

ABSTRACT

Title of Document: LOW-INCOME AFRICAN AMERICAN
FATHERS' CONTRIBUTIONS TO
TODDLERS' SOCIAL AND EMOTIONAL
DEVELOPMENT

Stephanie Jolley Mitchell, Doctor of Philosophy,
2007

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Growing interest in low-income, minority fathers' involvement and concern over their children's social and emotional development highlights the need for empirical investigation into the predictors of low-income fathers' involvement and its influence on young children's social and emotional development. Using data from a study of low-income, African American fathers of toddlers enrolled in Early Head Start, the present research examined associations among fathers' family contexts, the quality of father-child interactions, and children's social competence and problem behavior. Guided by the Dynamics Model of paternal influences on children (Cabrera et al., in press a), the present research addressed the following questions: (a) how are fathers' family contexts associated with children's social and emotional development, (b) how are fathers' family contexts associated with the quality of father-child interactions, (c) how is the quality of father-child interactions uniquely associated

with children's social and emotional development, and (d) to what extent does the quality of father-child interactions mediate associations between fathers' family contexts and children's social and emotional development?

Results of multiple regressions suggest that low-income, African American fathers who parent in the context of more harmonious partner and extended family relationships have children with greater social competence and less problem behavior than fathers who have less amicable partner and extended family relationships. Furthermore, fathers who act negatively and are over-controlling toward their toddlers have children who exhibit less social competence than fathers who display fewer negative behaviors. These findings highlight the importance of supporting fathers' relationships with their partners and extended family members and of encouraging fathers to be less negative and over-controlling when interacting with their toddlers in order to promote impoverished children's healthy social and emotional development.

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TODDLERS' SOCIAL AND EMOTIONAL DEVELOPMENT

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Dissertation submitted to the Faculty of the Graduate School of the
University of Maryland, College Park, in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
2007

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DEDICATION

I dedicate this manuscript to my husband, Shaka, and my loving parents, Steve and Joyce Jolley. More important than their unfailing support in my pursuit of this goal, they continue to encourage me in the greater pursuit of life.

ACKNOWLEDGEMENTS

Thank you to my advisory committee members for their guidance and encouragement throughout this process: Sandra Hofferth, Brenda Jones Harden, Melanie Killen, Kevin Roy, and Allan Wigfield. Thanks to Dale Epstein for your support and editing assistance. Thank you also to the research assistants who helped collect and manage the data published in this manuscript: Natalie Arthurs, Nicole Denmark, Denise Dugas, Heather See, and Allison Tarkow. Additionally, I acknowledge the Early Head Start programs in Washington, DC, in particular Rosemount Center, which were vital collaborators on this study. Finally, a special thanks to Natasha Cabrera, my advisor, for her many efforts on my behalf. Through her mentorship, she taught me to be a better researcher, teacher, colleague and friend.

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CHAPTER I

Introduction

Two recent policy initiatives, Healthy Marriage and Responsible Fatherhood (ACF, 2007), were developed based on claims that “children who grow up in healthy married, two-parent families do better on a host of outcomes...than those who do not” and that “fathers make unique and irreplaceable contributions to the development of their children” (Dawson, Williams, Thomas, & McCowan, 2005, pp. 2). These policies target minority men, in particular African American fathers because they appear absent from their children’s lives given population estimates that indicate African Americans experience higher rates of nonmarital childbearing, divorce, and unmarried, mother-headed households than Whites or Hispanics (McKinnon & Bennett, 2005).

There is also growing concern over African American children’s social and emotional development because research suggests lower socioeconomic status significantly predicts children’s emotional and behavioral problems (Dodge, Pettit & Bates, 1994) and poverty rates are highest for African American children (U.S. Census, 2002). Evidence from studies of low-income, minority mothers suggests that low-income, African American fathers may play an important role in mediating the effect of socioeconomic status on children’s social and emotional development by showing warmth and providing cognitive stimulation during interactions with their toddlers (Ackerman, Brown & Izard, 2003; Amato & Rivera, 1999; Dodge et al., 1994). Thus, to inform policies targeting low-income, African American fathers and to address concerns about their children’s social and emotional development, the present research explores the effects of quality of father-child interactions on children’s social and emotional

development and examines factors (e.g., family context) that may predict the quality of low-income, African American fathers' interactions with their children.

Despite population estimates of household composition that imply low-income, African American fathers are absent from their children's lives, recent research shows that these fathers, even those who are non-resident, are frequently involved (e.g., accessible, engaged) with their children (Cabrera et al., 2004b; Cabrera, Ryan, Mitchell, Shannon, & Tamis-LeMonda, under review a; Connor & White, 2006; King, Harris, & Heard, 2004; King & Sobolewski, 2006; Stewart, 2003). However, less is known about the *quality* of low-income, African American fathers' involvement with their children, which may influence children's development more than frequency of involvement alone (Cabrera, Shannon, West, & Brooks-Gunn, 2006; Easterbrooks & Goldberg, 1984; Hawkins & Palkovitz, 1999; Lamb & Lewis, 2004).

Existing studies suggest that the quality of low-income fathers' interactions with their children is uniquely and positively associated with children's language and cognitive development (Black, Dubowitz, & Starr, 1999; Ryan, Martin & Brooks-Gunn, 2006; Shannon, Tamis-LeMonda, London, & Cabrera, 2002; Tamis-LeMonda, Shannon, Cabrera, & Lamb, 2004). For example, fathers' supportive parenting during interactions with their toddlers is significantly associated with their children's cognitive development and vocabulary, above and beyond the effects of mothers' supportiveness (Tamis-LeMonda et al., 2004). However, few studies have examined the association between the quality of low-income, African American fathers' interactions with their children and their children's social and emotional development (Amato & Rivera, 1999; Cabrera, Shannon, Bradley, Tamis-LeMonda, & Tarkow, under review b), particularly when

children are very young (Kelley, Smith, Green, Berndt, & Rogers, 1998). It is important to explore the association between quality of father-child interactions and children's social and emotional development during toddlerhood because this is a foundation period for later development and because the amount of time fathers spend interacting with their children tends to decline as children grow older (Lamb, Chuang, & Hwang, 2004; Lerman, 1993).

Regarding predictors of father involvement, existing research has mostly considered how fathers' demographic characteristics (e.g., age, income, race/ethnicity) are associated with father involvement while less work has been done to ascertain the effects of fathers' family contexts, including partner and extended family relationships, on the *quality* of father involvement (Coley, 2001). Findings suggest that the quality of fathers' relationships with their partners (Cabrera et al., 2004b; Cabrera et al., under review a; Sobolewski & King, 2005) and with extended family members (Florsheim et al., 2003; Roy, 2004) significantly predict the *frequency* of low-income fathers' involvement with their children because partners (i.e., their children's mothers) and extended family members support or discourage fathers' involvement (Allen & Hawkins, 1999). Moreover, studies have found that partner relationship quality predicts the *quality* of father-child interactions (Coley & Chase-Lansdale, 2000; Shannon, Tamis-LeMonda, & Cabrera, 2006), but few studies have explored the effects of fathers' relationships with extended family members on the quality of father-child interactions. Examining how features of fathers' family contexts (e.g., partner and extended family relationships) affect the quality of low-income, African American fathers' interactions with their children and their children's social and emotional development is important because findings can

suggest ways to support positive father involvement and children's healthy social and emotional development.

In sum, the present study aims to inform policies intended to foster positive involvement among low-income, African American fathers and to suggest ways to enhance children's social and emotional development. In accordance with these aims, the present research explores associations among low-income, African American fathers' partner and extended family relationships, the quality of father-child interactions and toddlers' social and emotional development.

Definition of Father Involvement

One of the prominent features of research on father involvement is the variation in terms used to refer to what men do as parents (e.g., 'fathering', 'father involvement', etc.). Thus, a brief overview of vocabulary is presented to clarify the use of terms in the present research.

Researchers' use of specific terms most likely reflects philosophical, social and cultural expectations and beliefs about fathers' roles in their children's lives. For example, early research on 'parenting' was based on two-parent, married families and only assessed mothers' perspectives based on the assumption that mothers, as caregivers, were the primary parents (Pleck & Pleck, 1997). Researchers began to distinguish 'fathering' from mothers' parenting in the mid-twentieth century as popular constructions of the father's role expanded to include male sex-role model as well as financial provider (Lamb, 1997). As divorce rates rose in the 1970s and 1980s, researchers began to explore the effects of fathers' absence versus presence on child development (Day & Lamb, 2004; Stevenson & Black, 1988), and the term 'father involvement' was coined to

capture the various ways men are voluntarily “present” in their children’s lives (Lamb, Pleck, Chernov, & Levine, 1987). Currently, researchers define father involvement either expressly according to Lamb and colleagues’ (1987) multidimensional conceptualization of father involvement (e.g., accessibility, engagement, and responsibility) or more broadly, incorporating all that men do as fathers (Cabrera, Fitzgerald, Bradley, & Roggman, in press a; Palkovitz, 1997).

In the present study, ‘father involvement’ refers to the broad definition subsuming all of men’s parenting activities, and special mention will be made when referring specifically to Lamb and colleagues’ (1987) model. Furthermore, the present study focuses on ‘quality of father-child interactions’, as a specific qualitative aspect of involvement, and will therefore differentiate it from other referents of the term ‘father involvement’.

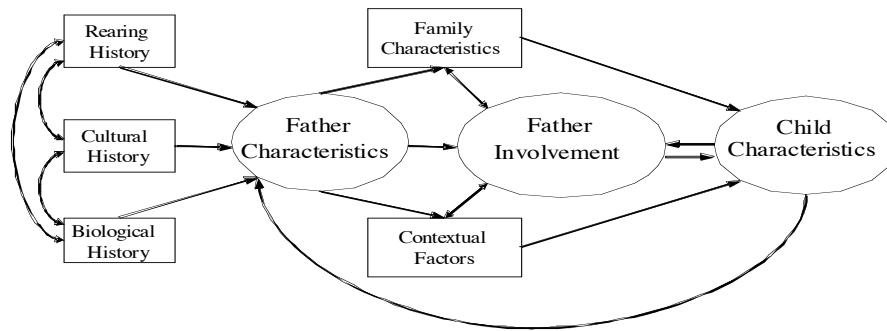
Theoretical Framework

The present research is guided by Cabrera and colleagues’ (in press a) dynamic, heuristic model of paternal influences on children (Dynamics Model) because it is a father-specific, integrated, comprehensive framework that incorporates multiple theoretical and conceptual models cited in research on fathers. The Dynamics Model is comprehensive in its explication of predictors and effects of father involvement, and it integrates multiple conceptualizations of father involvement (e.g., Lamb et al., 1987; Palkovitz, 1997) used in father research (see Figure 1).

Specifically, the Dynamics Model identifies sets of variables (e.g., father characteristics) that predict father involvement, variables (e.g., father characteristics, contextual factors) that interact to predict involvement, and variables (e.g., cultural

Figure 1.

Heuristic Model of the Dynamics of Paternal Behavior and Influence on Children over Time



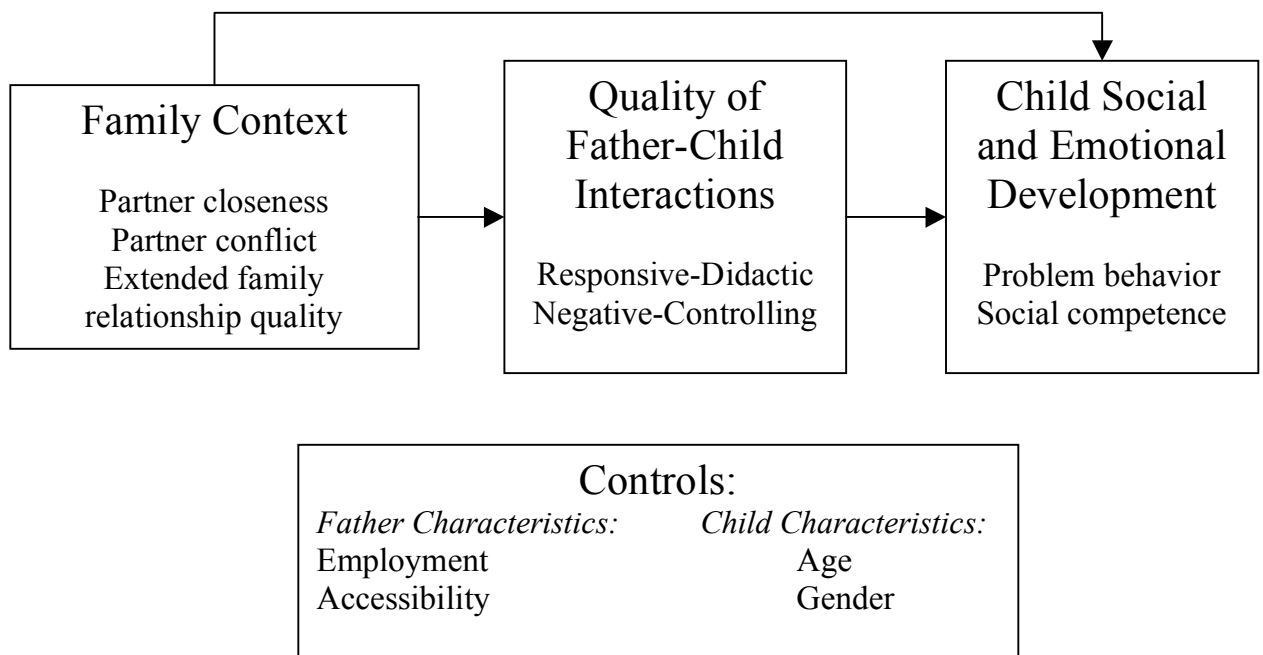
history) that influence father characteristics and in turn influence involvement . The model also suggests various moderators and mediators of the effects of predictors on father involvement and of the effects of father involvement on children’s development. In defining the father involvement construct, Cabrera and colleagues (in press a) allow for various conceptualizations thereby accounting for frequency of father-specific behaviors (e.g., financial provision, physical play) and qualitative dimensions of parenting (e.g., responsiveness) that are not exclusive to fathers. Additionally, the model is dynamic in that it assumes changes in the predictors and effects of father involvement over the life span while retaining paternal influence across development.

