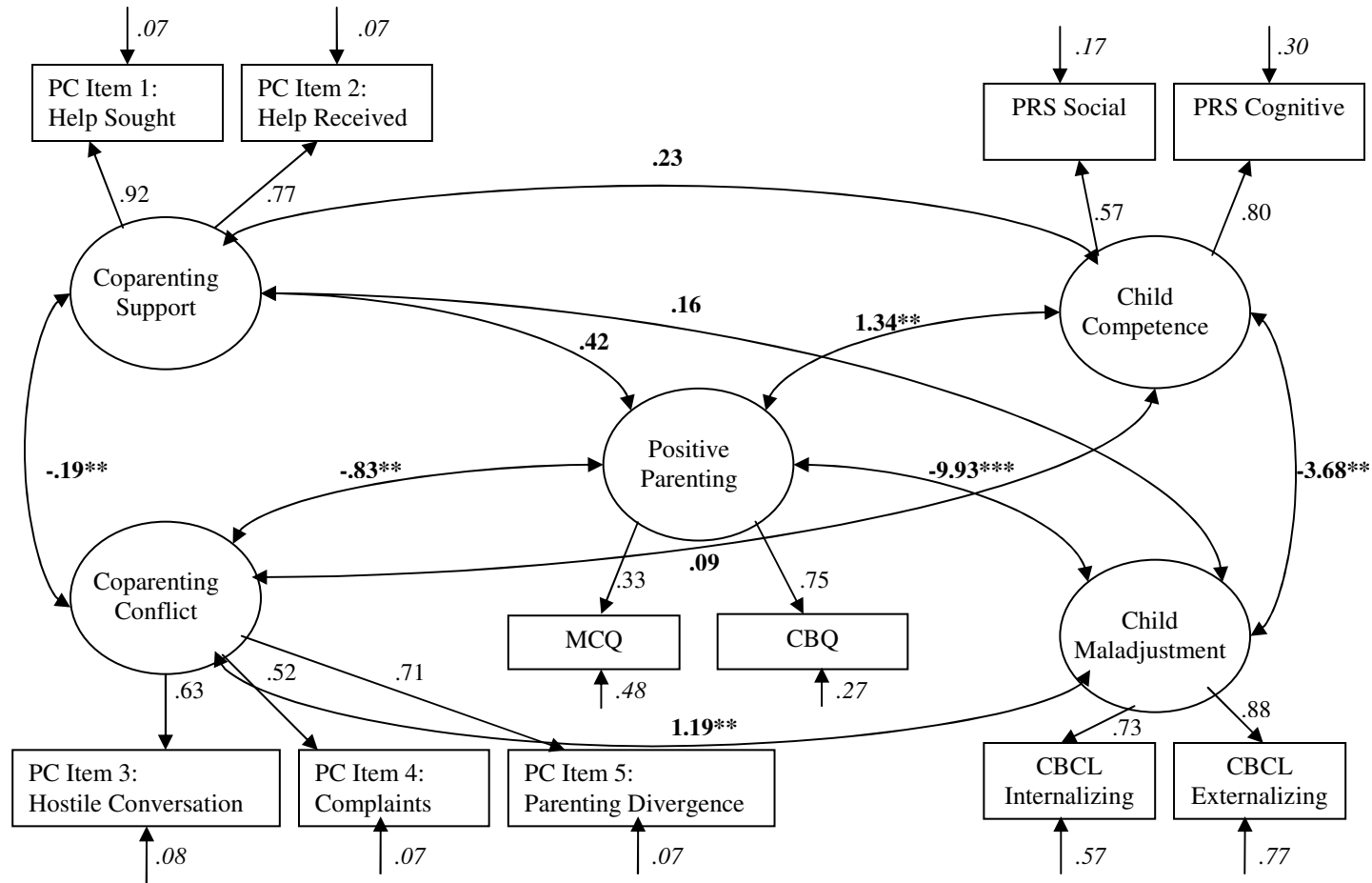


Figure 3: Measurement Model 2. Time 1 cross-sectional measurement model for testing the loading of indicators on their respective latent variables. Numbers set in bold are covariance estimates between latent variables; numbers set in italics are error terms for indicators; numbers set in standard font are standardized regression weights for indicators on latent variables. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

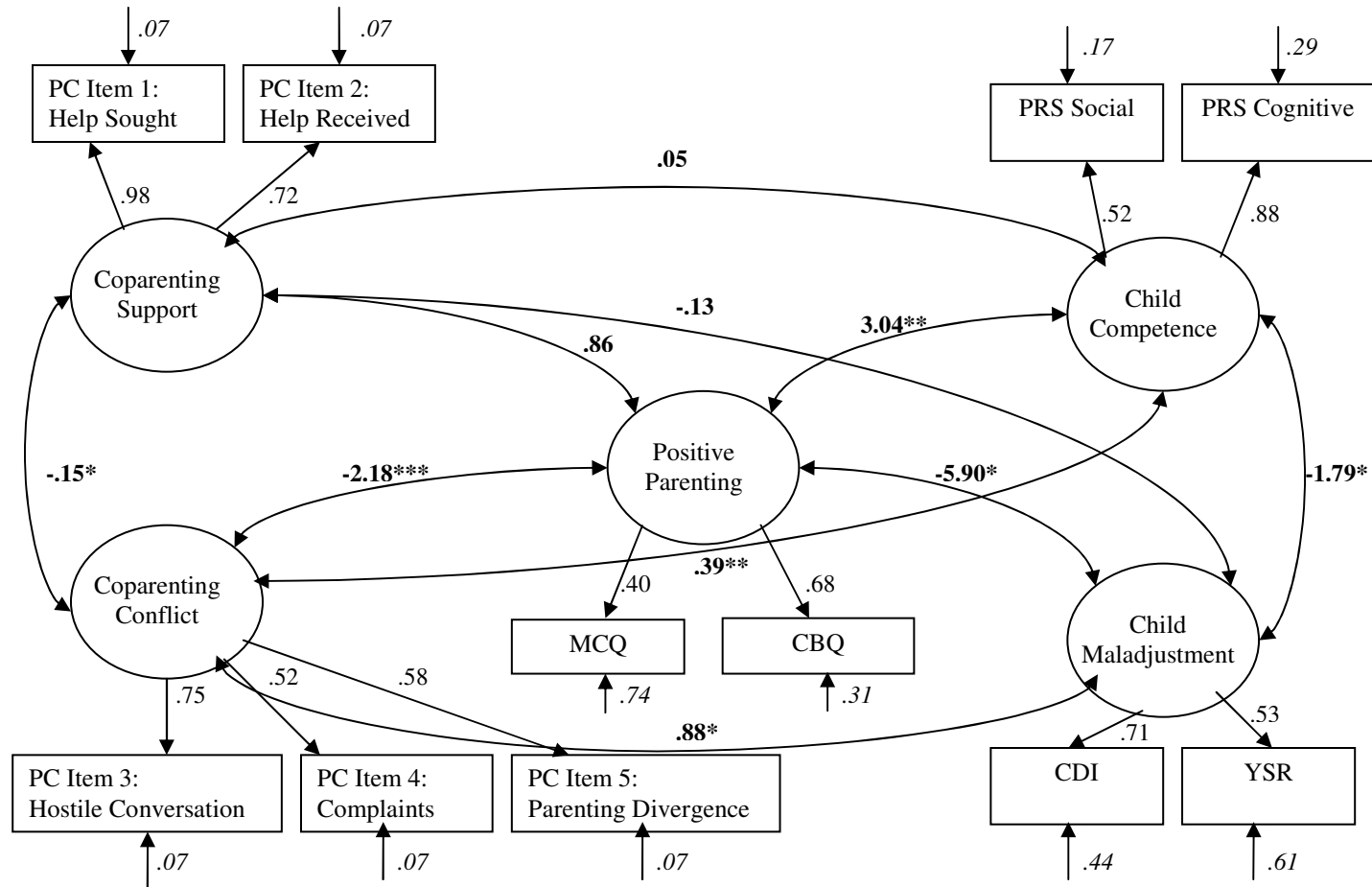


Figure 4: Measurement Model 3. Time 2 cross-sectional measurement model for testing the loading of indicators on their respective latent variables. Numbers set in bold are covariance estimates between latent variables; numbers set in italics are error terms for indicators; numbers set in standard font are standardized regression weights for indicators on latent variables. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

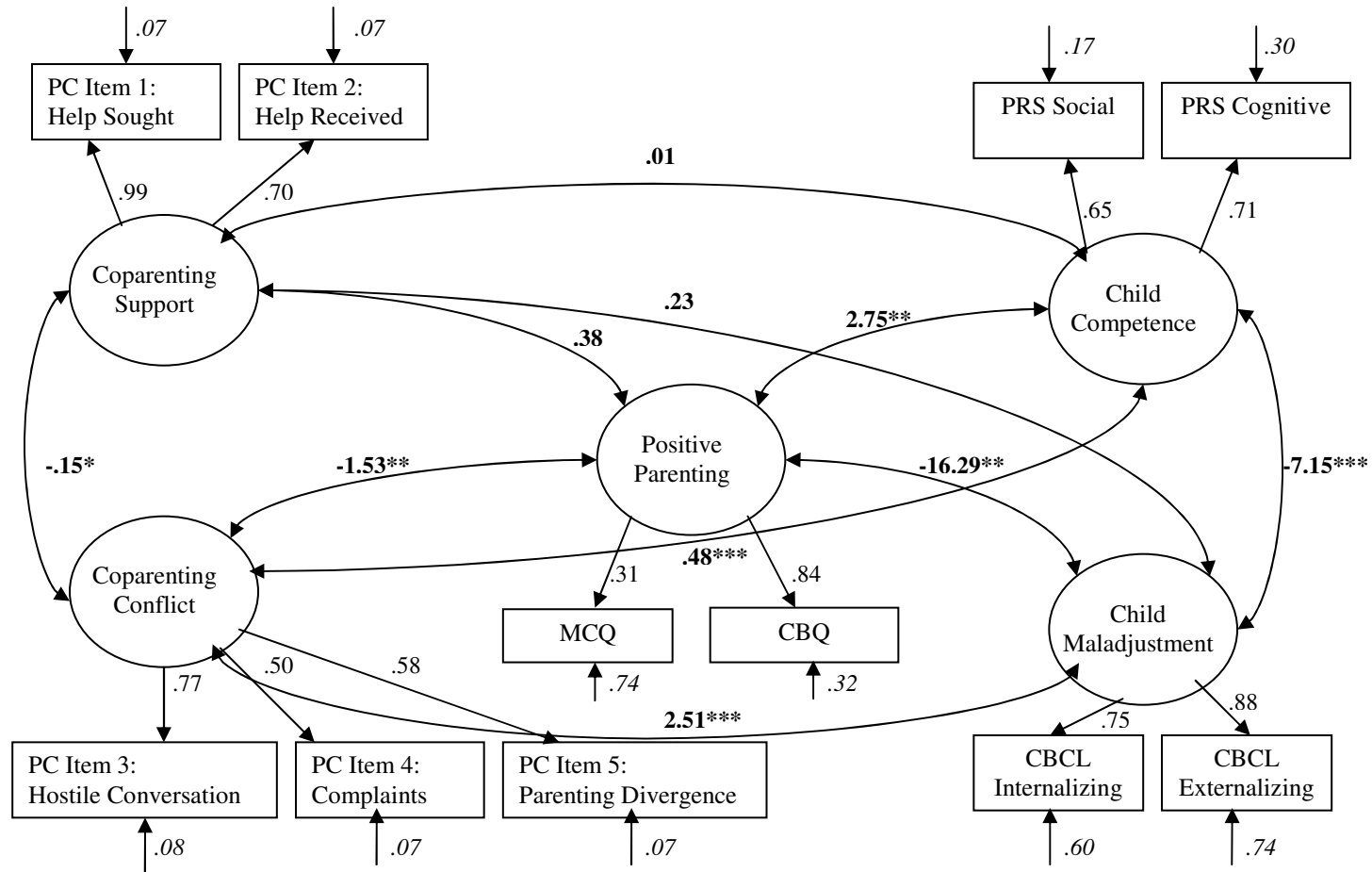


Figure 5: Measurement Model 4. Time 2 cross-sectional measurement model for testing the loading of indicators on their respective latent variables. Numbers set in bold are covariance estimates between latent variables; numbers set in italics are error terms for indicators; numbers set in standard font are standardized regression weights for indicators on latent variables. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