While the Dynamics Model is broad enough to account for multiple pathways to and from different aspects or conceptualizations of father involvement, it was intended as a heuristic to guide research on smaller components of the model as opposed to the whole (Cabrera et al., in press a). Hence, multiple measurement models can be derived from it depending on researchers’ goals and interests. For the purposes of the present research on

low-income, African American fathers and their toddlers, the following components of the Dynamics Model are explored concurrently: (a) the direct effect of contextual factors (i.e., family context) on child outcomes (i.e., social and emotional development), (b) the direct effect of contextual factors on father involvement (i.e., quality of father-child interactions), (c) the direct effect of father involvement on child outcomes, and (d) the mediating effect of father involvement on the association between contextual factors and child outcomes (See Figure 2).

Figure 2.

Model of Quality of Father-Child Interactions as a Mediator of Fathers' Family Contexts and Children's Social and Emotional Development



Dependent Variables

Children's social and emotional development. The Dynamics Model purports that children's developmental outcomes are directly affected by father involvement and directly or indirectly affected by fathers' family contexts through father involvement

(Cabrera et al., in press a). Social and emotional development are the outcomes explored in the present research because these domains support other domains of development (e.g., cognitive) thereby contributing to children's school success (Denham, 2006; Miles & Stipek, 2006; Zins & Elias, 2006) and because children in low-income families are at increased risk of developing social and emotional problems (Dodge et al., 1994). The domains of social and emotional development have been conceptualized and measured in multiple ways (e.g., emotion regulation, social cognition, externalizing behavior), all of which cannot be addressed in a single study. Therefore, in the present research, two aspects of social and emotional development are selected out of this plethora of constructs – social competence and problem behavior. Both social competence and problem behavior have been reliably measured in racially and economically diverse samples of toddlers and have been found to strongly predict later social (e.g., sociometric status, psychopathology) and cognitive (e.g., language) outcomes (Carter, Briggs-Gowan, & Davis, 2004; Denham & Holt, 1993). In the present study, 'social competence' and 'problem behavior' are operationally defined according to the 'problem' and 'competence' subscales of the Brief Infant-Toddler Social and Emotional Assessment (Briggs-Gowan et al., 2004).

Independent Variables

Fathers' family contexts. The Dynamics Model postulates that contextual factors (e.g., family context, community connections, religious activity) are important predictors of father involvement and child development because they infuse stress or support into the child-rearing context thereby negatively or positively affecting father involvement

and child development (Cabrera et al., in press a). The present study specifically focuses on the family context, which includes fathers' partner and extended family relationships.

Quantitative and qualitative research shows that the quality (e.g., closeness, conflict) of partner relationships is one feature of the family context which strongly impacts low-income, African American fathers' involvement (Cabrera et al., under review a; Florsheim et al., 2003; Gavin, Black, & Minor, 2002; McLoyd, Harper, & Copeland, 2001; Roy, 2004). Another important feature of low-income, African American fathers' family contexts is their relationships with extended family members. Because African American extended families tend to be closely connected (Dilworth-Anderson, 1992), the quality of fathers' relationships with extended family members may spill over to affect the quality of father-child interactions (Cox & Paley, 1997). Furthermore, low-income, African American parents often rely on assistance from other family members to provide necessary resources (e.g., childcare, transportation) and emotional support for caring for a child (McAdoo, 2001; Roy, 2004; Roy & Burton, 2007). Fathers who have positive relationships with extended family members may receive more instrumental and emotional support as parents which may in turn enhance the quality of father-child interactions (Ahmeduzzaman & Roopnarine, 1992; Belsky, 1984). Because partner and extended family relationships are particularly salient features of low-income, African American fathers' family contexts, the present study explores the associations between the quality of these relationships and the quality of father-child interactions and children's social and emotional development.

Mediating Variable

Quality of father-child interactions. The Dynamics Model proposes that father involvement directly affects child outcomes and explains the effect of fathers' family contexts on child outcomes. Cabrera and colleagues (in press a) advanced theoretical models of men's parenting by incorporating multiple conceptualizations of father involvement (e.g., financial provision, caregiving, cognitive stimulation) into their heuristic model. This theoretical advancement is important because the model can guide investigations into the potentially unique predictors and effects of quantitative and qualitative aspects of father involvement. The present study focuses on the predictors (e.g., family context) and effects (e.g., child social and emotional development) of quality of father-child interactions for two reasons. First, there is evidence to suggest that the quality of fathers' involvement influences children's development above and beyond the quantity of involvement (Cabrera et al., 2006; Easterbrooks & Goldberg, 1984; Hawkins & Palkovitz, 1999) meaning that it is not only spending time with children but what fathers do during that time that affects their children's development. Second, exploring the quality of father-child interactions may suggest specific objectives to be undertaken by current policy initiatives; for example, training fathers to respond sensitively to their children instead of only encouraging fathers to be available or present in their children's lives.

Control Variables

According to the Dynamics Model, there are various characteristics of fathers (e.g., employment, education, residency) and children (e.g., age, gender) that affect father involvement and children's development (Cabrera et al., in press a). Because of the

present study's focus on fathers' family contexts, father and child characteristics will be statistically controlled to examine the unique effects of family context (i.e., partner relationships, extended family relationships) on the quality of father-child interactions and children's social and emotional development above and beyond the effects of father and child characteristics.

There is little variation in most demographic characteristics (i.e., age, race, education, income) of fathers in the present sample, thus analyses only control for: (a) fathers' *employment*, which may correspond to their financial provision and thus other types of involvement (Roopnarine, 2004); and (b) fathers' *accessibility* to their children (i.e., average days per week father sees child), which corresponds to their residency status and is thus associated with the quality of father-child interactions (Brophy-Herb, Gibbons, Omar, & Schiffman, 1999).

Employment. Employment status is frequently shown to predict low-income, African American fathers' involvement (Amato, 1998; Coley & Chase-Lansdale, 1999; Roy, 2005; Shannon et al., 2002) probably because economic pressures and lingering cultural expectations of fathers prioritize the provider role above other types of involvement (Johnson, 2000). These expectations may be imposed by mothers who do not allow unemployed fathers who are not contributing financially to be involved in their children's lives (Roy & Burton, 2007). Also, fathers' personal expectations may affect the frequency and quality of their involvement (Roy, 2005); for example, an unemployed father may be ashamed and depressed over his inability to provide for his child and consequently engage in less positive and more negative parenting behaviors (Cummings & Davies, 1999).

Accessibility. Previous research has shown that fathers' residency status affects the quality of father-child interactions, but this association may be mediated by fathers' accessibility to child. Thus, the present study controls for accessibility instead of residency status for the following reasons. First, the commonly used single-item measure of residency included in the present study may be unreliable because mothers, fathers and researchers define fathers' residency status according to different indicators (e.g., if he pays rent, where he spends most nights, his mailing address). Therefore, it is uncertain whether fathers' reports of their residency status would be corroborated by mothers or more objective reporters. Second, the effect of fathers' residency on child development is most likely mediated by frequency of contact between father and child (e.g., accessibility). Findings suggest resident fathers are more responsive than nonresident fathers during father-child interactions (Brophy-Herb et al., 1999) possibly because resident fathers are able to interact with their children more often than nonresident fathers (Cabrera et al., 2004b; Cabrera et al., under review a) and are thus more familiar with their children's cues. Therefore, the present study controls for accessibility (i.e., the number of days per week fathers report seeing their children) instead of any potentially unreliable measure of fathers' residency status.

Child characteristics. As Cabrera et al. (in press a) acknowledge in the Dynamics Model, children are active contributors to their own development. Specifically, child characteristics such as age and gender influence fathers' behaviors which in turn affect children's development (Cote & Azar, 1997; DeLuccie & Davis, 1991; Marsiglio, 1995; McBride, Schoppe, & Rane, 2002; Mott, 1994; Pleck, 1997). For example, fathers' displays of warmth and affection (e.g., kisses) decrease as children get older (McBride,

Schoppe, Ho, & Rane, 2004). Therefore, to examine the unique effect of quality of father-child interactions on children's outcomes the present study controls for child characteristics of age and gender.

Summary of Present Research

In sum, the present research explores associations between fathers' family context (i.e., quality of partner and extended family relationships), quality of father-child interactions, and children's social and emotional development (i.e., social competence, problem behavior) in a sample of low-income, African American fathers and toddlers. This study focuses on partner and extended family relationships as predictors of quality of father-child interactions because these are two of the most salient aspects of low-income, African American fathers' family contexts (McAdoo, 2001). This study features the quality of father-child interactions because qualitative aspects of father involvement may be more important than quantitative aspects alone for predicting child outcomes (Easterbrooks & Goldberg, 1984). This study explores the effects of family context and quality of father-child interactions on children's social and emotional development because these domains are foundational for other developmental outcomes (Miles & Stipek, 2006) and because poor children are at increased risk of developing social and emotional problems (Dodge et al., 1994).

The Dynamics Model (Cabrera et al., in press a) frames the present research by hypothesizing the following associations which correspond to research questions: (a) a direct effect of fathers' family contexts (i.e., partner relationships, extended family relationships) on children's social and emotional development (i.e., problem behavior, social competence), (b) a direct effect of fathers' family contexts on father involvement

(i.e., quality of father-child interactions), (c) a unique, direct effect of quality of father-child interactions on children's social and emotional development, and (d) an indirect effect of fathers' family contexts on children's social and emotional development mediated by quality of father-child interactions. By examining these associations in a low-income, African American sample the present research can advance the literature on father involvement, inform policies and programs that target African American fathers, and suggest ways to support children's healthy social and emotional development in this at-risk population. In the next chapter, relevant literature is reviewed to further underscore the importance of the present research, particularly the research questions and hypotheses posed and the methodology (e.g., sample, design) employed in the present study.

CHAPTER II

Literature Review

Although there is a growing body of evidence that father involvement, specifically quality of father-child interactions, uniquely affects children's cognitive development (Conner, Knight, & Cross, 1997; Cabrera & Peters, 2000; Shannon et al., 2002; Tamis-LeMonda et al., 2004), less research has examined how fathers, particularly low-income, African American fathers, influence their children's social and emotional development. Studies that have found a link between father involvement and children's social and emotional outcomes (e.g., behavior problems, emotion regulation; Amato & Rivera, 1999; Cabrera et al., under review b; Coley, 1998; Hanson, McLanahan, & Thompson, 1997) have typically examined the quantity of involvement instead of the quality of father-child interactions. However, evidence suggests that, in addition to the amount of involvement, the quality of fathers' involvement (i.e., supportive father-child interactions) predicts children's developmental outcomes (Mezulis, Hyde, & Clark, 2004; Pleck, 1997).

Factors (e.g., father characteristics, family context) that explain variation in the quality of father-child interactions are also not well understood, especially for low-income, African American fathers. While there is a substantial body of literature on associations between demographic characteristics (e.g., race, socioeconomic status) and father involvement (Ahmeduzzaman & Roopnarine, 1992; Cabrera et al., 2004b; Fagan, 1998; Hofferth, 2003; McBride et al., 2004; Pleck, 1997), fewer studies have examined how aspects of fathers' family contexts (e.g., partner relationships, extended family relationships) support or undermine low-income, African American fathers' quality of

father-child interactions and children's social and emotional development. Consequently, the goals of the present research are to examine (a) the effect of low-income, African American fathers' family contexts (i.e., partner and extended family relationships) on children's social and emotional development (i.e., social competence, problem behavior); (b) the effect of fathers' family contexts on the quality of father-child interactions; (c) the unique effect of quality of father-child interactions on children's social and emotional development; and (d) the extent to which the quality of father-child interactions mediates the effect of fathers' family contexts on children's social and emotional development.

The following sections present a review of research on father involvement relevant to the present study. Before discussing specific findings, an overview of prevalent theories guiding research on fathers is presented. The present study is guided by the Dynamics Model (Cabrera et al., in press a), thus subsequent sections review studies that address the components of the Dynamics Model explored in the present research. The first literature review section includes studies of fathers' family contexts, particularly the social relationships among fathers, their partners, and extended family members and how these relationships shape fathers' interactions with their children and children's social and emotional development. The second literature review section includes research on the quality of father-child interactions and its effects on children's social and emotional development. In general, the literature review highlights studies of low-income, African American fathers and toddlers when available but studies of middle class, non-minority families and families with older children are also discussed to inform the present research.

Review of Theories Guiding Research on Fathers

As a multidisciplinary field, research on father involvement has drawn from various theoretical perspectives to describe and predict father involvement and to explain how father involvement relates to children's development. For example, economists, sociologists and demographers have used capital (Coleman, 1988) and resource (Haveman & Wolfe, 1994) theories to explain how fathers contribute to their children's development, while developmental psychologists tend to draw on family systems theory (Cox & Paley, 1997) and Belksy's (1984) process model of parenting.

Coleman's (1988) capital theories propose that by investing social capital (e.g., relationships with other persons and institutions) parents can increase their children's human capital (i.e., educational attainment). There is debate within the field regarding how to conceptualize social capital with some arguing that parents' social capital consists of both the parent-child relationship and parents' relationships with other individuals (e.g., extended family members) and institutions (e.g., schools; Hofferth, Boisjoly, & Duncan, 1998). Based on this conceptualization, a father can develop social capital with his child through his time spent with child, style of interacting with child, and expectations of child, which help the child develop adaptive skills (e.g., literacy) and beliefs (e.g., self-confidence) that are positively associated with human capital. Fathers' social capital gained from relationships with other people and institutions also affects children's human capital by reinforcing values and expectations about education and by providing connections to resources (e.g., job opportunities, colleges) that facilitate children's educational attainment (Hofferth et al., 1998).

While Coleman's (1988) capital theory explains how fathers' social capital with child (i.e., father involvement) and with others (i.e., partners, kin) directly affect children's development of human capital, the theory does not explain how a father's social capital with his partner and kin, for example, affects his social capital with child. Yet there is empirical evidence suggesting that the quality of fathers' partner relationships influences how much time fathers spend with their children and the quality of father-child interactions which in turn affect children's development (Cabrera et al., 2004b; Cabrera et al., under review a; Coley & Chase-Lansdale, 2000; Feldman, Wentzel, Weinberger, & Munson, 1990; Shannon et al., 2006). Thus, a criticism of Coleman's (1988) social capital theory is that it does not account for the mechanism by which one type of social capital (e.g., relationship with child) may mediate the effect of another form of social capital (e.g., relationship with partner) on children's development of human capital. Moreover, the theory does not consider how fathers' psychological characteristics (e.g., parenting beliefs), motivations, or mental health may impinge on fathers' abilities to invest social capital for their children.