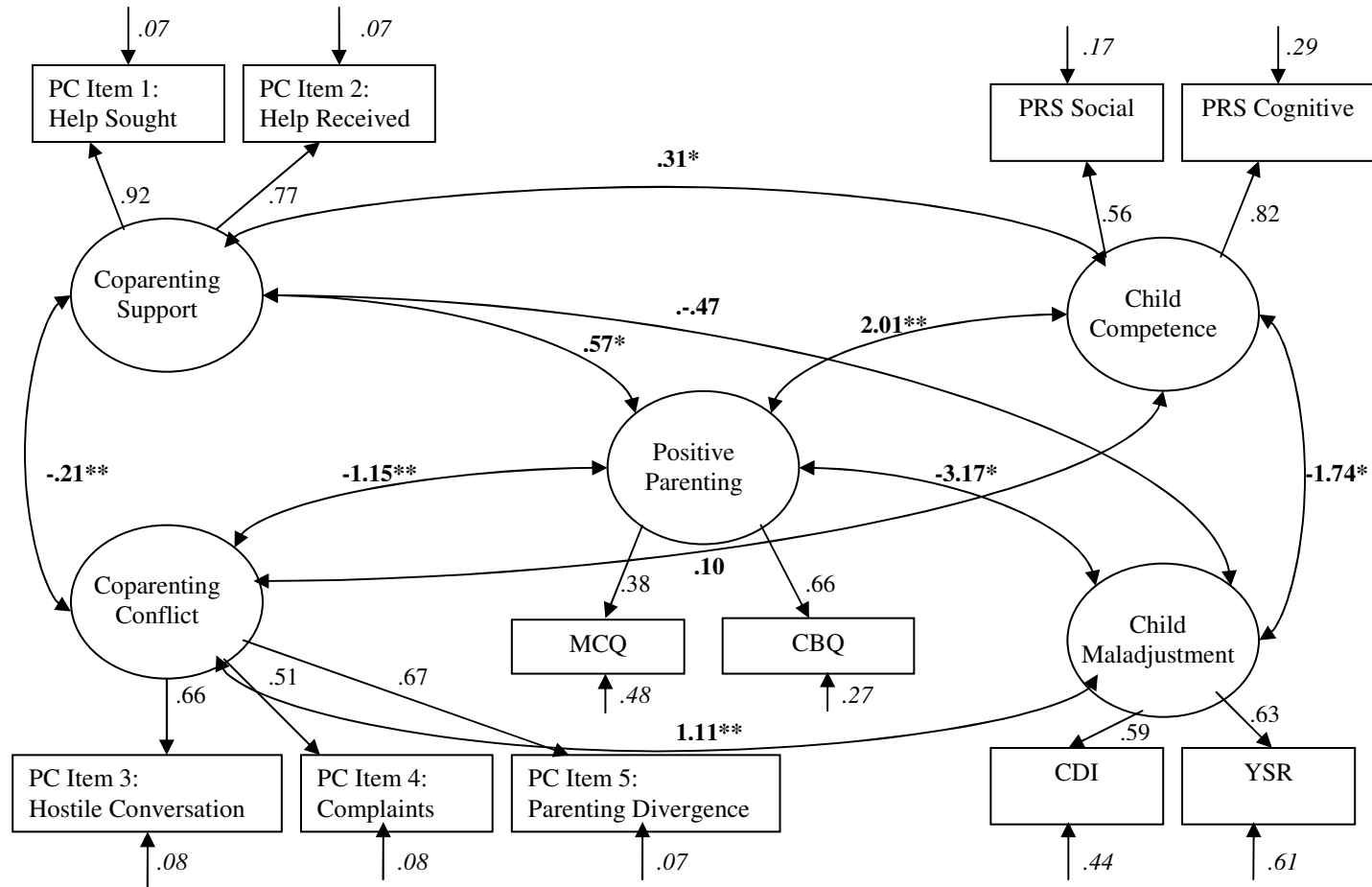


Figure 6: Measurement Model 5. Longitudinal measurement model for testing the loading of indicators on their respective latent variables. Numbers set in bold are covariance estimates between latent variables; numbers set in italics are error terms for indicators; numbers set in standard font are standardized regression weights for indicators on latent variables.  $*p < .05$ ;  $**p < .01$ ;  $***p < .001$ .

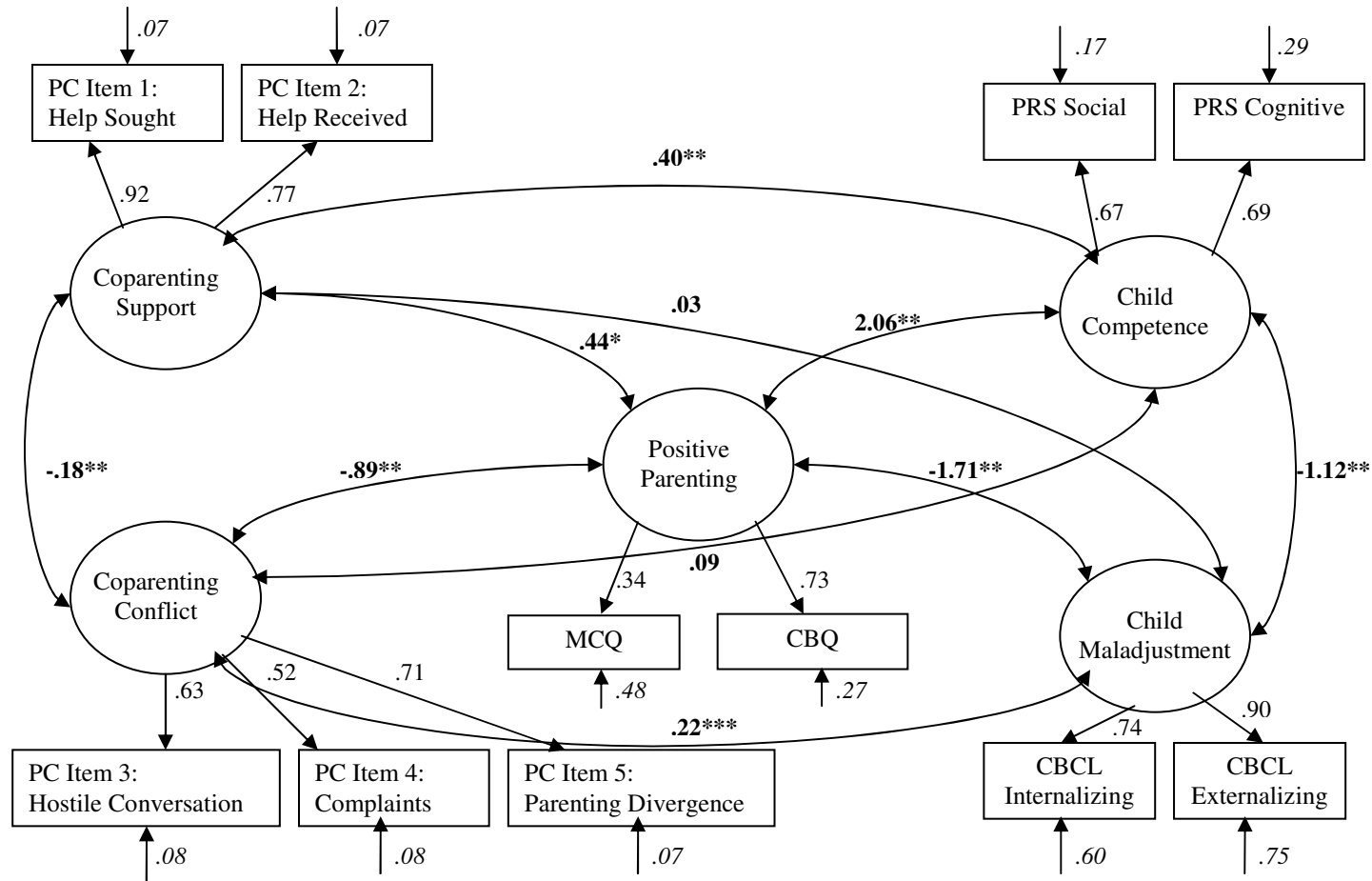


Figure 7: Measurement Model 6. Longitudinal measurement model for testing the loading of indicators on their respective latent variables. Numbers set in bold are covariance estimates between latent variables; numbers set in italics are error terms for indicators; numbers set in standard font are standardized regression weights for indicators on latent variables. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

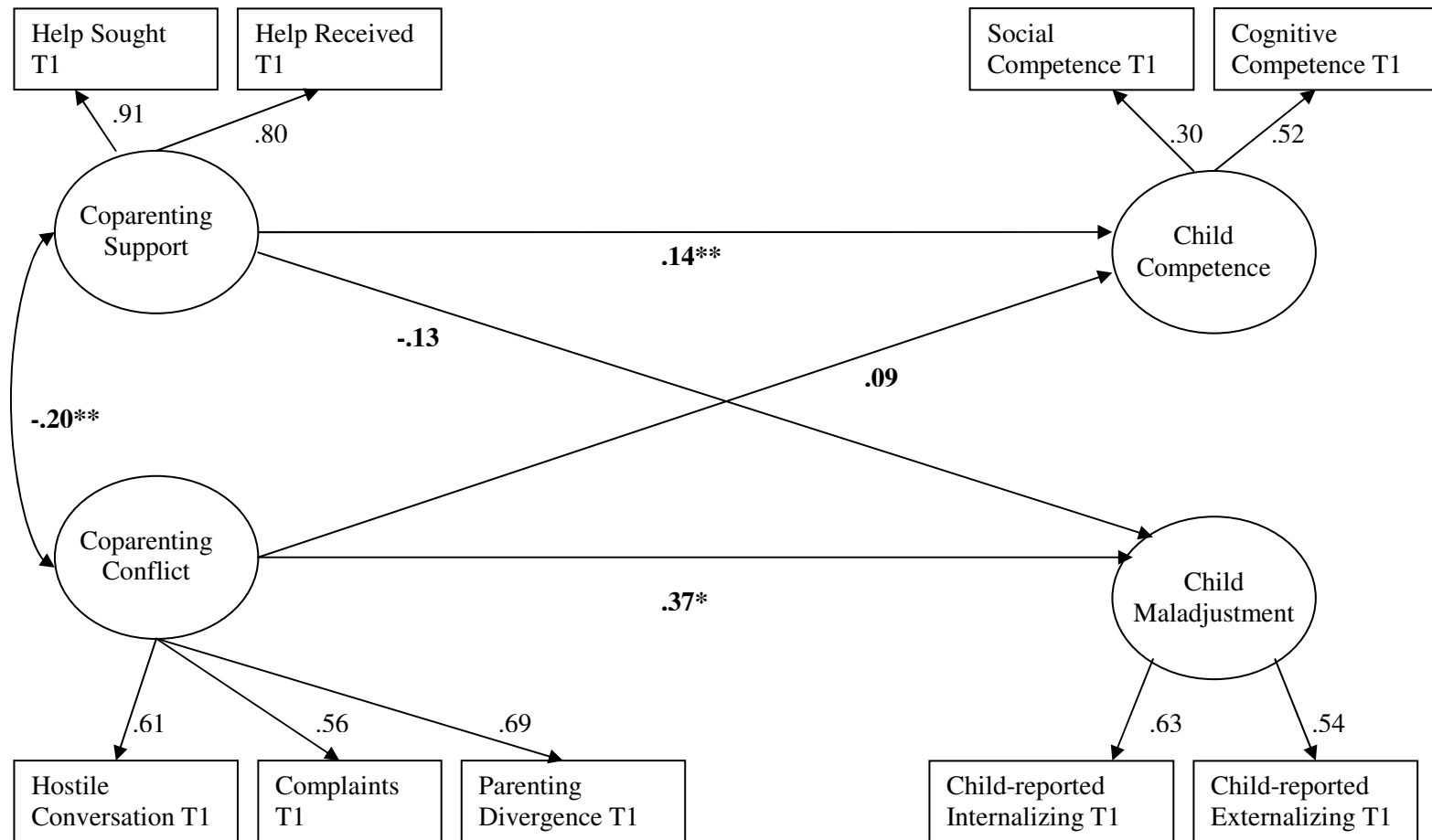


Figure 8: Structural Model 1A. Time 1 cross-sectional analysis with direct paths only. Numbers set in bold are standardized regression weights between latent variables; numbers set in standard font are loadings of indicators on latent variables.

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

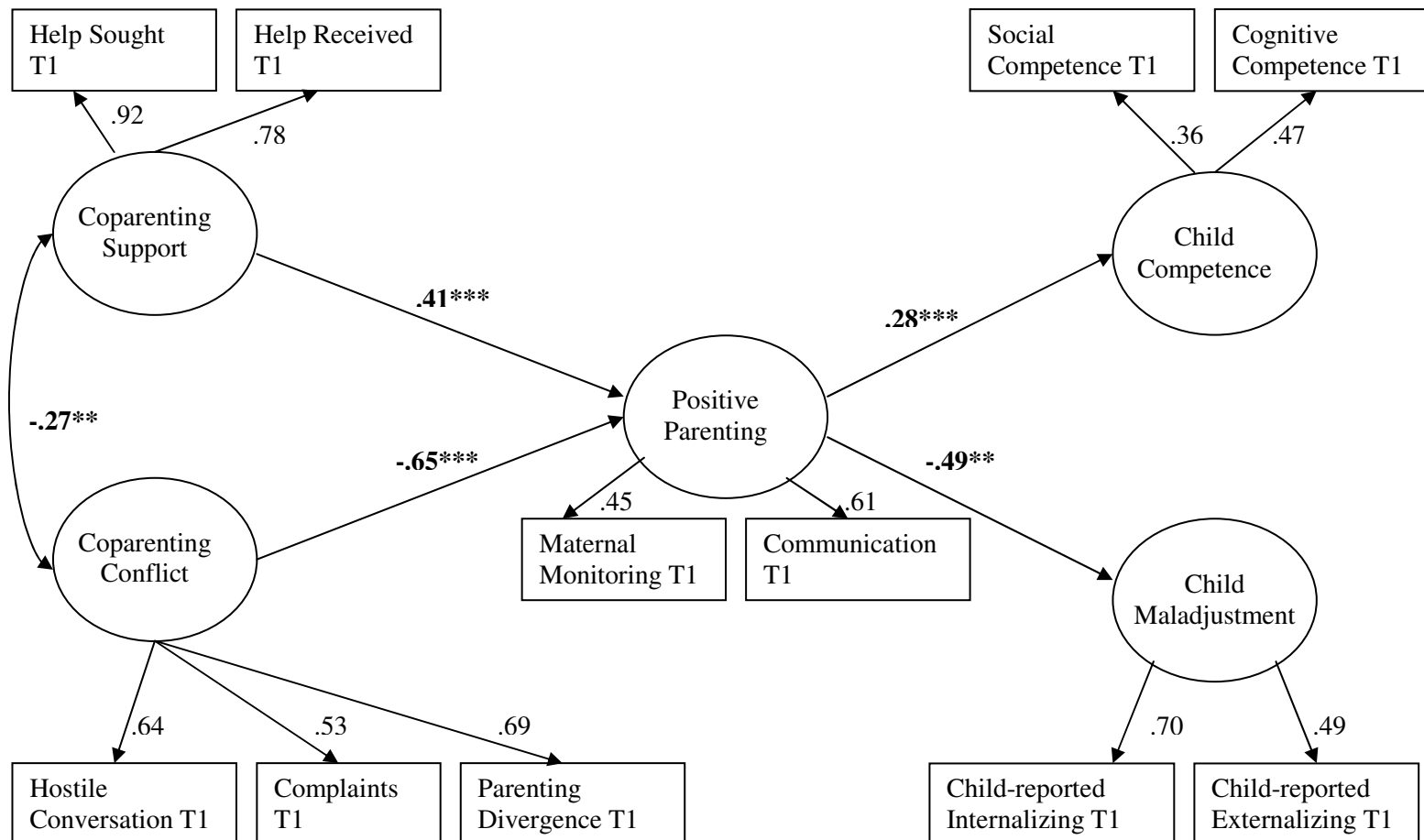


Figure 9: Structural Model 1B. Time 1 cross-sectional analysis with indirect mediational paths only. Numbers set in bold are standardized regression weights between latent variables; numbers set in standard font are loadings of indicators on latent variables. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .



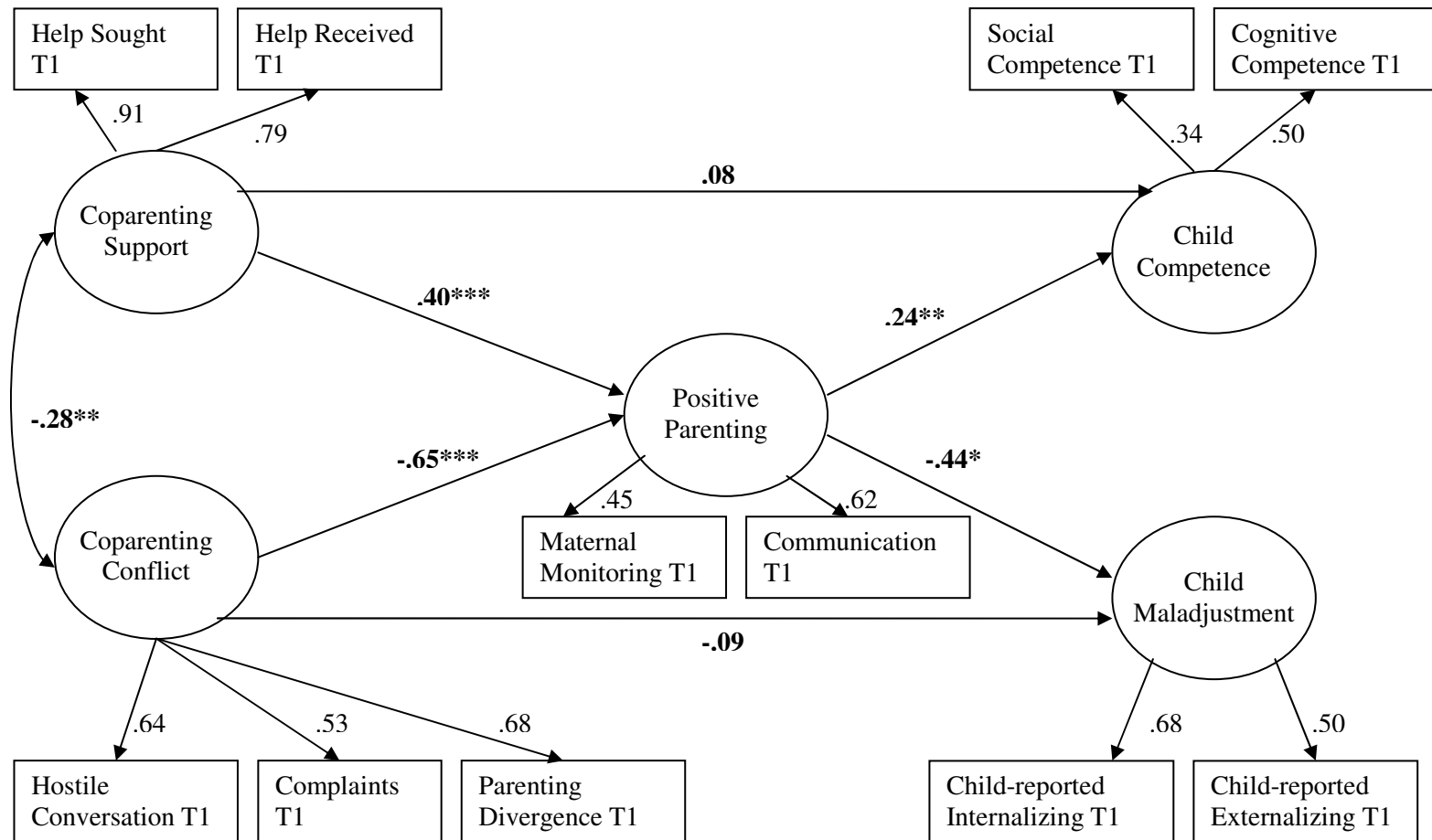


Figure 10: Structural Model 1C. Time 1 cross-sectional analysis with both direct and indirect mediational paths. Numbers set in bold are standardized regression weights between latent variables; numbers set in standard font are loadings of indicators on latent variables.

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

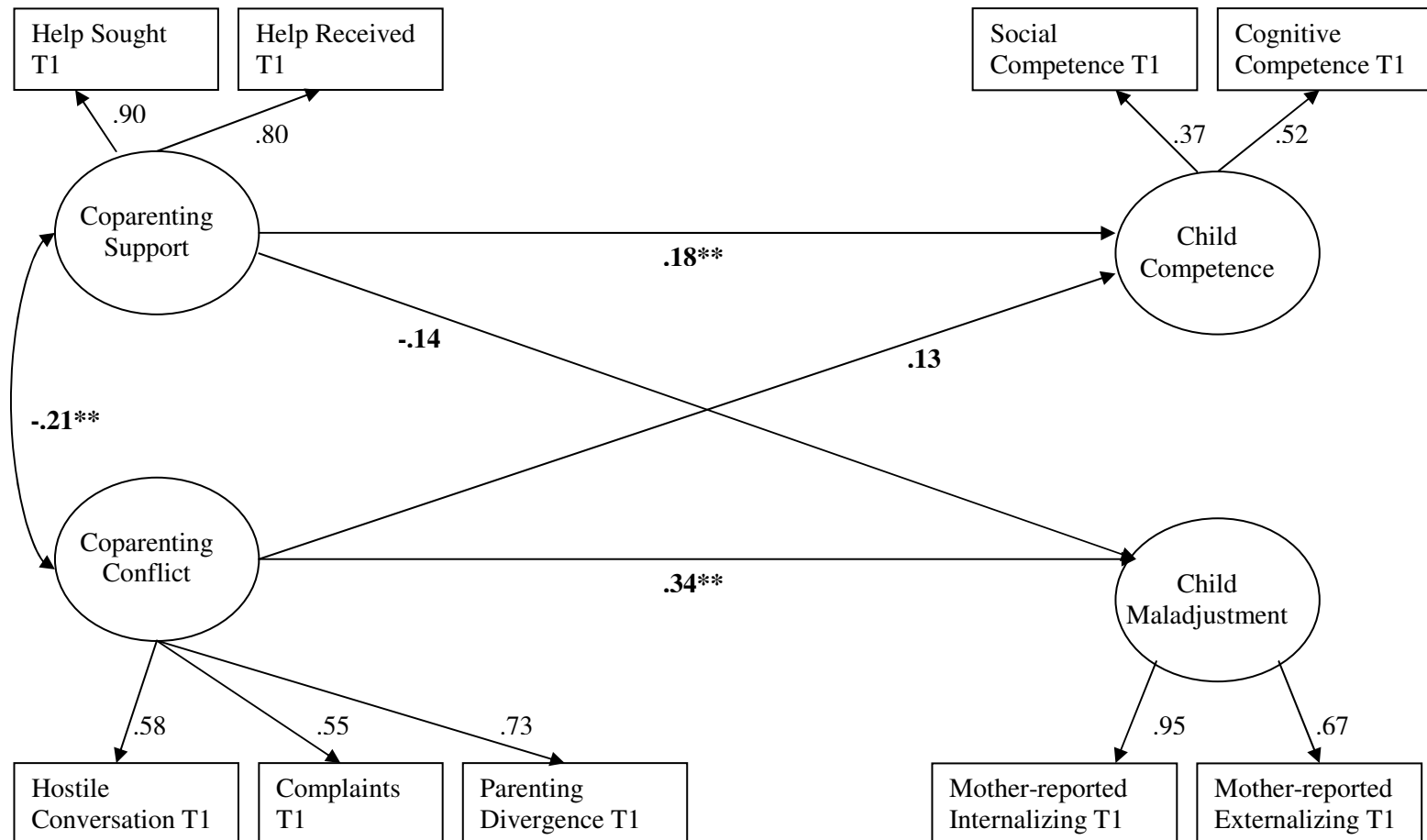


Figure 11: Structural Model 2A. Time 1 cross-sectional analysis with direct paths only. Numbers set in bold are standardized regression weights between latent variables; numbers set in standard font are loadings of indicators on latent variables.  
 \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