Resource theory (Haveman & Wolfe, 1994) is similar to capital theory (Coleman, 1988) in its tenet that fathers invest available resources (e.g., time, income) in their children which yields positive returns in the form of children's developmental outcomes (e.g., academic achievement). Additionally, resource theory proposes that certain parent characteristics (e.g., level of education, cultural norms, income level) indirectly affect children's development by restricting or constraining parents' choices regarding investments. For example, fathers who work low-paying jobs experience time constraints; they must work long hours to provide basic necessities for their families and thus have

less time available to spend with their children than fathers without such income and time constraints.

While resource theory postulates certain constraints (e.g., work schedule) that will determine the resources a father invests in his child (i.e., level of father involvement) and predicts a positive effect of fathers' investments on children's development (e.g., academic achievement), this theory does not consider other mechanisms, such as fathers' family context which may affect fathers' investments. Resource theory is based on rational choice models and thus assumes that fathers weigh their investment options and select whichever will yield the greatest return, meaning the most beneficial or advantageous child outcomes. However, there may be social factors that do not overtly constrain fathers' investment options but still influence fathers' investments in their children. For example, a father who experiences high conflict in his partner relationship may have the option to spend time with his child, but the quality of his partner relationship may inadvertently have a negative effect on his behavior towards his child. Thus, a limitation of resource theory (Haveman & Wolfe, 1994) is that it assumes parents always behave in rational ways, and consequently the theory does not account for additional predictors (e.g., partner relationship quality) of father involvement.

Family systems theory (Cox & Paley, 1997) has also guided research on fathers because it explains associations among family relationships, including father-child interactions, and children's development. Family systems theory contends that each family member is embedded in an intricately connected family system such that an individual child's development cannot be understood independent of the family context. Also, the family context is hierarchically organized with subsystems exerting

bidirectional influences on each other. Therefore, father-child interactions are reciprocally related to interactions between all other dyads (e.g., mother-child) and triads (e.g., mother-father-child) within the system. For example, conflict in fathers' partner relationship can extend to the father-child relationship, and any discord in the father-child dyad can negatively affect the partner relationship (Emery, Fincham, & Cummings, 1992).

While family systems theory explicates complex linkages among partner relationship quality, quality of father-child interactions and children's development, it also claims that this complexity cannot be captured by simply combining characteristics of each individual and subsystem. More specifically, father-child interactions cannot be understood without also examining triadic interactions involving the mother or even more complicated interactions between all family members. Although the postulation that the whole family context is greater than the sum of its parts is a compelling theoretical claim, little research has tested the proposition because it is difficult to collect data on the more complex family interactions. Thus, a limitation of family systems theory is that it is pragmatically difficult to test all of its claims.

Another theoretical model whose claims have been empirically examined in father research is Belsky's (1984) process model of parenting. Belsky's model postulates that parenting is multiply determined by personal psychological resources of the parent (e.g., education, mental health, developmental history), contextual sources of stress and support (e.g., marital quality, work, social network), and characteristics of the child (e.g., age, gender). In turn parenting and child characteristics, which are reciprocally related

(Belsky, 1984; Rubin, Nelson, Hastings, & Asendorf, 1999), lead to children's developmental outcomes.

While Belsky's model has most often been applied to studies of mothers' parenting, there is some evidence that similar determinants (e.g., education, marital status and quality) operate on fathers' parenting (e.g., responsiveness; Woodworth, Belsky, & Crnic, 1996) and that fathers' parenting uniquely predicts children's developmental outcomes (Shannon et al., 2002; Tamis-LeMonda et al., 2004). However, one limitation of Belsky's model for use in research on fathers is that many commonly used measures of parenting are based on a maternal template and thus capture typical maternal behaviors (e.g., emotional attunement) to the exclusion of paternal behaviors (e.g., risk-taking) that may influence child development. Therefore, most of the existing father research guided by Belsky's (1984) process model of parenting has relied on measures of gender-neutral parenting behaviors (e.g., displays of warmth) as opposed to examining determinants of father-specific parenting behaviors (e.g., rough and tumble play). Without further research on determinants and outcomes of father-specific parenting behavior it remains uncertain whether Belsky's (1984) model accurately explains fathers' parenting and its effect on child development.

Two models that describe father-specific parenting behaviors are Lamb and colleagues' (1987) tripartite model of father involvement and Palkovitz's (1997) extended definition of involvement. Lamb and colleagues' (1987) model proposes that the ways fathers are involved with their children constitute three dimensions: accessibility (i.e., fathers' presence or availability to his child), engagement (i.e., experience of direct contact and shared interactions), and responsibility (i.e., making

resources available to the child through planning or provision). Palkovitz (1997) proposed a broader conceptualization of father involvement that includes fifteen different ways fathers can be involved (e.g., communicating, teaching, monitoring, providing, showing affection, planning) which correspond to three overlapping domains of involvement: cognitive, behavioral, and affective. Palkovitz's (1997) model also proposes simultaneously occurring continua (e.g., time invested, degree of involvement, observability, salience of involvement, directness, and proximity) that describe qualities of fathers' involvement.

Lamb and colleagues' (1987) and Palkovitz's (1997) models of father involvement have been used to frame data collection in several national studies of fathers (e.g., Early Head Start National Research and Evaluation Project Father Studies, EHS; Fragile Families and Child Well-Being Study, FF; Early Childhood Longitudinal Study – Birth Cohort, ECLS-B) because these models describe a comprehensive set of actions men undertake as fathers (Cabrera et al., 2004a). Thus, these models advanced research on fathers by providing a common conceptualization of fathering that has allowed for comparisons of findings across father studies. However, there remains a need to integrate these conceptualizations of father involvement with theoretical models that explicate predictors and outcomes of involvement (Cabrera, Tamis-LeMonda, Bradley, Hofferth, & Lamb, 2000).

The Dynamics Model of paternal influences on children (Cabrera et al., in press a) was proposed to address this need for a more integrated framework to guide father research. The Dynamics Model predicts that father involvement directly affects child development and can mediate the direct effects of various predictors of involvement (e.g.,

partner relationship, father characteristics) on child outcomes. Moreover, the Dynamics Model accounts for associations among variables that predict father involvement (e.g., cultural history, family characteristics). The Dynamics Model also allows for the derivation of various measurement models of father involvement (e.g., quantity, quality) that can vary according to the purpose and goals of the given study.

The Dynamics Model frames the present study because it addresses several of the limitations of other theoretical perspectives. First, the Dynamics Model extends Coleman's (1988) capital theory by postulating that the effect of fathers' social capital with other people and institutions (i.e., family context) on children's development of human capital can be mediated by fathers' social capital with child (e.g., father involvement). Second, the Dynamics Model expands on the claims of resource theory (Haveman & Wolfe, 1994) by proposing multiple predictors (e.g., partner and extended family relationship quality) which may not necessarily influence fathers' rational investment choices but can influence father involvement. Third, the Dynamics Model allows for variation in how father involvement is conceptualized and measured, thereby incorporating components of Belksy's (1984) process model of parenting, Lamb and colleagues' (1987) tripartite model of father involvement and Palkovitz's (1997) extended definition of father involvement. Finally, as a heuristic, the Dynamics Model can be adapted into various measurement models, and thus, as opposed to family systems theory (Cox & Paley, 1997), the Dynamics Model's tenets are more amenable to empirical testing.

The present study tests four specific propositions of the Dynamics Model: (a) the direct effect of fathers' family contexts on children's development, (b) the direct effect of

fathers' family contexts on father involvement (i.e., quality of father child interactions), (c) the direct effect of father involvement on children's development, and (d) the indirect effect of family context on children's social and emotional development through father involvement. In the next two sections, previous studies that address these components of the Dynamics Model will be reviewed to inform the present research.

Effects of Fathers' Family Contexts on Father Involvement and Child Development

The Dynamics Model purports that a fathers' family context includes his partner relationship (i.e., relationship with child's mother), extended family relationships, community connections and religious activity because these associations influence the setting in which he parents. The present study focuses on partner and extended family relationships because previous research indicates these may be important determinants of the quality of father-child interactions (Cox, Owen, & Lewis, 1989; Florsheim et al., 2003). There is evidence that the quality of partner relationships affects fathers' interactions with their children more strongly than mothers' interactions (Belsky, Gilstrap, & Rovine, 1984; Krishnakumar & Buehler, 2000; Lamb & Elster, 1985) potentially because men's parental and spousal roles are more closely connected than women's (Blair, Wenk, & Hardesty, 1994), thus men's experiences in one role strongly influence their enactment of the other role. Additionally, the quality of fathers' relationships with their children's grandparents has been found to positively affect quantity of father involvement (Gavin et al., 2002); however, less research has examined the effects of extended family relationship quality on the quality of father-child interactions.

The following subsections critique studies that have explored the effects of *partner relationships* and *extended family relationships* on father involvement and children's social and emotional development to substantiate the need for the present study of low-income, African American fathers' family contexts, quality of father-child interactions and toddlers' social and emotional development. This section concludes by proposing hypotheses for three of the present study's four research questions: (a) how are fathers' family context associated with children's social and emotional development, (b) how are fathers' family context associated with the quality of father-child interactions, and (d) to what extent does the quality of father-child interactions mediate associations between fathers' family context and children's social and emotional development?

Partner relationships. According to the Dynamics Model partner relationship quality, whether positive (e.g., closeness) or negative (e.g., conflict), directly and indirectly affects child outcomes through its effect on father involvement (Cabrera et al., in press a). In support of a direct effect of partner relationship quality on children's development, evidence suggests that witnessing conflict between parents leads to more internalizing and externalizing problems for children (Cummings, Davies, & Campbell, 2000) and that fathers' perceptions of marital quality are positively associated with children's attachment security (Belsky, 1996). Findings also show that fathers' parenting (e.g., less inconsistency and power assertion, more child-centeredness) mediates the positive effect of partner relationship quality (i.e., marital satisfaction) on children's social and emotional development (e.g., self-restraint; Feldman et al., 1990).

Nevertheless, most of the research linking partner relationship quality to children's social

and emotional development, whether directly or indirectly through fathers' parenting, has been limited to samples of middle-class, married parents.

However, one recent study used the nationally representative 1997 Child Development Supplement of the Panel Study of Income Dynamics to explore the effects of inter-parental conflict between *divorced* and *unmarried* parents on their three to twelve year-old children's overall well-being (Harper & Fine, 2006). Both mothers and non-resident fathers reported the frequency with which they argued about ten child-rearing issues (e.g., where child lives, how he/she is raised), their perceptions of the quality of father-child relationships, fathers' displays of warmth toward child during the preceding month, fathers' engagement in monitoring or limit setting behaviors, and the overall quality of their child's life across five domains (i.e., health, friendships, prospects for the future, feelings about self, relationship with mother).

The authors found that father-reports of inter-parental conflict were negatively associated with their ratings of the quality of the father-child relationship and with both parents' reports of child well-being. They also found that fathers' ratings of the quality of the father-child relationship directly and positively affected child well-being. Although Harper and Fine's (2006) findings suggest that partner conflict and overall quality of father-child relationship directly affect children's social and emotional development (e.g., friendships, feelings about self), they did not explore whether father-child relationship quality or the quality of father-child interactions (i.e., displays of warmth, limit setting) mediated the association between inter-parental conflict and child well-being. Thus, it remains uncertain whether unmarried parents' conflict only directly affects children's development or exerts its effect through fathers' parenting. Also, given the importance of

early childhood for later development, additional research is needed to explore the direct and indirect effects of unmarried partners' relationship quality on the social and emotional development of children younger than the 3-12 year-olds in the PSID sample.

While Harper and Fine (2006) is one of relatively few studies, particularly of unmarried parents with various income levels, that has examined associations between partner relationship quality and child social and emotional development, there is a growing body of evidence linking partner relationship quality (e.g., emotional support) to the quality of father-child interactions (Belsky, 1990; Cabrera et al., under review b; Lewis, 2005). Research shows that when marital relationships are of high quality (e.g., close, confiding marriages), fathers interact more positively with very young infants (Cox et al., 1989). On the other hand, when there is high conflict between married parents, fathers tend to be less involved in parenting than when marital conflict is low (McBride et al., 2004). It has been purported that fathers in particular have difficulty disentangling negative feelings (e.g., stress) within their marital relationship from their parent-child relationship (Belsky, 1990; Blair et al., 1994), and thus, negative attitudes spill over to negatively affect how fathers interact with their children (Erel & Burman, 1995). As with studies of partner relationships and child social and emotional development, most research on partner relationship quality and quality of father-child interactions focuses on married parents, whereas studies of unmarried parents have mostly considered the effects of partner relationship quality on *quantity* of father involvement.

For example, findings from studies of low-income, unmarried parents suggest that relationship *status* (e. g., cohabitating, visiting, just friends, no relationship) is a significant predictor of levels of father involvement (Johnson, 2001). In a nationally

representative sample of Early Head Start families (EHS), nonresident fathers who maintained a romantic relationship with their children's mothers were significantly more involved (i.e., accessible, engaged, responsible) with their toddlers over time than fathers who were not romantically involved with their partners (Cabrera et al., 2004b). Partner relationship status accounted for more of the variance in father involvement than fathers' race/ethnicity or human and financial capital (Cabrera et al., under review a). Carlson and McLanahan (2004) also found that among unmarried parents, the romantic status of parents' relationship at the time of their child's birth was the strongest concurrent predictor of fathers' contributing financially, visiting mother in the hospital, and giving child father's surname, among other indicators of involvement.