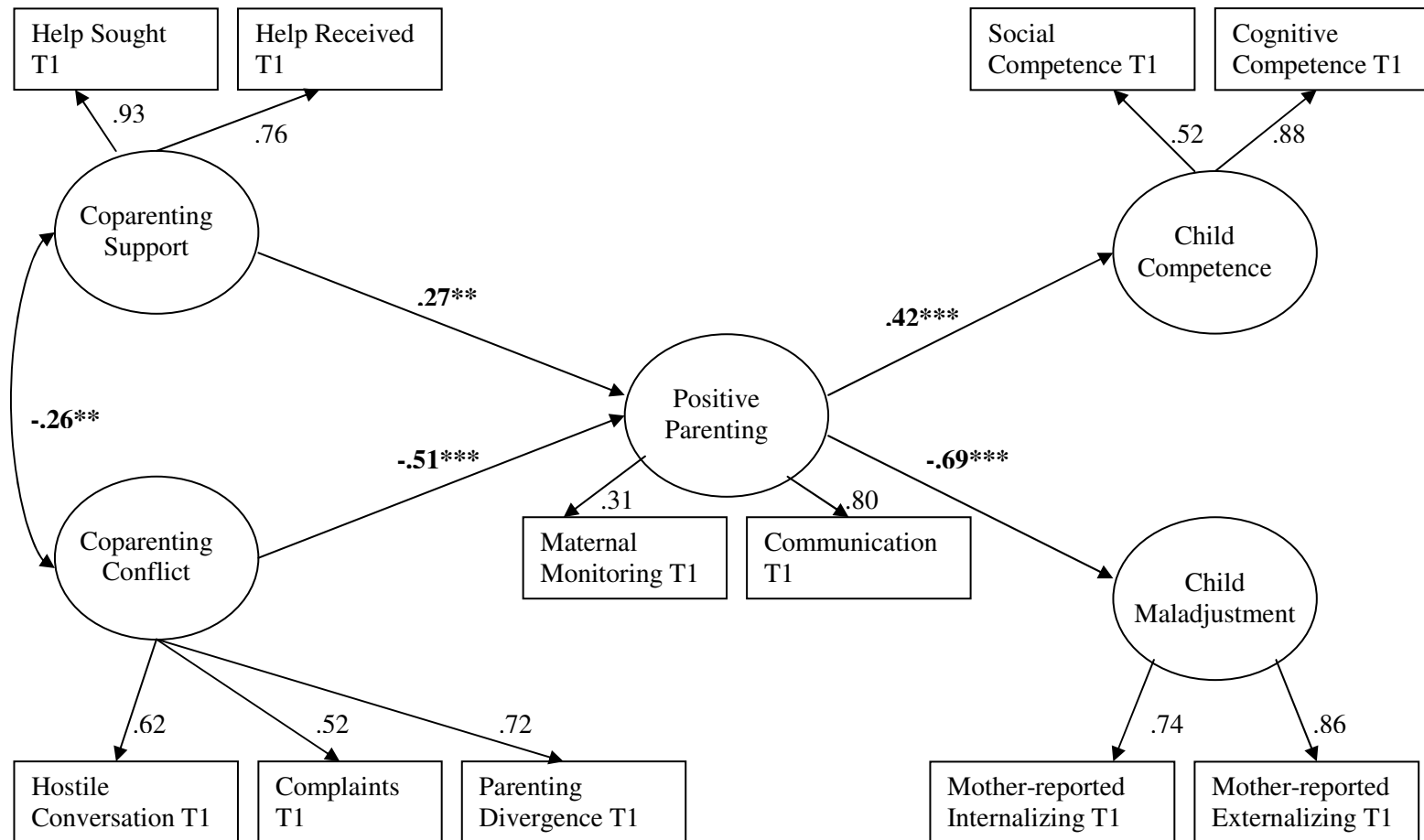


Figure 12: Structural Model 2B. Time 1 cross-sectional analysis with indirect mediational paths only. Numbers set in bold are standardized regression weights between latent variables; numbers set in standard font are loadings of indicators on latent variables. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

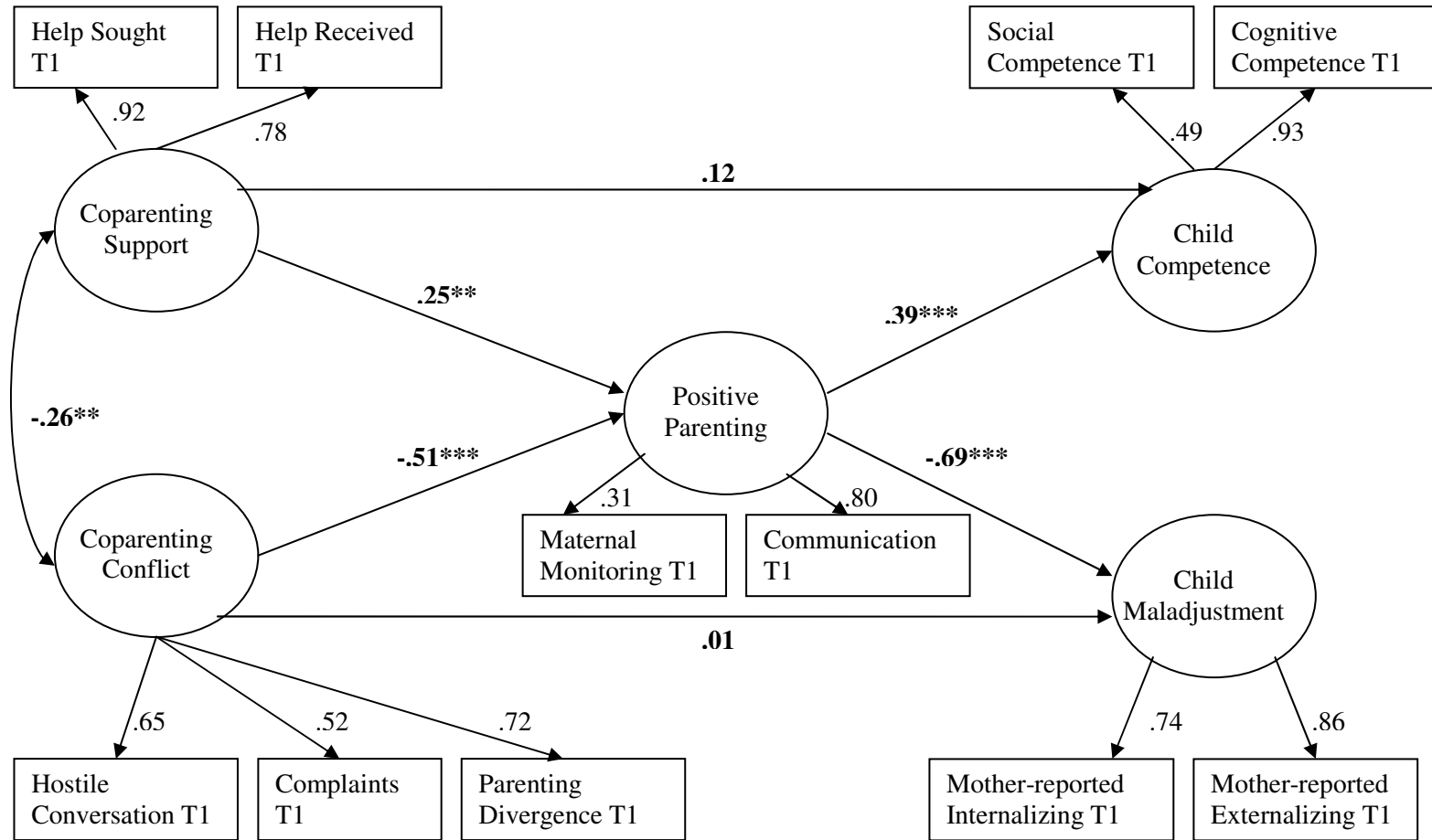


Figure 13: Structural Model 2C. Time 1 cross-sectional analysis with both direct and indirect mediational paths. Numbers set in bold are standardized regression weights between latent variables; numbers set in standard font are loadings of indicators on latent variables.

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

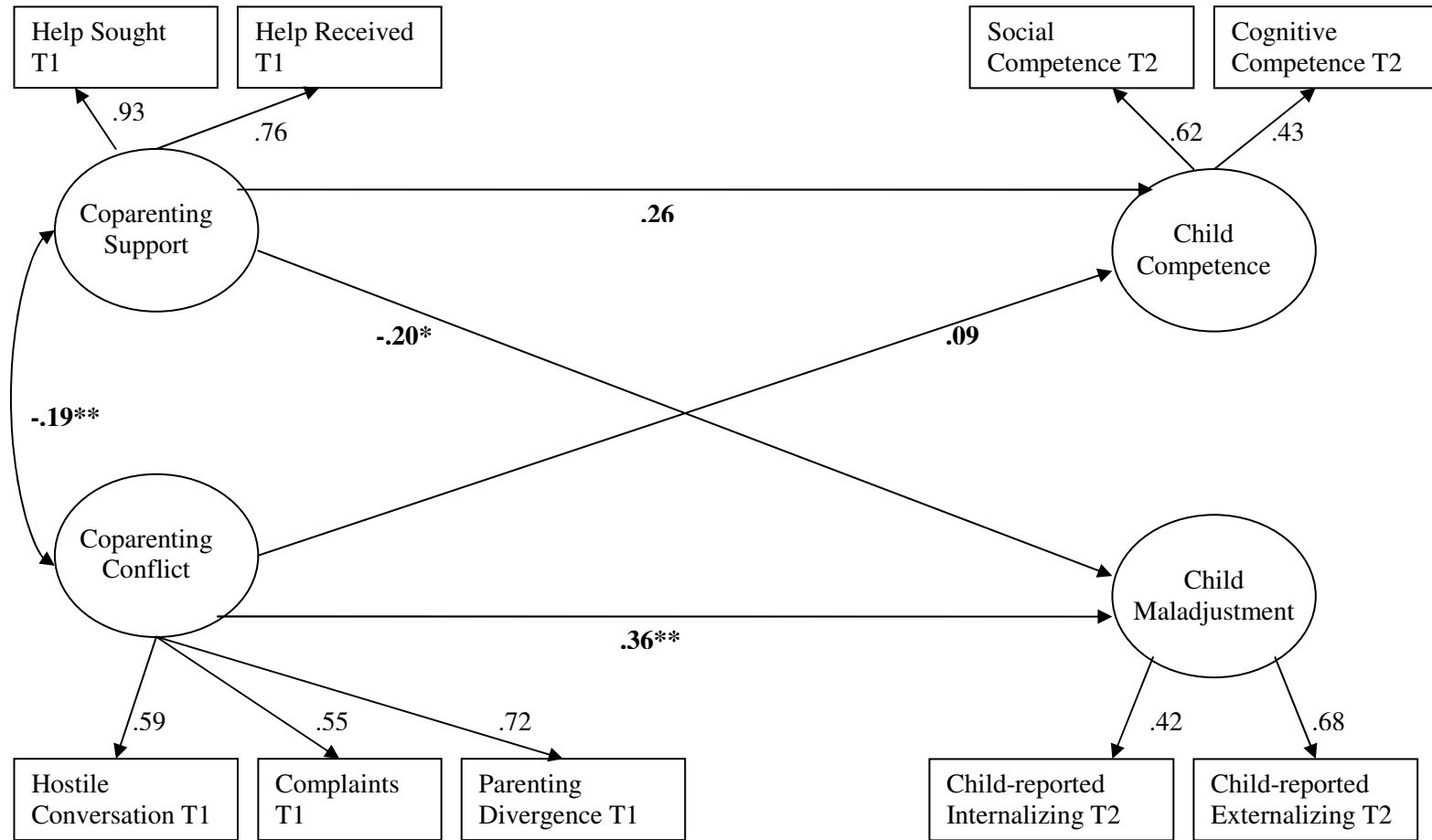


Figure 14: Structural Model 3A. Longitudinal analysis with direct paths only. Numbers set in bold are standardized regression weights between latent variables; numbers set in standard font are loadings of indicators on latent variables. Time 1 outcome variables were modeled though are not graphically depicted here.

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

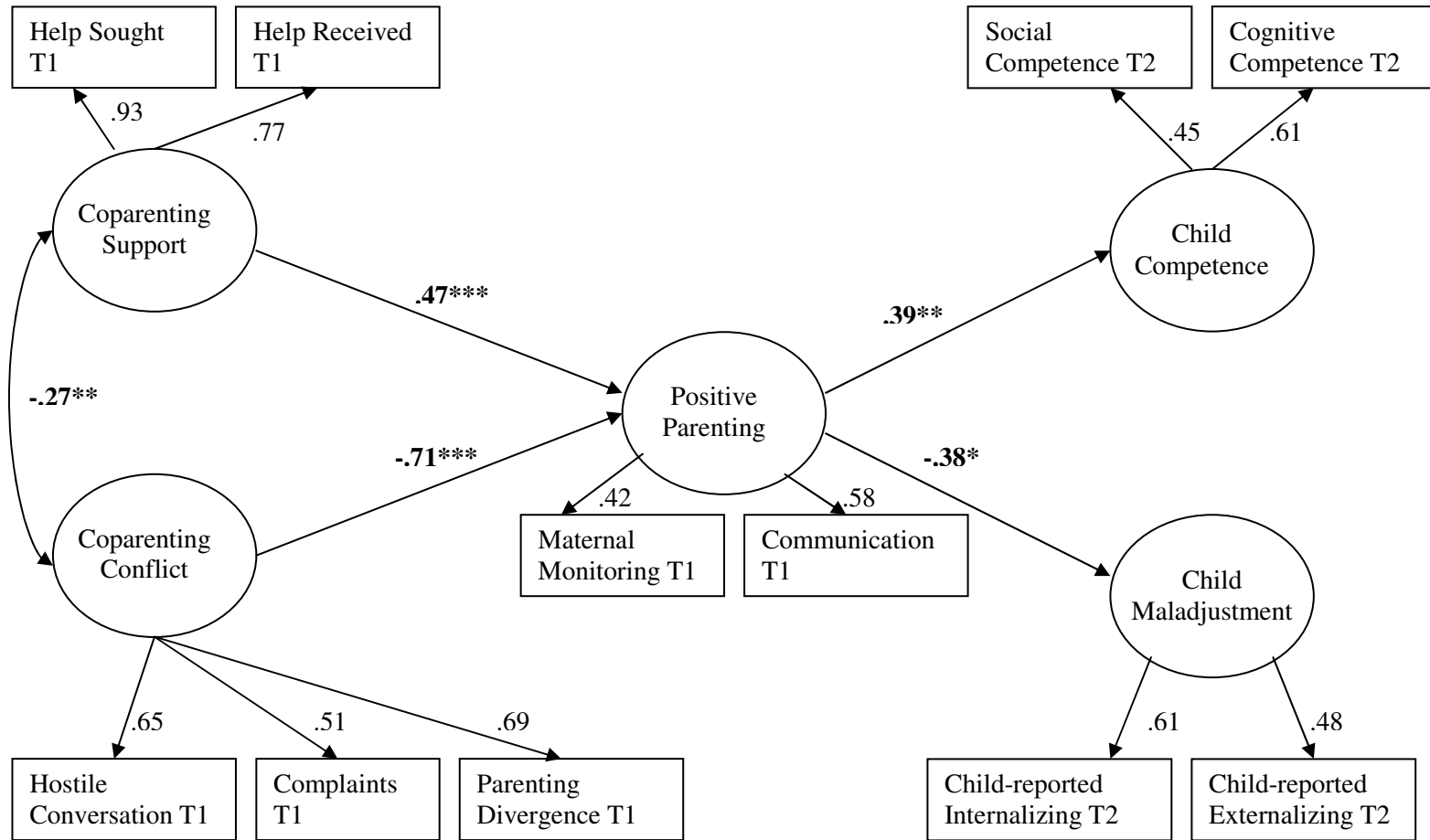


Figure 15: Structural Model 3B. Longitudinal analysis with indirect mediational paths only. Numbers set in bold are standardized regression weights between latent variables; numbers set in standard font are loadings of indicators on latent variables. Time 1 outcome variables were modeled though are not graphically depicted here.

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

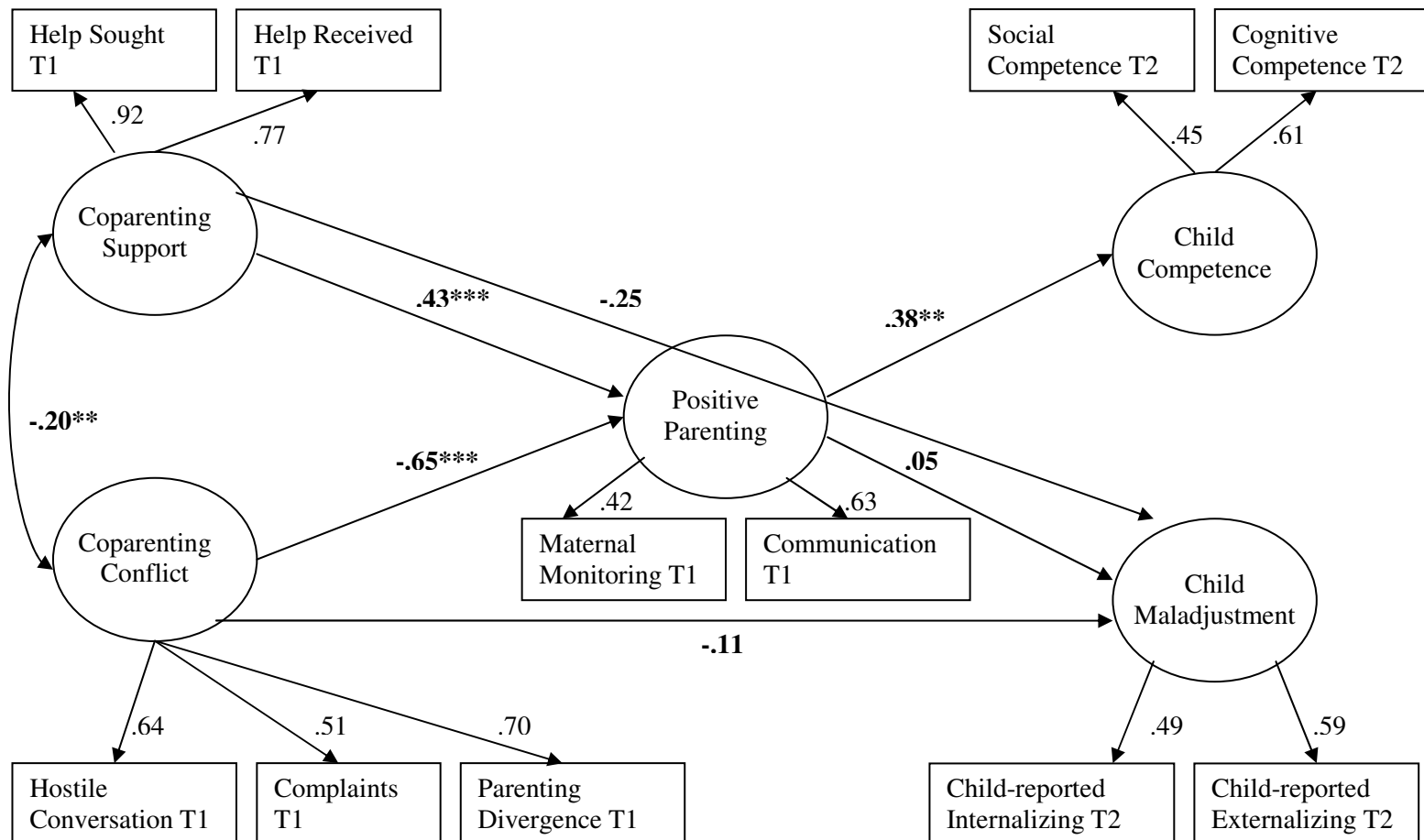


Figure 16: Structural Model 3C. Longitudinal analysis with both direct and indirect mediational paths. Numbers set in bold are standardized regression weights between latent variables; numbers set in standard font are loadings of indicators on latent variables. Time 1 outcome variables were modeled though are not graphically depicted here.

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

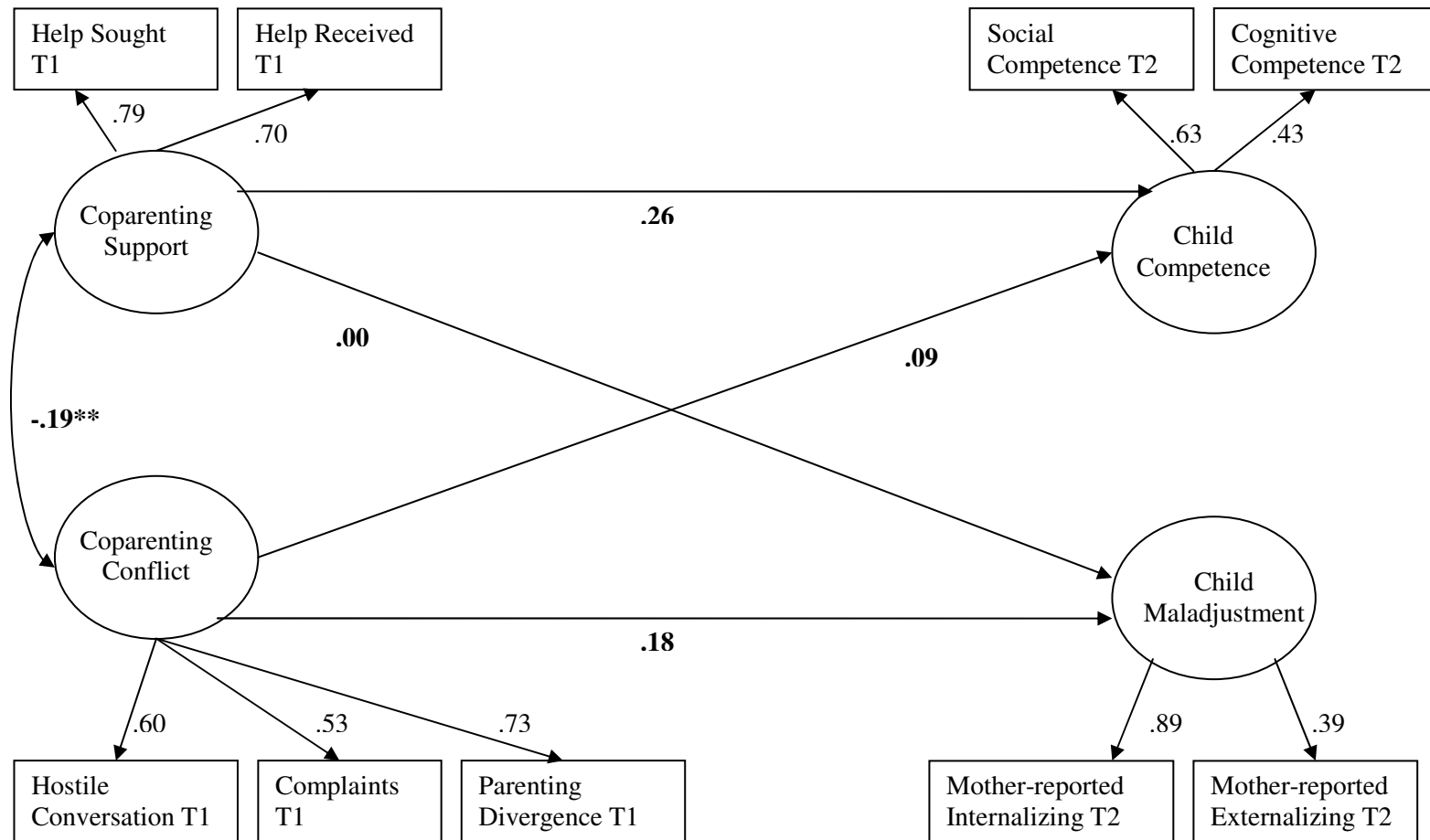


Figure 17. Structural Model 4A. Longitudinal analysis with direct paths only. Numbers set in bold are standardized regression weights between latent variables; numbers set in standard font are loadings of indicators on latent variables. Time 1 outcome variables were modeled though are not graphically depicted here.