However, Cabrera and colleagues (2004b) and Carlson and McLanahan (2004) did not explore the *quality* of partner relationships of various statuses. It may be that partner relationship quality is correlated with relationship status, and thus the quality of partner relationships explains the effect of relationship status on father involvement. In fact, Carlson and McLanahan (2006) found that married parents report less conflict in their partner relationships at the time of their child's birth than unmarried parents and that the association between partner relationship quality (i.e., conflict) and fathers' engagement (e.g., playing games like "peek a-boo," singing songs, reading stories) was the same across all relationship statuses. In other words, because there tends to be more conflict in unmarried partners' relationships than married partners' relationships, unmarried fathers are less engaged with their children than married fathers. Thus, Carlson and McLanahan's (2006) findings suggest that quality of partner relationships explains the effect of relationship status on quantity of father involvement; however, these

findings do not speak to the effect of partner relationship quality (or status) on the *quality* of father-child interactions.

In their study, Gavin and colleagues' (2002) also investigated the quality of partner relationships among young, low-income, minority parents. This study sampled African American teen mothers living in intergenerational households then recruited the men mothers identified as their child's biological father and the children's co-resident maternal grandmothers. In individual interviews, fathers and mothers were asked to rate the quality of their partner relationship (e.g., satisfaction, cohesion) and the father's involvement (i.e., endowment, protection, caregiving, provision, formation and general involvement) with their infants.

Gavin and colleagues (2002) found that higher partner relationship quality consistently predicted greater father involvement. Father-rated partner relationship quality was one of only three significant predictors (paternal employment, maternal grandmother education) of father-reported involvement. Mother-rated partner relationship quality accounted for 53% of the variability in mother-reported father involvement. Both mothers' and fathers' ratings of partner relationship quality were significant predictors of a composite score (mother, father and maternal grandmother report) of father involvement.

While these findings suggest that unmarried fathers' experiences in the partner role (i.e., father-rated partner relationship quality) are associated with their experiences in the father role (i.e., father-reported involvement), the findings do not distinguish between parents' perceptions and children's actual experiences of fathers' involvement. Having parents report on both relationship quality and father involvement may have introduced

measurement error if how parents' feel about their partner relationships affects how they judge fathers' involvement. Employing observational measures of father involvement would avoid the self-report bias confounding measures of partner relationship quality and father involvement. Furthermore, observing father-child interactions would allow for exploration of the effect of quality of unmarried partner relationships on the *quality* of father involvement.

Like Gavin and colleagues (2002), Coley and Chase-Landsdale (1999) examined partner relationship quality among a sample of young, unmarried African American mothers whose children were 3 years-old and who were living in intergenerational households at the time of data collection. Mothers reported on the closeness of their partner relationships and fathers' involvement. In this study, fathers were not recruited, so analyses relied on mother-report of father involvement. Coley and Chase-Lansdale (1999) acknowledged that father-report is preferable, but through extensive face-to-face interviews with mothers they attempted to collect detailed information on a range of father involvement behaviors occurring since the children were born.

Coley and Chase-Lansdale (1999) conducted regression analyses predicting change in mother-reported father involvement from birth through age 3. They found that, when their children were 3 years-old, mothers who reported closer partner relationships also reported greater father involvement, regardless of how involved the father had been earlier. This finding suggests that partner relationship quality may significantly change fathers' involvement, implying that improvements in partner relationship quality could yield increases in father involvement. However, this study, like Gavin and colleagues' (2002), introduces bias by relying on retrospective mother-reports of fathers'

involvement which may confound mothers' satisfaction in the partner relationship with their estimation of father involvement. Observing the quality of father-child interactions could avoid biases associated with mother-report (Coley & Morris, 2002) and suggest how partner relationship quality affects what fathers actually do with their children not just what mothers perceive fathers do.

In sum, the majority of existing studies of partner relationship quality and children's development are based on married, middle-class parents, there is some evidence to suggest that married and unmarried partner relationship quality directly affects children's social and emotional development (Cummings et al., 2000; Harper & Fine, 2006). Few studies, however, have investigated whether quality of father involvement mediates the effect of partner relationship quality on children's development (Feldman et al., 1990), especially among low-income, minority families. Instead, studies of unmarried, minority parents have focused on the direct effect of partner relationship quality (and status) on father involvement and find that partner relationship quality (e.g., closeness, conflict) affects levels of father involvement with infants and preschoolers (Cabrera et al., 2004b; Carlson & McLanahan, 2004, 2006; Coley & Chase-Lansdale, 1999; Gavin et al., 2002). However, these findings may be constrained by measurement error related to bias in self-report measures of father involvement. Additional research is needed to examine how low-income, minority partners' relationship quality directly affects their children's development and *quality* of father involvement and whether the effect of partner relationship quality on child outcomes is mediated by the quality of father-child interactions.

The combined set of findings from literature on fathers' partner relationships supports several hypotheses for the present study. First, evidence from studies of married parents (Cummings et al., 2000) and Harper and Fine's (2006) study of unmarried parents suggests that fathers who report less conflict and more closeness in their partner relationships will have children with greater social competence and fewer problem behaviors probably because children learn adaptive social and emotional skills by observing their parents' interactions. Second, evidence from studies of partner relationship quality and father involvement among low-income, minority parents suggests that fathers who report less conflict (Carlson & McLanahan, 2006) and more closeness (Coley & Chase-Lansdale, 1999) in their partner relationships will display more positive (e.g., responsive) and less negative (e.g., intrusive) behaviors during father-child interactions. Third, extant research that investigated whether father involvement mediates the effects of partner relationship quality on father involvement (Buehler & Gerard, 2000; Feldman et al., 1990), although minimal, suggests that quality of father-child interactions will partially mediate the association between partner relationship quality (i.e., closeness, conflict) and children's social and emotional development (i.e., social competence, problem behavior).

The present study builds upon existing research on partner relationship quality in several ways. First, it includes measures of children's social and emotional development in order to test the direct and indirect effects of partner relationship quality on children's developmental outcomes in a low-income, minority population. Second, it includes an observational measure of the quality of father-child interactions to investigate whether *quality* of low-income, African American fathers' involvement mediates the effect of

partner relationship quality on young children's social and emotional development.

Finally, by observing quality of father-child interactions, this study avoids the reporter bias inherent in self-report measures of father involvement.

Extended family relationships. As another important feature of fathers' family contexts, the Dynamics Model proposes that the quality of fathers' relationships with extended family members directly affects children's development and indirectly affects child development through father involvement. Research on mothers has shown that the quality of mothers' relationships with extended family members affects children's social and emotional development by supporting mothers' positive parenting (e.g., acceptance, firm control, monitoring; Taylor & Roberts, 1995), but research on fathers' extended family relationships has not investigated effects on child outcomes. Instead, this body of literature focuses on the direct effect of the quality of fathers' relationships with extended family members on levels of father involvement.

Research that address the quality of relationships between fathers and maternal grandmothers of their children typically draw from studies of adolescent mothers who are likely to live in intergenerational households headed by maternal grandmothers. Because co-resident maternal grandmothers play a central role in their daughters' and grandchildren's lives, they often act as gatekeepers, granting fathers with whom they have positive relationships access to their grandchildren (McAdoo & McAdoo, 2002).

In the previously described study of adolescent mothers by Gavin and colleagues (2002), the quality of relationships between co-resident maternal grandmothers and non-resident fathers was examined. Fathers and maternal grandmothers rated their relationships on three subscales of the Network of Relationships Inventory: enhancement

of worth, conflict, and annoyance. Multivariate regression analyses revealed that fathers' ratings of relationships with maternal grandmothers (along with fathers' ratings of relationships with mothers) accounted for 51% of the variation in a composite of mother-, father-, and grandmother-reported father involvement. In other words, fathers who rated their relationships with maternal grandmothers more positively (i.e., more enhancement of worth, less conflict and annoyance) were significantly more involved with their infants than fathers who rated maternal grandmother relationships less positively.

Based on the same sample of adolescent mothers, Krishnakumar and Black (2003) explored mediators of the association between father-maternal grandmother relationship quality and father involvement. More specifically, these authors tested the association between maternal grandmothers' ratings of their relationships with fathers and adolescent mothers' satisfaction with fathers' involvement. They found an indirect effect of maternal grandmother-father relationship quality on mothers' satisfaction with father involvement through mothers' parenting efficacy. In other words, when fathers had positive relationships with maternal grandmothers, the grandmothers supported adolescent mothers' parenting efficacy which predicted mothers' satisfaction with father involvement. The authors suggested that when mothers feel confident in their ability to parent, at least in part because maternal grandmothers affirm mothers' parenting efficacy, adolescent mothers may also feel more comfortable having fathers involved in raising their child.

However, Krishnakumar and Black (2003) also found a direct *negative* effect of adolescent mother-maternal grandmother relationship quality (i.e., more enhancement of worth, less conflict and annoyance) on mothers' satisfaction with father involvement.

One explanation the authors' offered was that when mothers and grandmothers have positive relationships many of the paternal functions are assumed by the maternal grandmother or other extended family members leaving little room for the father. Another explanation may be that maternal grandmothers in positive relationships with adolescent mothers' are jealous and wary of fathers' bids for their daughters and grandchildren's affections, or they try to protect their daughters and grandchildren from men they believe are not good enough.

Overall, findings from these studies of adolescent mothers living in intergenerational households suggest that fathers who have positive relationships with maternal grandmothers are more likely to be involved with their children. Maternal grandmothers may promote, instead of prevent, greater involvement by fathers if they have positive relationships with fathers. Furthermore, when maternal grandmothers support mothers' feelings of efficacy, mothers in turn support fathers' involvement. On the other hand, maternal grandmothers can discourage fathers' involvement, especially when maternal grandmother-mother relationships are close.

While these studies shed light on the effects of father-maternal grandmother relationships on father involvement for fathers whose children are born to adolescent mothers, there is a dearth of research on father-maternal grandmother relationships for fathers of children born to older mothers or on fathers' relationships with other maternal kin (e.g., maternal grandfathers, mothers' siblings). Moreover, existing studies have not linked fathers' maternal kin relationships to the *quality* of father-child interactions or to children's social and emotional development which could implicate ways to support positive fathering and child outcomes.

Although relatively less research attention has been paid to the influence of paternal kin in comparison to maternal kin on father involvement, there is a growing body of evidence that suggests paternal grandmothers also offer critical emotional and instrumental support particularly to adolescent and non-resident fathers (McAdoo & McAdoo, 2002; Miller, 1997). In a qualitative study of nonresident, low-income fathers in Chicago, Roy (2004) found that mothers were more willing to grant fathers' access to their children if father-child visits occurred in paternal grandmothers' homes because mothers considered paternal grandmothers' homes safe places for children. Thus, fathers who have positive relationships with their own mothers (i.e., paternal grandmothers) may be more involved with their children than fathers with less positive relationships who do not receive instrumental support from paternal grandmothers.

Florsheim and colleagues (2003) examined fathers' relationships both with their own mothers (i.e., child's paternal grandmothers) and with their own fathers (i.e., child's paternal grandfathers) as predictors of adolescent fathers' parental functioning. Before their children were born, young (14-24 years-old) African American and Latino fathers rated the quality of their relationships with their biological mothers, biological fathers and partners using the Quality of Relationships Inventory, which assesses levels of support, conflict and depth in dyadic relationships. Two years after their children's births, fathers completed the Parenting Stress Inventory and the Child Abuse Potential Inventory.

Florsheim and colleagues (2003) found that young fathers' positive ratings of relationships with their own parents (i.e., paternal grandparents) significantly predicted lower parenting stress and less potential to abuse their two year-old children. There were

also significant associations between fathers' ratings of relationships with their own parents and mother and father ratings of partner relationships. In other words, fathers who perceived their relationships with their own parents more positively also perceived their partner relationships more positively and had partners who perceived their relationships more positively. In turn, quality of partner relationships significantly predicted fathers' lower parenting stress and less potential to abuse.

These findings suggest that the quality of fathers' relationships with paternal grandparents directly affects fathers' parental functioning and indirectly affects parental functioning through partner relationship quality. While Florsheim and colleagues (2003) examined qualitative aspects of father involvement (i.e., parenting stress, potential to abuse), their study did not specifically address how quality of fathers' relationships with paternal grandparents affects the quality of father-child interactions which may be more proximally associated with child outcomes than fathers' parenting stress (Deater-Deckard, 1998) or potential to abuse.

Overall, studies of fathers' extended family relationships suggest that quality of these relationships, particularly with children's maternal grandmothers and paternal grandparents directly affects father involvement (Gavin et al., 2002; Roy, 2004) and functioning (e.g., parenting stress, potential to abuse) by encouraging or discouraging fathers in their parenting role. Furthermore, fathers' relationships with extended family members indirectly affect father involvement through partner relationship quality (Florsheim et al., 2003) and maternal parenting efficacy (Krishnakumar & Black, 2003). Findings from reviewed studies of fathers' extended family relationships inform several hypotheses related to the present study's research questions. Evidence that the quality of

fathers' relationships with maternal grandmothers (Gavin et al., 2002) and paternal grandparents (Florsheim et al., 2003; Roy, 2004) significantly affects father involvement and functioning supports the hypothesis that fathers who rate their extended family relationships as higher in quality will engage in more positive and less negative father-child interactions than fathers who rate their extended family relationships as lower in quality. While extant research on fathers' relationships with extended family members has not addressed effects on children's social and emotional development, evidence from studies of mothers (Taylor & Roberts, 1995) supports the prediction that fathers who rate their extended family relationships as higher quality will have children with greater social competence and fewer problem behaviors, and it suggests that the quality of father-child interactions will partially explain the association between quality of fathers' extended family relationships and children's social and emotional development.

There are several limitations to the reviewed studies of fathers' extended family relationships that the present study addresses. First, studies of fathers' extended family relationships have not explored direct effects on children's social and emotional development or whether quality of father-child interactions mediate this effect. By exploring direct and indirect effects on child development the present study may suggest whether supporting fathers' relationships with extended family members is an effective way to enhance fathers' positive parenting and children's social and emotional development. Second, studies of fathers' relationships with extended family members have examined effects of extended family relationships on father involvement and parental functioning but not on the quality of father-child interactions. Therefore, the present study examines how the quality of fathers' relationships with extended family

members affects the quality of father-child interactions and in turn how the quality of father-child interactions affects children's social and emotional development. Finally, studies of fathers' extended family relationships have focused on relationships with grandparents without considering how relationships with other extended family members (e.g., siblings) influence fathers' parenting. The present study builds upon this existing research by examining the quality of fathers' relationships with multiple extended family members (e.g., maternal and paternal grandparents, other maternal and paternal male and female relatives) and how these relationships directly affect the quality of father-child interactions and children's social and emotional development or indirectly affect child development through quality of father-child interactions.