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .



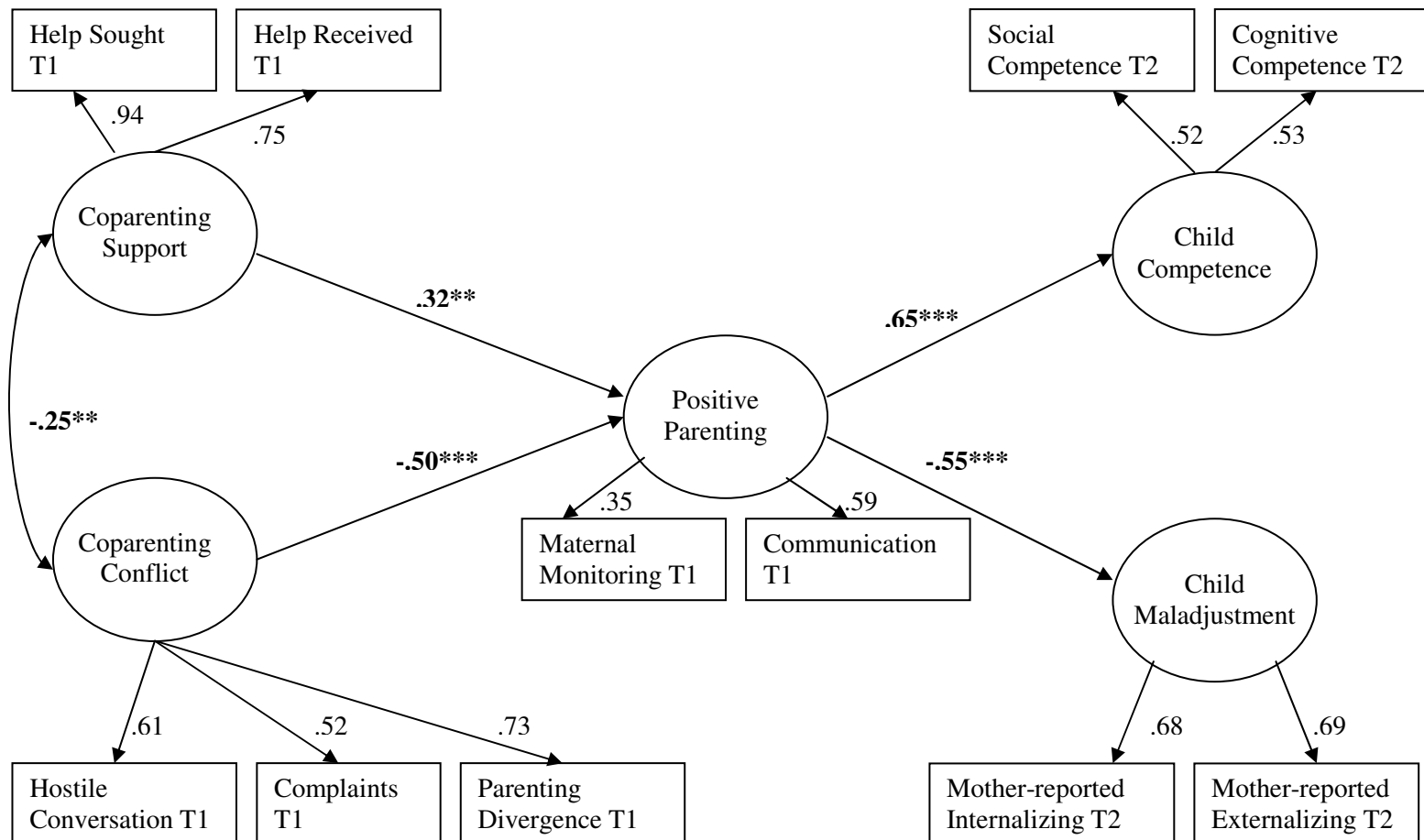


Figure 18: Structural Model 4B. Longitudinal analysis with indirect mediational paths only. Numbers set in bold are standardized regression weights between latent variables; numbers set in standard font are loadings of indicators on latent variables. Time 1 outcome variables were modeled though are not graphically depicted here.

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

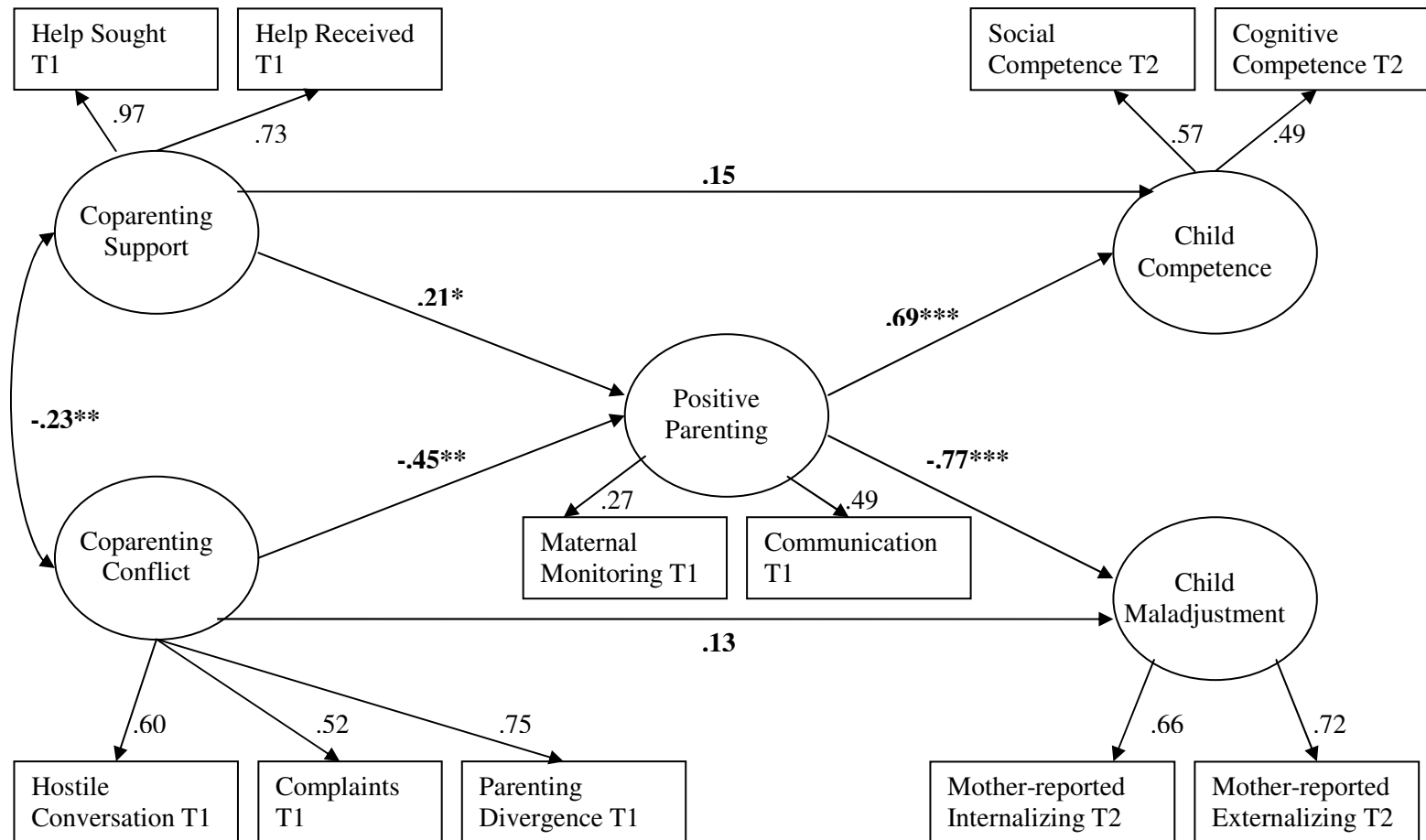


Figure 19: Structural Model 4C. Longitudinal analysis with both direct and indirect mediational paths. Numbers set in bold are standardized regression weights between latent variables; numbers set in standard font are loadings of indicators on latent variables. Time 1 outcome variables were modeled though are not graphically depicted here.

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

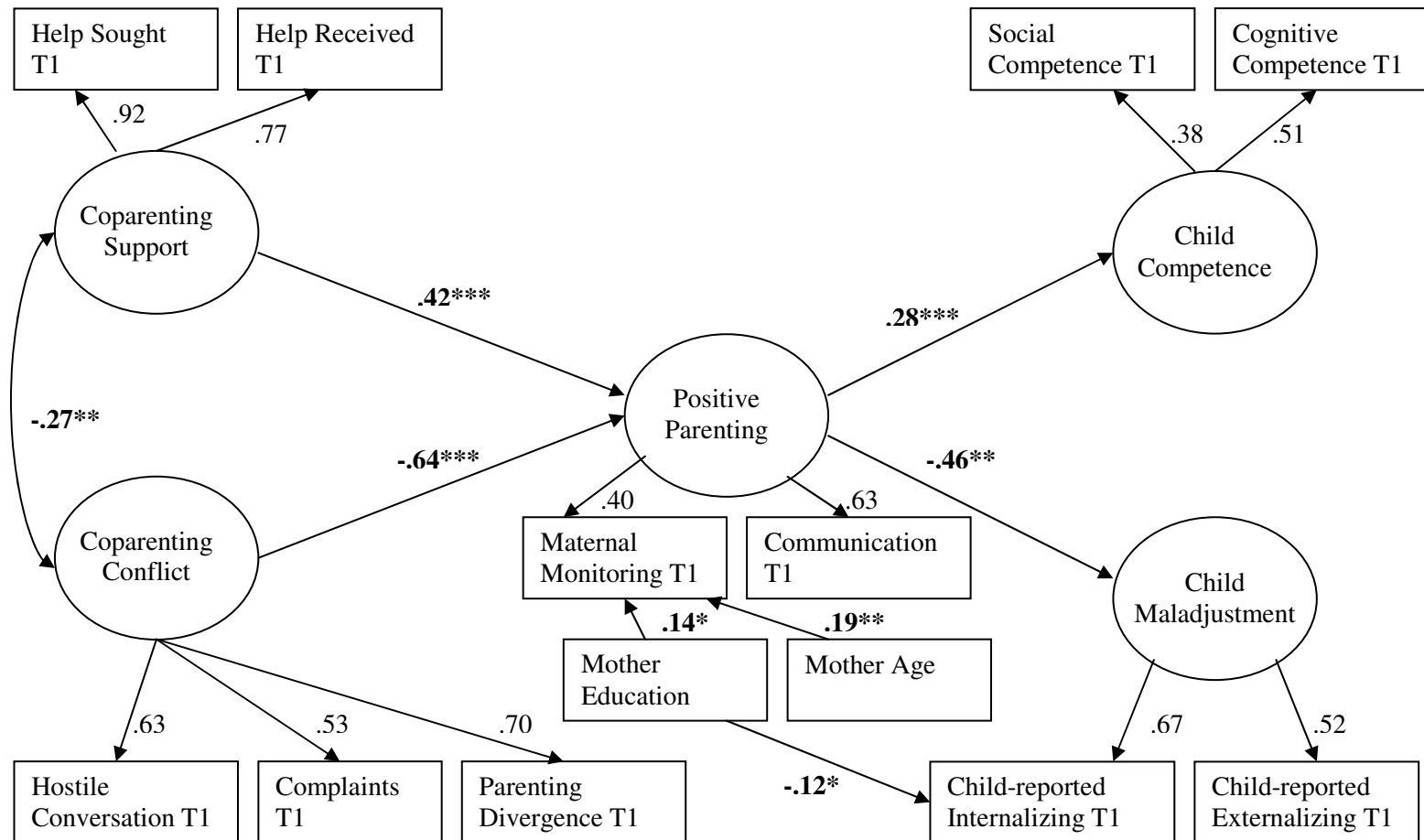


Figure 20: Structural Model 1B with demographic controls. Time 1 cross-sectional full mediation analysis with mother age and education included. Numbers set in bold are standardized regression weights between latent variables; numbers set in standard font are loadings of indicators on latent variables. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

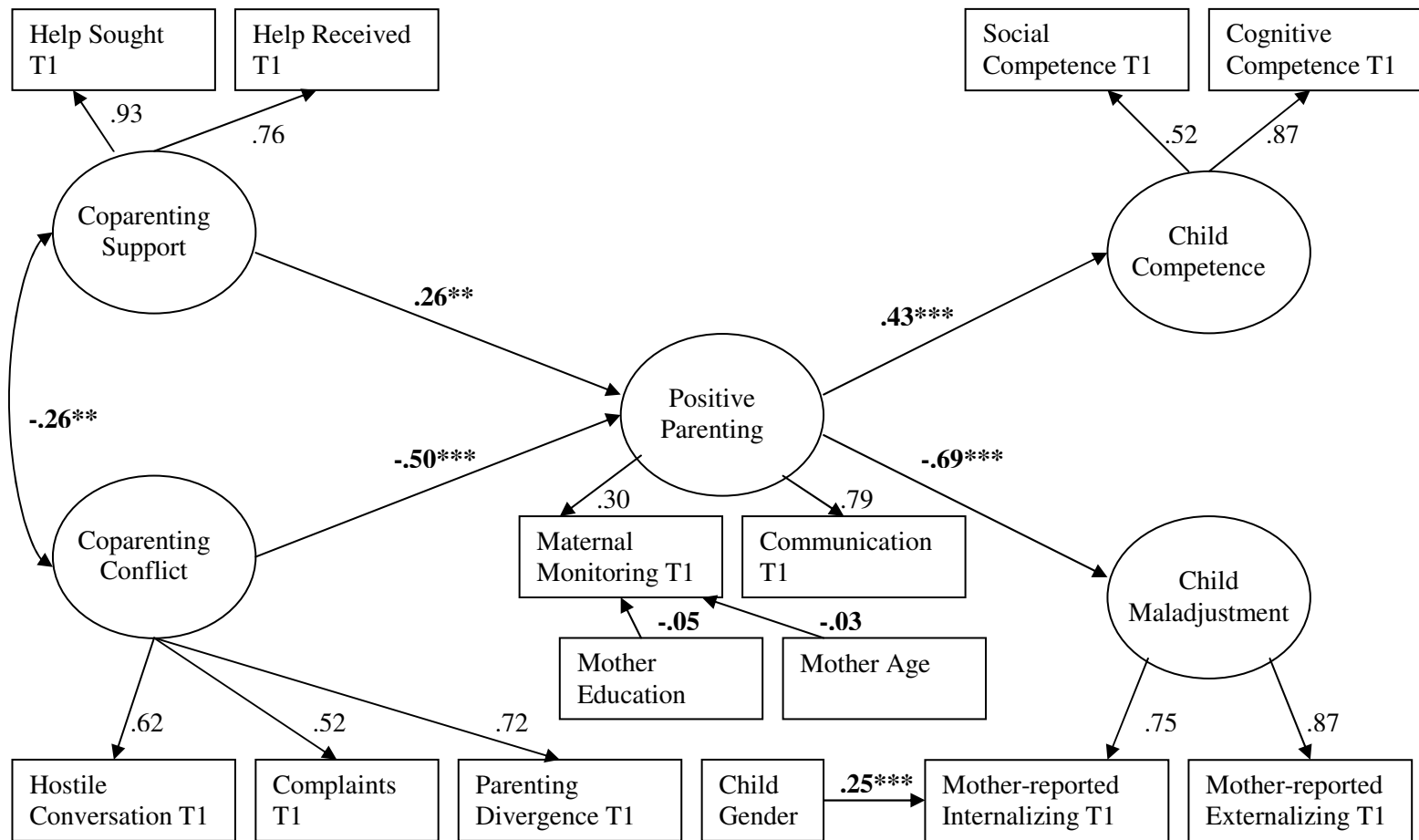


Figure 21: Structural Model 2B with demographic controls. Time 1 cross-sectional full mediation analysis with mother age, mother education, and child gender included. Numbers set in bold are standardized regression weights between latent variables; numbers set in standard font are loadings of indicators on latent variables. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

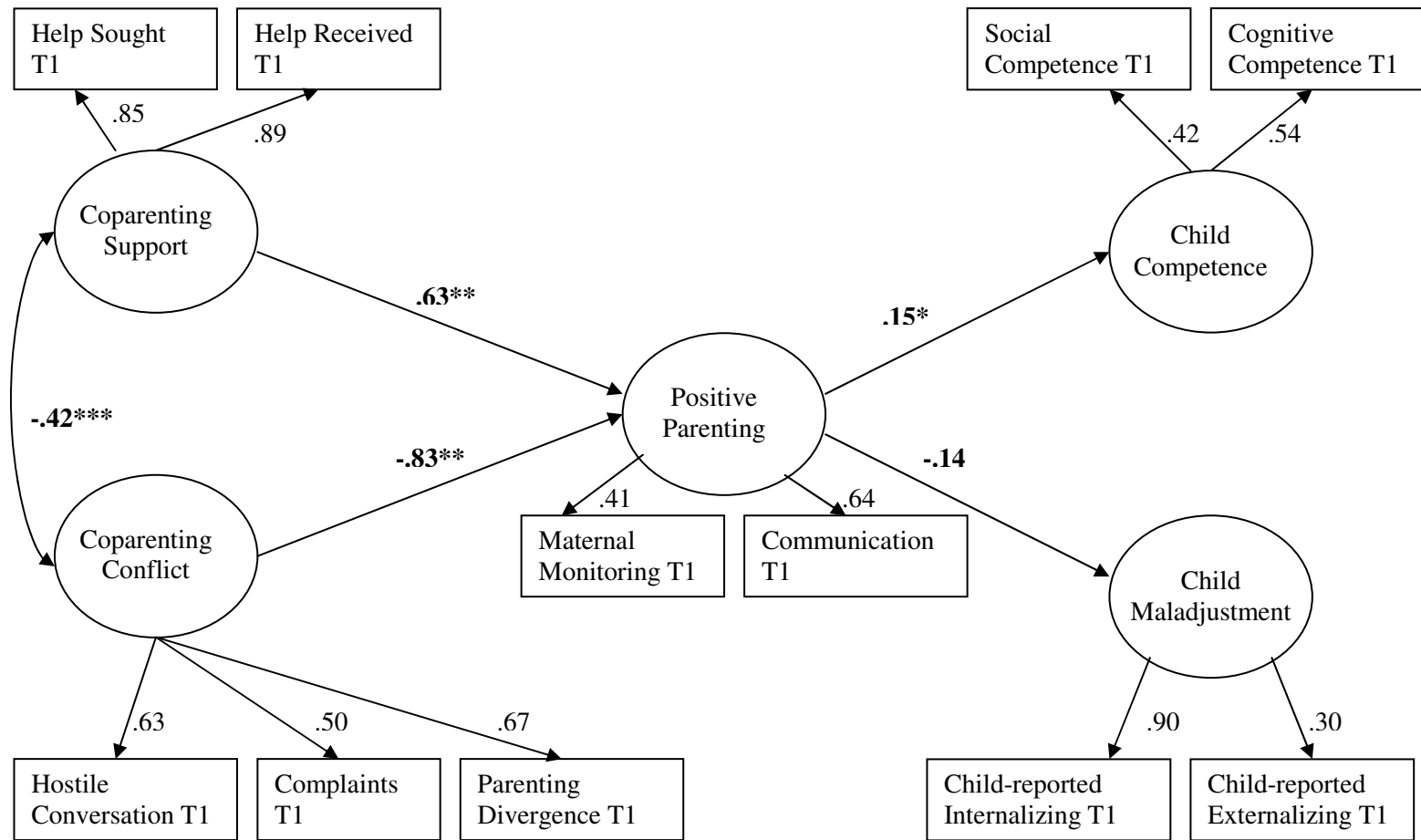


Figure 22: Mediation moderated by community context: Rural group with child-reported maladjustment. Time 1 cross-sectional analysis with indirect mediational paths only. Numbers set in bold are standardized regression weights between latent variables; numbers set in standard font are loadings of indicators on latent variables. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

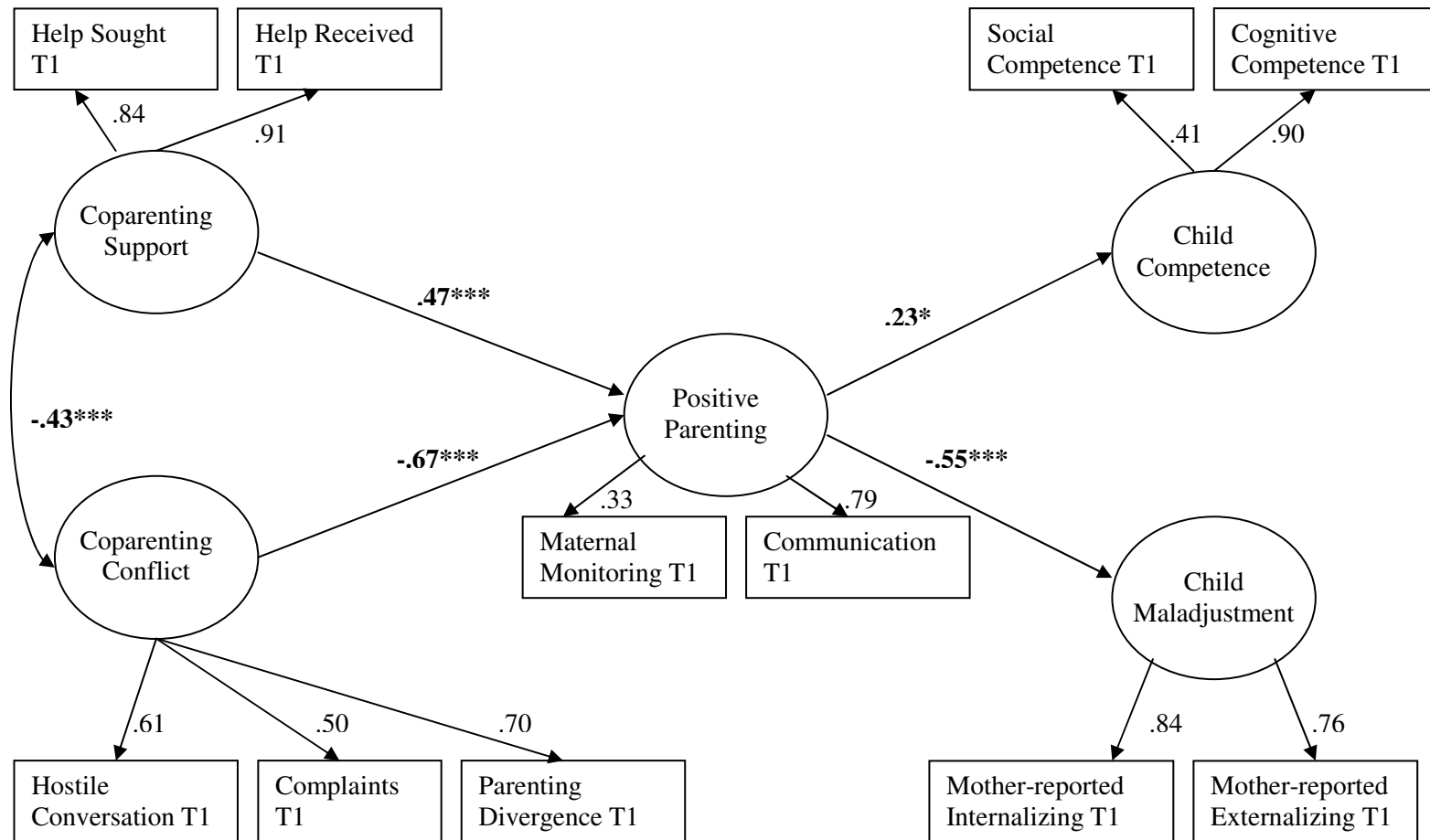


Figure 23: Mediation moderated by community context: Rural group with mother-reported maladjustment. Time 1 cross-sectional analysis with indirect mediational paths only. Numbers set in bold are standardized regression weights between latent variables; numbers set in standard font are loadings of indicators on latent variables. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