Effects of Quality of Father-Child Interactions on Children's Social and Emotional Development

The Dynamics Model proposes that father involvement, regardless of how it is conceptualized, directly and positively affects children's development. The present study focuses on the quality of father-child interactions because there is evidence to suggest that, more than quantity of father involvement alone, the quality of fathers' involvement with their children predicts children's social and emotional development (Mezulis et al., 2004; Pleck, 1997; Tamis-LeMonda et al., 2004). Evidence from studies using self-report and observational measures of quality of father-child interactions suggests that more positive (e.g., warm) and less negative (e.g., intrusive) parenting is positively associated with children's social and emotional development (Black et al., 1999; Cabrera et al., under review b; Grossman et al., 2002; Hanson et al., 1997; Hawkins, Bradford, & Palkovitz, 2002; Shannon et al., 2006).

The following section features studies employing observational measures in their investigations of effects of quality of father-child interactions on children's social and emotional development because fathers' self-reports of quality of father-child interactions may be biased, particularly for non-resident fathers in conflicted partner relationships (Coley & Morris, 2002) and because observational measures avoid self-report bias while providing more in-depth information on what fathers actually do as opposed to what they say they do (Shannon et al., 2002; Tamis-LeMonda et al., 2004). After reviewing the research, this section concludes with hypotheses addressing one of the present study's four research questions: (c) how is the quality of father-child interactions uniquely associated with children's social and emotional development?

In their study of father-child interactions, Brophy-Herb and colleagues (1999) used the Nursing Child Assessment Satellite Training (NCAST) Teaching Scale (Sumner & Spietz, 1994), designed for mothers, to measure low-income fathers' parenting behaviors during teaching interactions with their 6-month old infants. The NCAST Teaching Scale is a 73-item observational scale including four parental behavior subscales: sensitivity to cues, cognitive growth functioning, social and emotional growth fostering, and response to distress (Sumner & Spietz, 1994).

To examine how father-child interactions are unique from mother-child interactions during teaching tasks, Brophy-Herb and colleagues (1999) compared the behaviors of their sample of low-income, predominantly White fathers to a national database of low-education adolescent mothers, low-education mothers and high-education mothers. Brophy-Herb and colleagues (1999) found that low-income fathers displayed more social-emotional growth fostering (e.g., smiling, praising children) than

both age groups of low-education mothers and had levels comparable to high-education mothers. However, comparing fathers' behaviors to mothers' using a scale designed to measure mother-child interactions may not adequately reflect the unique ways fathers interact with their children, and these unique ways may be more important for children's social and emotional development than the indicators of fathers' social-emotional growth fostering measured by the NCAST.

In their focal set of analyses, Brophy-Herb et al. (1999) examined how fathers' demographic characteristics and risk factors were associated with their parenting behavior. Subgroup analyses revealed that resident fathers were more responsive to infants' distress than their non-resident counterparts, and higher risk (i.e., young, less than high school education) fathers were less sensitive to infants' cues than their low-risk counterparts. It may be that resident fathers spend more time with their infants and thus learn to recognize cues and respond to them; however, in this study data was not available on the time fathers spent with their infants. It may also be that high risk fathers are less sensitive to their infants because they are under more stress due to economic hardships than their low-risk counterparts.

In sum, Brophy-Herb and colleagues (1999) found that low-income fathers were comparable to highly educated mothers in terms of social-emotional growth fostering behaviors measured by the NCAST and that resident, low-risk fathers were more responsive and sensitive to their infants than non-resident and high-risk fathers. The main limitations of Brophy-Herb et al.'s (1999) findings are related to the observational measure they employed.

First, because the NCAST is intended to measure quality of interactions during a teaching task, father-child interactions were observed for only a short segment of time, 3.65 minutes on average. During this short time period fathers may have displayed what they believed to be more socially desirable behaviors instead of behaviors they typically engage in when others are not watching. Although the most appropriate time segment for observations is difficult to determine, longer interaction sessions (e.g., 10 minutes) give fathers time to settle into more typical behavioral patterns as they become less attentive to the observer's presence. Also, repeating observations on multiple occasions and in multiple settings would allow for more reliable and valid assessments of fathers' parenting in context (Gardner, 2000). Hence, it is possible that when observed for longer time periods and on multiple occasions, low-income fathers would display different rates of social-emotional growth fostering, responsiveness and sensitivity than found by Brophy-Herb and colleagues (1999).

Second, although the NCAST has acceptable psychometric properties when used with mothers (Sumner & Spietz, 1994), it may not capture the range of behaviors fathers display. However, there are currently no published observational measures developed specifically for father-child interactions. Basic descriptions of how fathers behave with their children are needed to develop a coding scheme appropriate for fathers instead of relying on measures based on a maternal template.

Finally, although Brophy-Herb and colleagues (1999) provided some descriptive information about low-income fathers' interactions with their infants, they did not consider how low-income fathers' parenting behaviors influenced their infants' social and emotional development. Other studies have directly tested associations between the

quality of low-income fathers' interactions and children's social and emotional development. In a sample of low-income, resident, African American fathers, Kelley and colleagues (1998) measured fathers' restrictiveness, warmth and sensitivity during a short (three minute) free play session with their one to three year-old children. Children's social development was measured with mother reports on the Vineland Adaptive Behavior Scales Survey Form (Sparrow, Balla, & Cicchetti, 1984). Less paternal restrictiveness and more paternal sensitivity were significantly associated with children's higher scores on the Vineland's socialization subscale (i.e., interpersonal relationships, play and leisure, and coping skills sub-domains).

Kelley and colleagues' (1998) findings are also limited due to sample size and measurement issues. First, the results were based on a sample of 54 low-income, resident, African American fathers recruited from public health clinics, day care centers and word of mouth. Fathers who agree to participate in home-based interviews tend to be a select group who are more educated, employed, and involved with their children than fathers who do not participate in research (Mitchell et al., under review; Tamis-LeMonda et. al, 2004). Thus, the association between observed paternal sensitivity and restrictiveness and children's social and emotional development may not generalize to all low-income, African American fathers. Second, Kelley and colleague's (1998) findings were based on mother-report of the Vineland Adaptive Behavior Scales, which may reflect reporter bias, for instance if mothers are depressed (Luoma, Koivisto, & Tamminen, 2004). Also, fathers may observe different behaviors in their children than mothers, especially if a child tends to only act out (e.g., temper tantrums) towards his or her mother and not other

adults or peers. Thus, fathers' reports may more accurately reflect their children's overall social and emotional development.

Cabrera et al. (under review b) also examined how resident, low-income fathers' behaviors during father-child interactions predict their five year-old children's social and emotional development. Racially diverse, resident fathers participating in the Pre-K data collection wave of the EHS study were interviewed and video-taped with their children during a semi-structured free play session. Observers rated fathers' behaviors during interactions using scales adapted from NICHD Study of Early Child Care Study's (1999) "Three box" scales, which include subscales for supportiveness, cognitive stimulation, intrusiveness, and negative regard. In addition to using observational measures of parenting, Cabrera et al. (under review b) utilized the Leiter-R Social and Emotional Rating Scale in which trained observers administer subscales to assess children's social skills (e.g., attention, organization/impulse control, activity level, sociability) and emotion regulation (e.g., energy and feelings, mood and regulation, anxiety and sensory reactivity). Also, mothers and fathers completed the Child Behavior Checklist (Achenbach, 1991) as a measure of children's externalizing behaviors.

Cabrera and colleagues (under review b) found that fathers' supportive and cognitively-stimulating behaviors were marginally associated with observer ratings of children's social and emotional development (e.g., social skills), and fathers' intrusiveness was positively associated with mother-reports of children's externalizing behaviors. These findings suggest that fathers' discrete behaviors (e.g., intrusiveness) are linked to specific aspects of children's social and emotional development (e.g.,

externalizing behaviors); however, these findings are limited to resident, low-income fathers and five year-old children.

Drawing on a sub-sample of fathers in the EHS study, Roggman and colleagues (2004) examined observational ratings of fathers' social toy play during interactions with their 24 month-old children. They found that for their rural sample of low-income, predominantly European American fathers, those who engaged in more complex social toy play had children with higher emotion regulation scores on the Bayley Scales of Infant Development (e.g., fearfulness/trust, energy/activity level, adaptation to transitions, hypersensitivity) than fathers who engaged in less complex social toy play. Roggman and colleagues' (2004) findings suggest that fathers' complex social toy play positively influences children's social and emotional development (e.g., emotion regulation), yet these findings may not generalize to low-income fathers from non-White racial backgrounds or to nonresident fathers.

With a sub-sample of 74 racially and ethnically diverse fathers from the EHS study, Shannon and colleagues (2006) examined how fathers' behavior during interactions with infants concurrently and longitudinally predicted children's behavior. The Caregiver-Child Affect, Responsiveness, and Engagement Scale (C-CARES; Tamis-LeMonda, Rodriguez, Shannon, Ahuja, & Hannibal, 2002) was used to rate father, infant and dyad behaviors. Fathers received scores on Responsive-Didactic (e.g., positive affect, responsiveness to nonverbal cues, structuring) and Negative-Overbearing (e.g., negative touch, intrusiveness) factor composites. When infants were 8 months-old they received scores on Mastery (e.g., emotion regulation, persistence, involvement with toys; reverse-scored negative affect and negative touch) and Social-Communication (e.g., positive

affect, participation with caregiver, responsiveness to caregiver, emotional attunement, amount of communication), and at 16 months, the latter factor was split into Social (e.g., positive affect, participation with caregiver, responsiveness to caregiver, emotional attunement) and Communication (e.g., amount of communication, quality of communication, play sophistication) composites.

Shannon et al. (2006) found that fathers' scores for the Responsive-Didactic composite were significantly positively correlated with infants' concurrent scores on Social-Communication at 8 months and Social and Communication at 16 months. Fathers' Responsive-Didactic scores at 8 months only marginally predicted children's Social scores at 16 months once children's earlier Social-Communication scores were controlled. Fathers' scores on Negative-Overbearing at 8 months were significantly negatively correlated with infants' concurrent scores on Social-Communication at 8 months, but fathers' Negative-Overbearing scores at 16 months were not significantly correlated with infants' concurrent Social and Communication scores. Furthermore, fathers' earlier Negative-Overbearing behavior did not significantly predict infants' behavior at 16 months. Neither father scale was related to infants' scores on the Mastery scale at either time point.

Shannon and colleagues' (2006) results suggest that low-income, minority fathers' Responsive-Didactic and Negative-Overbearing behaviors influence their infants' displays of social and communicative behavior during father-child interactions particularly when infants are 8 months-old. However, because this study did not include a global measure of infants' social and emotional development, it is unclear how fathers'

responsive and didactic or negative and overbearing behaviors are associated with their infants' social behaviors in other contexts besides father-child interactions.

Studies in which middle class, European American father-child interactions were observed have also found evidence of significant effects on children's social and emotional development. For example, Carson and Parke (1996) observed fathers interacting with their 4 to 5 year-old children during a hand game, and observers recorded the sequencing of affect displays by children and fathers. Children's social and emotional development was measured with a seven-item, teacher-report scale of competence in peer interactions (e.g., sharing, verbal aggression, avoidance of others). Fathers' displays of negative affect in response to children's negative affect were significantly associated with teacher-report of children's social and emotional development (e.g., less sharing, more verbal aggression and more avoidance of others).

Carson and Parke (1996) suggested that fathers' displays of negative affect may negatively influence children's competence in peer interactions through children's decreased capacity for emotion regulation, which is necessary for positive peer interactions (Eisenberg & Spinrad, 2004; McDowell & Parke, 2005). However, Carson and Parke (1996) did not consider bidirectional effects, in other words whether child characteristics explain the association between fathers' displays of negative affect and children's social competence. As the Dynamics Model (Cabrera et al., in press a) suggests, child characteristics, such as temperament (Rubin et al., 1999), can influence fathers' parenting and in turn child development. In Carson and Parke's (1996) study, children's emotion regulation may have elicited fathers' negative affect which in turn led to children's poorer social and emotional outcomes. Additional research, especially

longitudinal, is needed to partial out the effects of fathers' behaviors (e.g., negative affect) and child characteristics (e.g., emotion regulation, temperament) on children's social and emotional development (e.g., social competence).

In another study of middle class German fathers, Grossman and colleagues' (2002) considered how fathers' play behavior influences children's development of secure attachment, which is a precursor of social and emotional development. In a small-scale, longitudinal study, fathers were observed during free play with their 24 month-old children, and children's attachment security was later measured at 6, 10 and 16 years of age. Fathers who displayed more acceptance, cooperation and sensitivity when their 24 month-old children faced challenges in play were more likely to have children who were securely attached at 10 and 16 years of age. Because ratings of mothers' play behaviors were not significantly associated with children's later attachment security, Grossman and colleagues (2002) suggested fathers assume a unique role of using play to foster their children's secure exploration (i.e., attachment security). Interacting with fathers who display acceptance, cooperation and sensitivity to challenges may be important for middle class children's attachment, but this association has not been explored among low-income, minority fathers' and their children.

In sum, observational studies of parent-child interactions suggest that the quality of fathers' parenting behaviors is associated with young children's social and emotional development because fathers' parenting behavior can support or impede children's development of adaptive social and emotional skills. Findings from middle class samples suggest that fathers' negative affect and sensitivity during play are associated with children's social competence and attachment security (Belsky, 1996; Carson & Parke,

1996). Findings based on observations of father-child interactions in low-income samples suggest that fathers' sensitivity, responsiveness, intrusiveness and complex toy play are associated with children's socialization and externalizing and social behaviors (Brophy-Herb et al., 1999; Cabrera et al., under review b; Kelley et al., 1998; Roggman et al., 2004; Shannon et al., 2006). These findings support the hypothesis that fathers who exhibit more positive (e.g., responsive, sensitive) and fewer negative (e.g., intrusive) parenting behaviors during father-child interactions will have children with greater social competence and fewer problem behaviors.