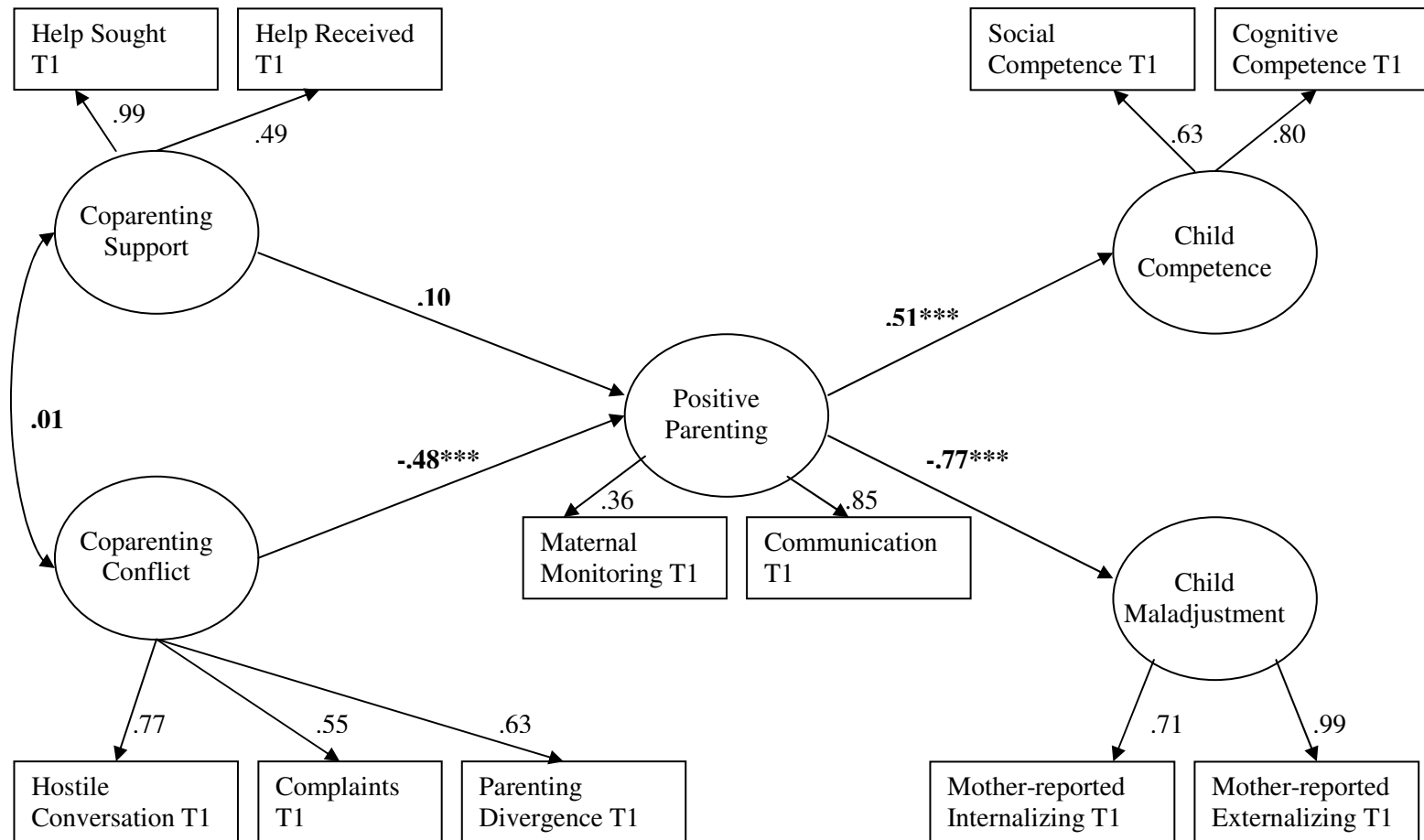


Figure 24: Mediation moderated by community context: Urban group with mother-reported maladjustment. Time 1 cross-sectional analysis with indirect mediational paths only. Numbers set in bold are standardized regression weights between latent variables; numbers set in standard font are loadings of indicators on latent variables. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

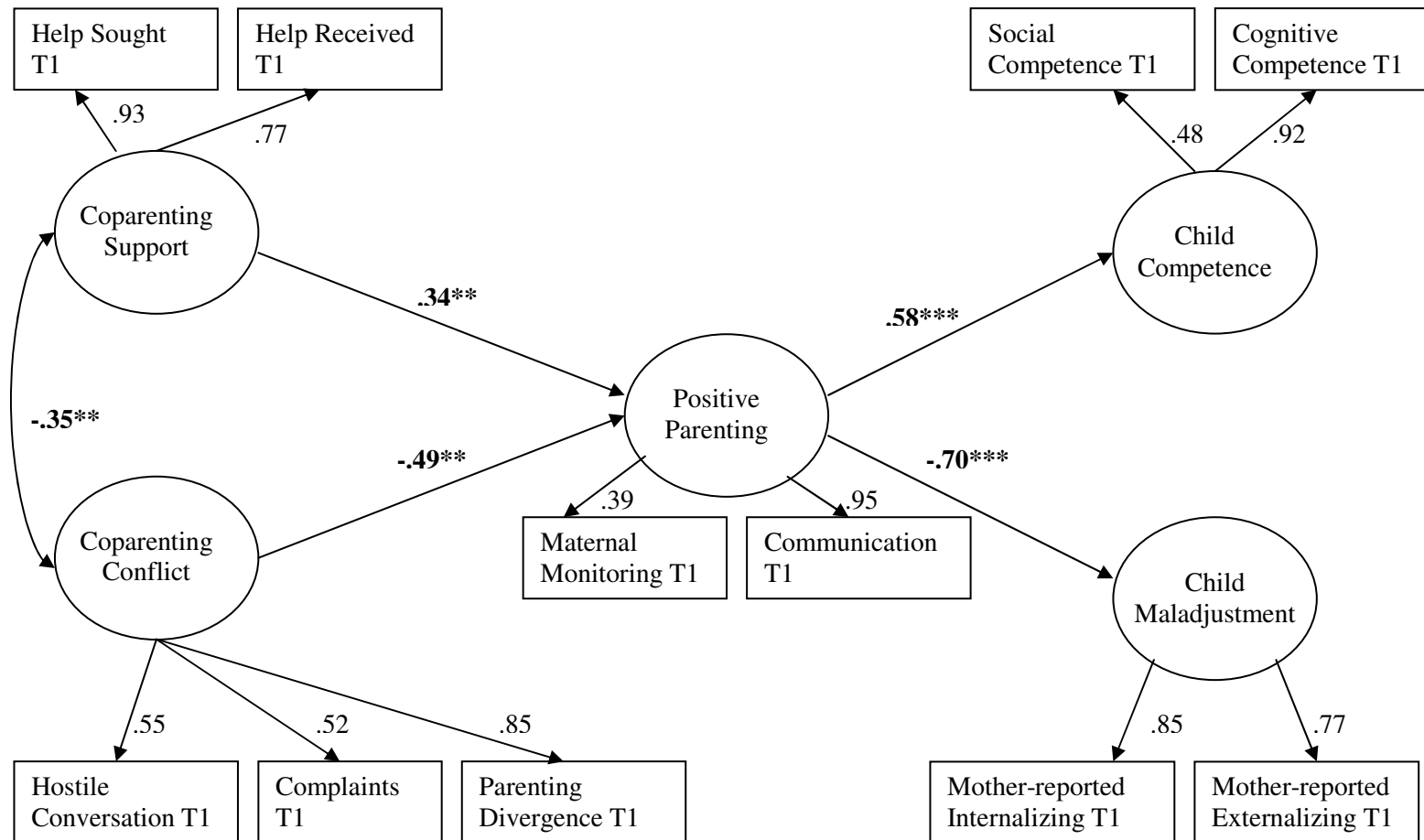


Figure 25: Mediation moderated by child age: Older children with mother-reported maladjustment. Time 1 cross-sectional analysis with indirect mediational paths only. Numbers set in bold are standardized regression weights between latent variables; numbers set in standard font are loadings of indicators on latent variables. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .



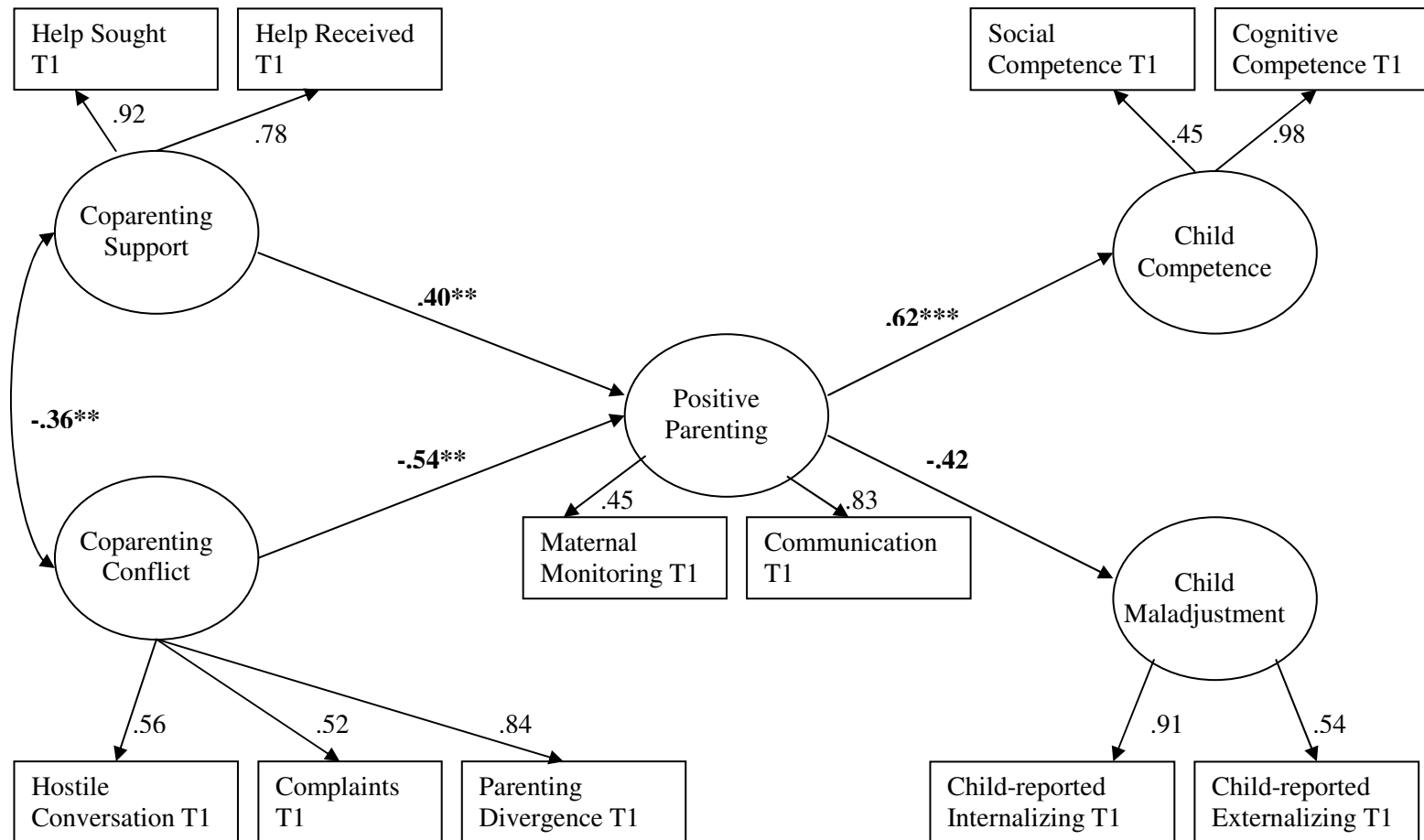


Figure 26: Mediation moderated by child age: Older children with child-reported maladjustment. Time 1 cross-sectional analysis with indirect mediational paths only. Numbers set in bold are standardized regression weights between latent variables; numbers set in standard font are loadings of indicators on latent variables.  $*p < .05$ ;  $**p < .01$ ;  $***p < .001$ .

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