There are several limitations of the observational studies reviewed herein which the present study aims to address. First, while observational measures are advantageous because they are generally more objective than self-report measures, the limited time period and single occasions in which fathers were observed in Brophy-Herb et al. (1999) and Kelley et al. (1998) may have only captured fathers' socially desirable behaviors instead of how they typically behave with their children. Second, observational studies of father-child interactions typically rely on mother-report of children's social and emotional development (Kelley et al., 1998), which may be biased, or observations of children's behavior while interacting with their fathers (Shannon et al., 2006), which may not represent children's overall social and emotional development. Third, few studies of father-child interactions considered how child characteristics (e.g., age, temperament) contribute to fathers' behavior which may in part explain the association between quality of father-child interactions and children's social and emotional development. Finally, observational studies of low-income fathers focused on select groups of fathers (e.g., resident African American, rural European American), so the findings may not generalize

to other groups of low-income fathers (e.g. nonresident). The present research builds on these previous studies by observing father-child interactions for at least 10 minutes, collecting father-reports on a global measure of children's social and emotional behavior, statistically controlling for child characteristics (e.g., age, gender), and recruiting an underrepresented sample of low-income, African American fathers.

Overview of Present Study

Overall, the research reviewed herein consistently found significant associations among fathers' family contexts (e.g., partner relationships, extended family relationships), quality of father-child interactions, and children's social and emotional development. Evidence, mostly from studies of middle class families, suggests fathers' partner relationship quality directly and indirectly affects children's social and emotional development (Cummings et al., 2000; Harper & Fine, 2006), and studies with low-income samples suggest fathers who have more positive relationships with their partners and extended family members are more involved with their children (Cabrera et al., 2004b; Coley & Chase-Lansdale, 1999; Florsheim et al., 2003; Gavin et al., 2002). Furthermore, low-income fathers who exhibit more positive and less negative parenting during father-child interactions have children with greater social skills (Cabrera et al., under review b; Kelley et al., 1998; Roggman et al., 2004; Shannon et al., 2006), and there is some evidence suggesting the quality of father-child interactions mediates the effect of fathers' family contexts on children's social and emotional development (Feldman et al., 1990).

There are several limitations of the reviewed literature on fathers that the present study addresses. First, research on fathers' family contexts has rarely explored the effects

of fathers' relationships with partners and extended family members on the *quality* of father-child interactions or on children's social and emotional development. The present research explores the direct effect of fathers' family contexts on children's social and emotional development, the direct effect of fathers' family contexts on the quality of father-child interactions, and the extent to which the association between fathers' family contexts and children's social and emotional development is mediated by the quality of father-child interactions.

Second, much of the research on low-income fathers' interactions with their children focused on resident fathers who tend to be easier to locate and include in research (Mitchell et al., in press), and thus findings may not generalize to non-resident fathers who are less likely to participate in research. In the present study extensive recruitment efforts were undertaken to include some non-resident as well as resident low-income, African-American fathers so that findings may generalize to a broader group of fathers.

Finally, studies to date have generally relied on mother-reports of father involvement and children's social and emotional development which can be biased (Coley & Morris, 2002). Observational measures of father-child interactions are less subjective but have typically been confined to short episodes that may reflect self-presentation bias. Also, although usually highly correlated with mother-reports of child behavior, under some conditions (e.g., maternal depression) father reports of children's social and emotional development may be most valid (Luoma et al., 2004). Therefore, to improve on previous methodology, the present research collected father-reports of

children's social and emotional development and utilized an observational measure of quality of father-child interactions based on 10-minute episodes.

By exploring the effects fathers have on young children's social and emotional development within an understudied population of low-income, African American fathers and by utilizing potentially more valid measures of the quality of father-child interactions and children's social and emotional development the present study can advance the field of research on fathers. Additionally, this work can have important implications for policies and programs aimed at improving the health and well-being of children and families by supporting fathers' positive involvement.

Research Questions and Hypotheses

To review, based on a measurement model (see Figure 1) drawn from Cabrera and colleagues' (in press a) Dynamics Model and findings in the literature reviewed above, the present research intends to answer the following questions: (a) how are fathers' family contexts (i.e., quality of partner relationships, maternal kin relationships, and paternal kin relationships) associated with children's social and emotional development (e.g., social competence, problem behavior), (b) how are fathers' family contexts associated with the quality of father-child interactions, (c) how is the quality of father-child interactions uniquely associated with children's social and emotional development, and (d) to what extent does the quality of father-child interaction mediate associations between fathers' family contexts and children's social and emotional development?

The reviewed literature underscores the following hypotheses related to each research question. First, although evidence of a direct effect of family context on children's social and emotional development comes mostly from studies of middle class,

White families, (Belsky, 1996; Cummings et al., 2000; Harper & Fine, 2006), the quality of low-income, African American fathers' relationships with their partners and extended family members is expected to be associated with children's higher social competence and lower problem behavior scores. Second, literature on low-income fathers' partner and extended family relationships and levels of father involvement (Cabrera et al., 2004b; Black et al., 2002) underscores the hypothesis that fathers with more positive partner and extended family relationships will exhibit more positive (e.g., sensitive) and less negative (e.g., intrusive) behavior during father-child interactions. Third, evidence from studies of low-income fathers' interactions with their children (Cabrera et al., under review b; Roggman et al., 2004; Shannon et al., 2006) supports the hypothesis that fathers who engage in more positive and less negative father-child interactions will have children with higher social competence and lower problem behavior scores. Finally, based on the Dynamics Model, the quality of father-child interactions is expected to partially mediate the associations between the quality of fathers' relationships with partners and extended family members and children's social competence and problem behavior scores.

CHAPTER III

Method

In this chapter, the methods and measures used to collect data for the present research are described. Data collection was completed by the author and other graduate research assistants as part of the Healthy Attachment Promotion for Parents and Infants: Father Study (henceforth referred to as the HAPPI: Father Study; Cabrera et al., 2005) and occurred between August 2004 and March 2007. All measures and forms used in the HAPPI: Father Study were approved by the Institutional Review Board of the University of Maryland (Appendix A).

Participants

Participating fathers were recruited from a concurrent study of at-risk mothers with children between 0 and 24 months-old enrolled in Early Head Start centers in the Washington, D.C. area (Project HAPPI; Jones Harden, 2004), or they were directly from one Early Head Start center in Washington, D.C. if they had a child less than 36 months-old enrolled in the program. Overall, 53 fathers and their toddlers enrolled in EHS programs in Washington, DC participated in the HAPPI: Father Study.

Because the purpose of the present study was to explore predictors and effects of *low-income* fathers' involvement, four participants who reported monthly incomes greater than two standard deviations above the sample mean were not considered low-income and thus excluded from further analysis. Consequently, the final analytic sample for the present study included 49 low-income fathers and their toddlers.

Table 1 presents descriptive information about the sample of participating fathers based on father-reported family demographic information. Fathers were between 17 and

Table 1.

Description of Participants in the HAPPI: Father Study

Variables	% (N=49)	M(SD)
<i>Father Demographics</i>		
Age		31.9(10.7)
African American	94	
Education		
< HS	29	
HS or equivalent	51	
> HS	20	
Employed	78	
Monthly Income		\$1,406.61(1,236.72)
<i>Partner Relationship Status</i>		
Married	24	
Cohabiting	31	
Visiting	14	
Resident with child	76	
<i>Mother Demographics</i>		
Age		25.7(7.0)
African American	86	
Education		
< HS	19	
HS or equivalent	60	
> HS	21	
Employed	51	
<i>Child Demographics</i>		
Age		20.8(9.2)
Male	55	

58 years-old ($M = 31.9$, $SD = 10.7$) at the time of their initial interview, and the majority of fathers (94%) were Black/African-American (2 Hispanic/Latino, 1 Black/Hispanic). Almost one third (29%) of fathers had less than a high school diploma, while 51% graduated from high school or completed their GED, and 20% had attended or graduated from college. The majority of fathers (78%) were employed with monthly incomes ranging from \$0 to \$6,000 ($M = 1,406.61$, $SD = 1,236.72$). Most fathers (69%) were in romantic relationships with their children's mothers (24% married, 31% cohabitating, 14% visiting), and 76% of fathers reported living with or spending an average of 7 nights per week with their children during the prior month. Twelve residential fathers were social fathers (24%) who were either romantically involved with their child's mother ($n = 5$) or biologically related to her ($n = 7$).

Participating toddlers were between 4.4 and 36.3 months of age ($M = 20.8$, $SD = 9.2$), and 55% were male. The mothers of participating toddlers were between 16 and 50 years-old ($M = 25.7$, $SD = 7.0$), and most (86%) were Black/African-American (3 Hispanic/Latino, 1 White, 3 Caribbean). Almost one fifth of the mothers (19%) had not finished high school, while 60% graduated from high school, and 21% had attended some college or graduated from college. Approximately half of the mothers (51%) were currently employed.

Selection bias. Using available mother-reported family demographic information ($N = 114$; Jones Harden, 2004), a selection bias analysis was conducted to determine if mothers' descriptions of participating fathers ($n = 37$) were significantly different from mothers' descriptions of fathers who did not participate ($n = 77$). Results of one-way ANOVAs revealed no significant differences in father, mother or child age between

participants and non-participants. Results of logistic regressions predicting demographic characteristics from participation status revealed that non-participating fathers were significantly more likely than participating fathers to be of a race other than African American ($\chi^2 = 7.18, p < .01$) probably because participants were required to be proficient in English. Also, non-participants were significantly less likely to be in romantic relationships with their children's mothers than participants ($\chi^2 = 6.27, p < .05$), and mothers whose children's fathers did not participate were significantly more likely to be employed than mothers whose children's fathers participated ($\chi^2 = 4.63, p < .05$). Finally, fathers who did not participate were significantly less likely than participating fathers to see their child almost every day or more ($\chi^2 = 7.71, p < .01$), and there was a trend suggesting non-participating fathers were less likely to live with their children than participating fathers ($\chi^2 = 3.68, p = .06$). Overall, the fathers who participated in this study were more involved in their children's and their partners' lives than the fathers who did not participate.

Procedure

Before describing procedures for data collection, this section presents a detailed account of the HAPPI: Father Study's recruitment procedures to underscore challenges researchers face recruiting sizable, representative samples of low-income fathers (Cherlin & Griffith, 1998). It also highlights the efficacy of recruitment strategies employed in the current study (Mitchell et al., in press). Identification of fathers was the first step in recruitment. Studies of fathers generally rely on two methods for identifying fathers – asking mothers to identify the father of their child or asking men to identify themselves as fathers (Mitchell et al., in press). In the present study, mothers participating in Project

HAPPI (Jones Harden, 2004) or enrolled in the EHS program were asked to identify the biological and/or social fathers of their children.

By asking mothers to identify their children's fathers, the present study was able to gather information about both biological and social fathers, whoever mothers believed played a fathering role in their children's lives. Additionally, by contacting mothers (i.e., guardians) for consent, children were allowed to participate alongside their fathers, which enabled matching of father and child data and exploration of the effects of father involvement on child development. On the other hand, asking mothers to identify fathers limited the present sample to those men whom mothers were able or willing to identify. While all mothers were able to identify at least one father for their children, some acted as "gatekeepers", regulating identified fathers' participation in research (Fagan & Barnett, 2003). Of the 141 mothers who identified living fathers, one third refused to give consent for researchers to contact the fathers. Mothers may have selected fathers out of the research for a variety of reasons, such as to preserve the father's limited time, the lack of any contact or relationship with the father, or to protect themselves and their children from violent fathers (Allen & Hawkins, 1999).

In addition to identifying their children's fathers and providing consent, mothers completed surveys asking for basic information about the fathers (Appendix C). Included in this survey was a 4-item scale (ECLS-B, 2007) used to screen out fathers who were not English proficient. Four mothers indicated that their children's fathers were not able to speak and understand English at least "pretty well", therefore these fathers were not recruited to participate in the study. In total, mothers identified and gave consent for researchers to contact 91 eligible fathers.

The next step in recruitment was to contact fathers using information (e.g., phone numbers, addresses, employers' name and location, best times to reach father by phone) provided by mothers. Obtaining multiple types of contact information from mothers was critical because a number of fathers had disconnected phone numbers, changed residences, and/or changed employment situations. Even with multiple types of contact information, researchers were unable to reach seventeen fathers (19%) within 3 months of an initial recruitment attempt. The fathers who could not be reached were mailed final letters informing them of the study and providing the project manager's contact information in case the fathers were interested in participating. None responded to the mailed notice.

Some mothers provided additional assistance contacting fathers by suggesting times when the father could be reached at her home or by taking the onus to schedule the visit in her home to ensure the father's attendance. Other mothers could not or would not provide such assistance contacting the fathers, and in those cases recruitment took anywhere from one five-minute phone call to three months of repeated phone calls to various family members, daily trips to the child care center, and weekly drop-by visits to the father's home and workplace.

Although phone contact was most efficient, in terms of both time and cost, meeting fathers at their children's EHS center, when feasible, proved to be a more personal and successful approach to recruitment. Such in-person contact provided an opportunity for fathers to meet the researchers, learn about the study, and hear how much their participation was valued while bypassing potential "gatekeepers" (e.g., new romantic partners, housemates). When phone calls and visits to the EHS center were

unsuccessful, the next step was to drop-by the fathers' residence, the success of which is best described as "hit or miss." Fathers who work multiple jobs, irregular shifts, or overtime to earn extra money are rarely home and have limited time to spare. When researchers dropped by and fathers were not home some resident family members responded positively to the researchers' visit and provided further contact information for the father, whereas other housemates wanted to protect the father's privacy and thus refused to provide further assistance. Overall, drop-by visits to low-income families' homes were less effective and more burdensome than other means of contact. Only three fathers were successfully recruited on drop-by visits, whereas the other 50 participants were recruited by phone or at the EHS centers.

After contact was made with fathers, the next step in recruitment was asking fathers to participate. Some initially declined for various reasons including time constraints (e.g., exhausting work schedule, work hours conflicting with child's day care schedule, conflicts between mothers'/children's and fathers' availability), tense relationships with their children's mothers, and distrust of research. However, some of these fathers eventually agreed to participate because researchers scheduled multiple shorter visits to overcome time constraints, negotiated with mothers to coordinate father and child being together for the visit, and emphasized how recording these men's stories could reduce the stereotype that minority fathers are absent from their children's lives. Of the fathers with whom contact was made, one-third refused to participate, and two fathers withdrew before completing the baseline visit.

Once fathers agreed to participate in the HAPPI: Father Study, an appointment for data collection was scheduled at a time and place (13% father's home, 25% mother's

home, 56% both parents' home, 6% EHS center) convenient to the father and his family. At the initial baseline visit, written informed consent was obtained from fathers (Appendices D-F). Follow-up visits were conducted with fathers approximately 6-months after the initial visit and consisted of the same procedures as the baseline visit. A portion of fathers (13.2%) did not complete a follow-up visit because they were uninterested/busy or unreachable within three months of the follow-up visit due date.

Visits with fathers consisted of a 30-minute videotaped, semi-structured father-child interaction; an approximately 60-minute in-person, quantitative interview; and age-standardized, parent-report scales assessing children's social and emotional development (e.g., BITSEA). For completing each visit, fathers were given \$50, a digital copy of their video-taped play session, and a book for their children.

The video-taped father-child interactions included three tasks: 15-minutes of unstructured free play, a 3-minute teaching task, and a 10-minute semi-structured 3-bag task (infants younger than 12 months-old were given another free play task instead of the 3-bag task). The present study's analyses are based on the 3-bag task during which toys were presented to fathers in three separate bags with contents varying depending on child age (Tamis-LeMonda et al., 2002). For 12- to 36-month-olds, bags contained: bag #1- book, bag #2- plastic pizza set and toy phone, and bag #3- farm set. Fathers were told that they could divide up the 10-minutes between the bags however they liked and were asked to try to ignore the camera and do what felt most natural.

The quantitative father interview was a comprehensive measure covering family demographics, mother-father relationship quality, family history, father involvement, [father] health and well-being, employment and income, child support, household

composition, and child care (Appendix G). Interview items were drawn from national studies involving fathers such as the Early Head Start Research and Evaluation Project, the Fragile Families and Child Well-Being Study, and the Early Childhood Longitudinal Study – Birth Cohort (Cabrera et al., 2004a). Fathers also responded to age-standardized scales assessing their children’s social and emotional development.

Measures

This section describes measures used in the present research beginning with the dependent variables (i.e., social and emotional development) and followed by the mediating variable (i.e., quality of father-child interaction), independent variables (i.e., quality of partner and extended family relationships), and control variables (i.e., father employment and accessibility, child age and gender).

Brief Infant-Toddler Social Emotional Assessment (BITSEA). Fathers were administered the 42-item BITSEA, which was designed as a screener for parents to identify children (ages 12-36 months) at risk for or currently experiencing social-emotional/behavioral problems and delays in social-emotional competence (Appendix H). The items describe children’s behavior during the last month, and fathers responded using a Likert scale ranging from 0 (not true/rarely) to 2 (very true/often). The scale consists of two domains: problem (31 items; e.g., “Seems nervous, tense, or fearful,”) and competence (11 items; e.g., “Is affectionate with loves ones”). Domain scores were computed by reverse-coding negatively-worded items and summing scores across the items in each domain. Internal consistencies for the domain composites in the present study were comparable to the scales’ norming data (Briggs-Gowan, et al., 2004); Cronbach’s alpha was .80 for problem and .58 for competence.

Quality of father-child interactions. The Caregiver-Child Affect, Responsiveness, and Engagement Scale (C-CARES; Tamis-LeMonda et al., 2002; Appendix I) was used to assess the quality of father-child interactions because it has been shown to exhibit acceptable reliability and predictive validity in samples of low-income, minority fathers (Cabrera et al., in press b; Cabrera et al., under review b; Shannon et al., 2002; Shannon et al., 2006). The C-CARES was adapted from the NICHD Study of Early Child Care's "Three Box" scales (NICHD Early Child Care Research Network, 1999) to code father, child and dyad behaviors. Trained observers rated each behavior using a 5-point Likert scale ranging from 1 (not observed) to 5 (constantly observed). The father behavior items included: positive affect, negative affect, positive touch, negative touch, positive verbal statements, negative verbal statements, teasing, participation with child, responsiveness to non-verbal non-distress, responsiveness to verbal non-distress, emotional attunement, flexibility, intrusiveness, structuring, achievement orientation, toy play, play sophistication, amount of language, and quality of language (see Table 2 for father item descriptions). Child behavior items included: positive affect, negative affect, positive touch, negative touch, emotion regulation, aggressiveness, participation with caregiver, responsiveness to caregiver, emotional attunement, involvement with toys, task persistence, play sophistication, amount of communication, and quality of communication. Dyad items included: mutual enjoyment, mutual communication, and reciprocal interaction.

Two lead coders were trained to 90% agreement with "gold standard tapes" (Tamis-LeMonda et al., 2002) before coding video-taped interactions from the present study. To maintain inter-rater reliability, lead coders dual-coded 10% of tapes (randomly

Table 2.

C-CARES Father Items

Behavior Items	Definitions	<i>M</i>	<i>SD</i>
Positive affect	Display enjoyment, approval, or affection through facial expressions & tone of voice.	2.96	1.20
Negative affect	Display disapproval, anger, or impatience through facial expressions & tone of voice.	1.41	.67
Positive touch	Amount & quality of gentle, playful touch using hands, face or body.	2.65	1.39
Negative touch	Amount & quality of forceful, abrupt touch using hands, face, or body.	1.91	.92
Positive verbal statements	Expression of approval, praise, & positive reinforcement.	2.23	1.22
Negative verbal statements	Expression of disapproval for noncompliance & negative behavior.	1.91	1.00
Teasing	Contradict infant's actions in a playful or antagonistic manner.	1.68	1.10
Participation with infant	<i>Amount</i> of involvement with the infant, <i>not</i> the quality.	4.61	.76
Responsiveness to non verbal cues	Contingent & appropriate responsiveness to infant's <i>non-verbal</i> cues.	3.65	.82
Responsiveness to vocalizations	Contingent & appropriate responsiveness to infant's <i>verbal</i> cues.	3.77	1.38
Emotional attunement	Emulate infant's emotions using voice, gestures, & facial expressions.	2.94	1.18
Flexibility	Willingness to let the infant direct an activity.	3.82	.97
Intrusiveness	Interrupt, restrict, or hover over the infant's play.	2.65	1.07
Structuring	Organize environment/materials to maximize infants' play/learning.	4.06	.98
Achievement orientation	Encourage cognitive achievement through directive teaching.	3.63	1.16
Toy play	<i>Amount</i> of the father's play with the toys, <i>not</i> sophistication of play.	4.30	.92
Play sophistication	Use of symbolic play as opposed to functional non-symbolic play.	2.38	.97
Amount of language	Amount of verbal stimulation provided, regardless of content & style.	4.10	1.01
Quality of language	Quality of verbal stimulation; level of explanatory verbal style.	3.05	1.21

selected) and reached 91% agreement within 1-point before deciding on final scores.

Correlation estimates of inter-rater reliability for father items ranged from .61 (play sophistication) to .98 (positive touch). Coders of father-child interactions were fluent in the language spoken by the participants (4 Spanish tapes) and were unaware of children's scores for social and emotional development.

An exploratory factor analysis of father items was conducted to investigate the underlying structure of father behaviors measured by the C-CARES. A principal components analysis with varimax rotation of the nineteen father items [measured at baseline only] indicated that a two-factor solution best fit the data. A scree plot of the factor eigenvalues of 5.81 and 3.45 substantiated the two-factor solution. The two factors accounted for 49% of the item variance.

Only items with factor loadings greater than .40 were retained to ensure that a sufficient portion of variance in each item could be explained by the extracted factors. Four items were dropped because of low factor loadings: positive touch, teasing, toy play, and play sophistication. Table 3 shows the factor loadings for each of the retained items. The *Responsive-Didactic* component (10 items) consisted of father behaviors that were positive in tone (e.g., positive affect, positive verbal statements), responsive to children's cues (e.g., emotional attunement, response to non-verbal non-distress) and didactic (e.g., structuring, achievement orientation). The *Negative-Controlling* component (5 items) consisted of father behaviors that were negative in tone (e.g., negative affect, negative verbal statements) and over-controlling (e.g., intrusive, inflexible). The two-factor structure found in the present study is similar to what has been reported in prior studies using the C-CARES to rate the quality of father-child interactions (Cabrera, Shannon, Tamis-LeMonda, in press; Shannon et al., 2002; Shannon et al., 2006; Tamis-LeMonda et al., 2004).

Composite scores for Responsive-Didactic and Negative-Controlling behaviors were created by averaging scores across the items that loaded onto each factor with higher scores indicating the behaviors were more frequently observed. Creating

Table 3.

Factor Loadings for C-CARES Father Items

Father Behavior Items	Responsive - Didactic	Negative - Controlling
Positive affect	.68	
Positive verbal statements	.68	
Participation with infant	.73	
Responsiveness to non verbal cues	.66	
Responsiveness to vocalizations	.73	
Emotional attunement	.72	
Structuring	.83	
Achievement orientation	.73	
Amount of language	.74	
Quality of language	.54	
Negative affect		.70
Negative touch		.59
Negative verbal statements		.42
Flexibility		-.70
Intrusiveness		.82

composites instead of saving regression-based factor scores (i.e., linear composites of items weighted by factor-loadings) allowed for comparisons of the present study's results to previously reported findings from another study of low-income, minority fathers (Cabrera et al., in press b). Cronbach's alphas for the composites were comparable to those reported in previous research (Shannon et al., 2006): .87 for Responsive-Didactic and .67 for Negative-Controlling.

Partner relationship quality. Both positive (closeness) and negative (conflict) aspects of partner relationship quality were measured. Closeness reflects the degree of emotional connection and support a father perceives receiving from his partner (Cabrera et al., 2004a). Fathers reported how well the following statements described their partners: “She listens to me when I need someone to talk to,” “I can state my feelings without her getting defensive,” and “She can really understand my hurts and joys.” Responses ranged from 1 (strongly disagree) to 4 (strongly agree). A closeness composite score was created by averaging responses across the three items with higher scores representing greater closeness. Cronbach’s alpha was .77.

For conflict, fathers reported how much they disagreed with their partners on fourteen items drawn from the National Survey of Families and Households (Sweet & Bumpass, 1996). Items reflect various childrearing issues about which parents may disagree such as “disciplining child,” “how mother spends money on child,” “the activities your child does,” and “spending enough time with child”. Fathers’ responses ranged from 0 (no disagreement) to 2 (a great deal of disagreement). A conflict composite score was created by summing fathers’ scores across the fourteen items with higher scores indicating more conflict. Cronbach’s alpha was .84.

Extended family relationship quality. Each father rated the quality of his relationships with various people in his and his child’s life including the father’s own family members (e.g., his mother, his other adult female relatives, his father, his other adult male relatives) and the child’s mother’s family members (e.g., mother’s mother, mother’s other adult female relatives, mother’s father, mother’s other adult male relatives). Fathers rated each of the eight relationships (or relationship categories in the

case of adult male or female relatives) on a 5-point Likert scale ranging from 1 (poor) to 5 (excellent) unless there was no such person or the person was not known by the father (NA). A composite score for extended family relationship quality was created by averaging fathers' ratings of relationships across the eight family member categories with higher scores reflecting higher quality extended family relationships. Cronbach's alpha was .82.

Control variables. In this study, analyses control for fathers' employment and accessibility (i.e., frequency of contact with their child) and children's age and gender because these variables have been shown to predict father involvement (Brophy-Herb et al., 1999; Cabrera et al., 2004b; Cote & Azar, 1997; McBride et al., 2004; Roopnarine, 2004). During the quantitative interview fathers were asked to report whether they were currently employed, how frequently they had contact with their child during the last month, their child's date of birth and their child's gender.

Fathers' current employment status was scored as either 1 (employed) or 0 (unemployed). To measure accessibility, fathers indicated how often they had spent an hour or more a day with their child during the last month on a 6-point scale from "never" to "every day." The majority of fathers (76%) reported spending an hour or more a day with their child "almost every day" or "every day", thus, similar to previous research using this item (Cabrera et al., 2004b; Cabrera et al., under review a), a dichotomous variable was created with scores of 0 (a few times a week or less) or 1 (almost every day or every day). Fathers who classified themselves as non-resident were significantly less likely to report seeing their child 'almost everyday or everyday' than fathers who classified themselves as resident ($\chi^2 = 12.34, p < .01$). Fathers also reported their

children's birth dates, and interviewers computed child age in months by subtracting the child's birth date from the date of the interview. Child gender was coded as either 0 (male) or 1 (female).

CHAPTER IV

Results

This chapter describes the methods used to prepare data for statistical analyses, the analytic strategy used to address the research questions, and results of statistical analyses organized by the research questions.

Data Preparation

Results in the present study are based on a pooled sample of observations from fathers' baseline and follow-up visits. Pooling data from both waves of data collection increased statistical power over using only one data point for each participant (Maxwell, 2000).

Several steps were taken to create the pooled dataset from the original dataset in which each participants' data from both observations was entered in the same row with variable names indicating whether the data was collected at baseline or follow up (e.g., 'age1' vs. 'age2'). First, a new variable was created to indicate at which wave the data was collected with scores of 0 (baseline) or 1 (follow-up). Second, a temporary dataset was created by cutting and pasting each participant's follow-up data into separate rows of the new dataset. Then, the variable names in this temporary dataset were renamed to match baseline variable names. Next, each participant's follow-up data was cut from the temporary dataset and pasted into a new row in the original dataset, so that, for example, participant 1 had a row of baseline data with a score of 0 on 'data collection wave' and another row of follow-up data (with the same ID) with a score of 1 on 'data collection wave'.

“Participant” refers to a father ($N = 49$), and “observation” refers to the set of data collected from a participant on a single occasion or visit ($N = 87$). Only 38 out of 49 fathers participated in a follow-up visit; thus, the number of observations is not equal to twice the number of participants.

To account for the non-independence of observations from the same participant, STATA statistical software was used to compute *robust* standard errors in multiple regression analyses (Rogers, 1993). Before conducting any statistical analyses to address the research questions, the pooled data were examined for patterns of missing data, normality and multicollinearity.

Missing Data. Table 4 shows the number of observations for all variables. There were no missing data for fathers’ employment and accessibility, child age and gender, partner relationship conflict, or extended family relationship quality. Only two observations (2%) were missing data on partner relationship closeness because two fathers preferred not to respond to those items. Eight observations (9%) were missing data on quality of father-child interactions; five were missing because research assistants were unable to coordinate with mothers and fathers to have father and child in the same place for the video-taped session within 1-month of the father’s interview, two were missing because the fathers did not sign video consent, and one interaction could not be coded because the child refused to participate. Eighteen observations (20%) were missing children’s BITSEA scores because father interviews were conducted before the BITSEA was included in the interview protocol ($n = 5$) or because, at the time of the interview, the child was outside of the scale’s 12 to 36-month age-range ($n = 13$; 11 of which were too young).

Table 4.

Father and Child Characteristics, Fathers' Family Contexts, Quality of Father-Child Interactions, and Child Social and Emotional Development

Variables	<i>N</i>	<i>M(SD)/%</i>
<i>Control Variables</i>	87	
Father employment (employed)		77
Father accessibility (almost once a day or more)		76
Child age		23.04(9.16)
Child gender (male)		55
<i>Family Context</i>	87	
Partner Relationships Closeness	[85]	3.27(.78)
Partner Relationship Conflict		5.02(4.87)
Extended Family Relationship Quality		3.71(.67)
<i>Father-Child Interaction Quality</i>	79	
Responsive-Didactic		3.42(.65)
Negative-Controlling		1.96(.58)
<i>Child Social and Emotional Development</i>	74	
BITSEA Competence Domain Score		12.95(6.38)
% Below Cut-off		11
BITSEA Problem Domain Score		17.76(2.53)
% Above Cut-off		32

When more than five percent of the observations were missing for a variable (i.e., quality of father-child interactions, BITSEA), ANOVA and Chi-square tests were conducted to explore potential patterns of missing data. When there was no pattern of missing data, meaning the data were missing at random, imputation procedures were employed to estimate what the value of the missing data point would have been, thereby

increasing the number of observations used in further statistical analyses (Schafer & Graham, 2002).

For the eight (9%) observations missing father-child interaction data child age was significantly younger ($F = 5.59, p < .05$) and quality of fathers' relationships with extended family was of significantly poorer quality ($F = 9.10, p < .01$) than for the observations including father-child interaction data. There were no significant differences between observations missing father-child interaction data and observations including father-child interaction data on child gender, father employment or accessibility, partner relationship closeness or conflict, and child social competence or problem behavior. Quality of father-child interaction data were not imputed because it was not missing at random; missingness was related to child age and the quality of fathers' extended family relationships.

The five observations missing BITSEA scores because the scale was not yet part of the baseline protocol were considered missing at random (Rubin, 1976) because whether or not the BITSEA was administered was not due to any measured characteristics of the participants. Because the BITSEA scores were missing at random, single-item imputation was used to reduce the number of missing data points (Schafer & Graham, 2002). Estimates of the stability of BITSEA problem and competence domain scores from baseline to follow-up (approximately 6 months) based on twenty-five children who had scores at both time points were significant (problem, $r = .65, p < .01$; competence, $r = .48, p < .05$). Therefore, for these five observations, children's problem and competence domain scores at follow-up were imputed as their baseline scores.

The other 13 (15%) observations missing BITSEA scores were not missing at random but because of child age, thus imputation methods were not employed (Schafer & Graham, 2002). Results of a one-way ANOVA further revealed that for observations missing BITSEA scores due to child age fathers had significantly lower scores on Responsive-Didactic behavior than for observations including BITSEA scores ($F = 5.81$, $p < .05$). The difference in fathers' Responsive-Didactic behavior seems to suggest that fathers of young infants are less responsive to their children than are fathers of older children, possibly because older children are more active and verbalize more often than infants. ANOVA and Chi-square tests revealed no other significant differences on father employment or accessibility, child gender, partner relationship closeness or conflict, extended family relationship quality or father Negative-Controlling behavior between observations that included the BITSEA and observations missing BITSEA scores because children were outside the scales' age-range.

Normality. Skew and kurtosis of the distribution of each variable were examined. The following variables were normally distributed: fathers' employment, accessibility, extended family relationship quality, Responsive-Didactic and Negative-Controlling behavior and child age, gender, social competence and problem behavior scores. Only partner closeness and partner conflict were not normally distributed.

Partner closeness was negatively skewed (skew = -1.40, kurtosis = 1.33). Therefore, item scores were first reverse coded and averaged to create a new composite score. Then these new composite scores were log transformed. Examination of the log-transformed partner closeness scores showed they were normally distributed (skew = .70, kurtosis = -.34).

Because partner conflict was significantly positively skewed (skew = 1.11, kurtosis = .80), conflict composite scores were square-rooted. Examination of the square-root-transformed partner conflict scores showed they were normally distributed (skew = .02, kurtosis = -.80).

Multicollinearity. Correlations between control, independent and dependent variables were examined for multicollinearity, meaning larger correlations among predictor variables than between predictor and dependent variables which inflates the variance of parameter estimates (Hair, Anderson, Tatum, & Black, 1995). Table 5 shows that correlations among fathers' family context variables (i.e., partner conflict, partner closeness, extended family relationship quality) were higher than correlations between family context variables and children's BITSEA problem and competence scores. To examine this preliminary evidence of multicollinearity, tolerance and variance inflation factors (VIF) were computed for each family context variable (i.e., partner conflict, partner closeness, extended family relationship quality). Tolerance values were all greater than 0.1, and VIF were all less than 2.0 which suggested that the multicollinearity among the family context variables would not bias parameter estimates for multiple regressions predicting children's social competence and problem behavior (Hair, Anderson, Tatum, & Black, 1995).

The correlation matrix presented in Table 5 also shows that fathers' employment status and child age and gender were not significantly correlated with any of the independent or dependent variables. Because there was no shared variance between these controls and the dependent variables, they were not included in any further analyses.

Table 5.

Correlations among Father and Child Characteristics, Fathers' Family Contexts, Quality of Father-Child Interactions and Children's Social and Emotional Development

	Employment	Accessibility	Child Age	Child Gender	Partner Closeness	Partner Conflict	Extended Family Relationship Quality	Responsive - Didactic	Negative - Overbearing	BITSEA Problem	BITSEA Competence
<i>Father and Child Characteristics</i>											
Father Employment	-	-.05	-.09	.05	-.05	.18	.03	.18	-.03	-.08	.06
Father Accessibility		-	.05	.02	.26*	-.54**	.26*	.15	.31**	-.35**	.12
Child Age			-	-.10	.05	-.06	-.07	.20	-.05	-.19	-.10
Child Gender				-	.04	.05	.19	.21	-.11	.05	.12
<i>Fathers' Family Contexts</i>											
Partner Closeness					-	-.50**	.35**	-.08	.09	-.26*	.39**
Partner Conflict						-	-.36**	.09	-.14	.43**	-.25*
Extended Family Relationship Quality							-	-.04	-.04	-.09	.25*
<i>Quality of Father-Child Interactions</i>											
Responsive-Didactic								-	-.13	-.03	-.02
Negative-Overbearing									-	-.09	-.25*
<i>Child Social and Emotional Development</i>											
BITSEA Competence										-	-.29*
BITSEA Problem											-

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

After cleaning the data (i.e., imputation, transformation), all of the primary statistical analyses were conducted with and without imputed BITSEA scores, with and without transformed partner closeness and conflict scores, and with and without controlling for fathers' employment, child age and gender to explore whether there were differences in results. Conducting regressions with imputed BITSEA scores and transformed partner closeness and conflict did not yield parameter estimates with significance levels that were very different from regressions conducted with non-imputed BITSEA scores and untransformed partner closeness and conflict. While the full set of controls (i.e., father employment and accessibility, child age and gender) accounted for more of the variance in dependent variables than father accessibility alone, the beta values for father employment, child age or gender were not statistically significant, and including these control variables did not change the significance levels of parameter estimates for the independent variables.

Because the skew of distributions for partner closeness and partner conflict was not large and computing effect size is problematic with transformed variables, the final regression models were run with non-transformed partner closeness and partner conflict. Also, because imputing BITSEA scores and including control variables did not influence the results, the following sections present results of analyses using imputed BITSEA scores and without controlling for father employment, child age or child gender.

Additionally, given the empirical support for the notion that biological fathers make greater investments in their children and have greater positive impacts on their children's development than father figures (Amato, 1994; Coleman, Ganong, & Fine, 2000), the primary statistical analyses in the present study were run with and without

inclusion of 19 observations of father figures. The pattern of results did not differ, except that significance levels were lower when conducting analyses with only biological fathers because of the smaller sample size and lower statistical power. Thus, all results reported herein are for the full sample of both biological fathers and father figures.

Analytic Strategy

After computing descriptive statistics for all of the variables, the research questions were addressed by conducting linear multiple regressions to test the significance of the unique portion of variance in continuous dependent variables (e.g., problem behavior) accounted for by the independent variables (e.g., partner conflict, partner closeness, extended family relationship quality; Cohen & Cohen, 1983). Hierarchical multiple regressions were used to test for significant mediation as prescribed by Baron and Kenny (1986).

Based on Baron and Kenny's (1986) approach for testing mediation, the following criteria must be met in regression analyses to establish mediation: (a) fathers' family contexts (IV) must significantly predict children's social competence and/or problem behavior (DV), (b) fathers' family contexts (IV) must significantly predict quality of father-child interactions (mediator variable, MV), and (c) quality of father-child interactions (MV) must significantly predict children's social competence and/or problem behavior (DV) while controlling for fathers' family contexts (IV). According to Baron and Kenny (1986), there is evidence of full mediation if the beta values for fathers' family contexts in models predicting children's social competence and problem behavior are reduced to zero when the quality of father-child interaction is added as a predictor. There is evidence of partial mediation if the beta values for fathers' family contexts in

models predicting children's social competence and problem behavior are partially reduced when the quality of father-child interaction is added as a predictor.

If beta values suggest partial mediation, Preacher and Hayes' (2004) bootstrapping technique is used to test the significance of the mediation by calculating a confidence interval around the estimate of the indirect (or mediation) effect. If zero is not within this confidence interval then it can be concluded with 95% confidence that the effect size is significantly ($p < .05$) different from zero. This bootstrapping technique is employed because it is more appropriate than other, more conservative significance tests (e.g., Sobel test) for use with smaller samples.

Descriptive Results

Table 4 (shown on page 72) displays descriptive statistics for all independent and dependent variables. On average, fathers' reported a high degree of closeness (i.e., emotional connection and support; range = 1-5; $M = 3.27$, $SD = .78$) and low levels of conflict (range = 0-28; $M = 5.02$, $SD = 4.87$) with their partners. They also reported having at least "good" relationships with extended family members (range = 1-5; $M = 3.71$, $SD = .67$). Observers' ratings of father behavior during father-child interactions indicate that this sample of fathers showed moderate rates of Responsive-Didactic behavior (range = 1-5; $M = 3.42$, $SD = .65$) and low rates of Negative-Controlling behavior (range = 1-5; $M = 1.96$, $SD = .58$).

On the BITSEA, children's average scores for social competence ($M = 17.76$, $SD = 2.53$) and problem behavior ($M = 12.95$, $SD = 6.38$) were similar to those reported by the scales' authors (Briggs-Gowan et al., 2004). However, almost one-third (32%) of children in this sample were above the cut-off for problem behavior which is higher than

the 25% expected based on the scales' cut-point design. On the other hand, only 11% of children in the present sample reached the cut-off for low social competence which was within the 10-15% range expected based on the scale's cut-point design. In general, this sample of toddlers displayed normal levels of social competence and problem behavior for their age.

Bivariate correlations. The correlation matrix presented in Table 5 (shown on page 76) reveals significant correlations among some of the variables. Fathers' accessibility was significantly positively correlated with fathers' partner closeness ($r = .26, p < .05$), extended family relationship quality ($r = .26, p < .05$), and Negative-Controlling behavior ($r = .31, p < .01$) while significantly negatively correlated with partner conflict ($r = -.54, p < .01$) and children's problem behavior ($r = -.35, p < .01$). Fathers who were more accessible to their children (i.e., spent an hour with their child almost every day or more) tended to have more harmonious relationships (i.e., close, low conflict, high quality) with partners and extended family members, displayed more Negative-Controlling behavior towards their children, and their children tended to exhibit fewer behavior problems than fathers who were less accessible.

As described in the discussion of multicollinearity, there were also significant associations among fathers' family context variables. Partner relationship conflict and closeness were significantly negatively correlated ($r = -.50, p < .01$). Extended family relationship quality was negatively correlated with partner conflict ($r = -.36, p < .01$) and positively correlated with partner closeness ($r = .35, p < .01$). Fathers who reported feeling close to their partners also tended to report low levels of conflict. Furthermore, fathers whose partner relationships were closer and less quarrelsome tended to have

higher quality extended family relationships than fathers in less close and more quarrelsome partner relationships.

Fathers' family context variables were also significantly associated with children's social and emotional development. Partner closeness was positively correlated with children's social competence ($r = .39, p < .01$) and negatively correlated with children's problem behavior ($r = -.26, p < .05$). Partner conflict was negatively correlated with children's social competence ($r = -.25, p < .05$) and positively correlated with children's problem behavior ($r = .43, p < .01$). Extended family relationship quality was positively correlated with children's social competence ($r = .25, p < .05$). Although small, the correlations indicate that children whose fathers had more positive partner and extended family relationships were rated higher in social competence and lower in behavior problems than children whose fathers had more distant, quarrelsome partner relationships and poorer quality extended family relationships.

While fathers' Responsive-Didactic behavior was not significantly correlated with any of the other variables, fathers' Negative-Controlling behavior was significantly negatively correlated with children's social competence ($r = -.25, p < .05$). Children whose fathers were more negative and over-controlling tended to exhibit less social competence than children whose fathers were less negative and over-controlling.

As intended in the scales' design (Briggs-Gowan et al., 2004), toddlers' scores on the BITSEA subscales (i.e., problem, competence) were significantly negatively correlated with each other ($r = -.29, p < .05$). Children whose fathers rated them as more socially competent tended to display fewer problem behaviors than children whose fathers rated them less socially competent.

Multivariate Results

All regression models were run with and without entering fathers' accessibility as a control variable in step one to examine differences in results. Accessibility was originally included as a control because previous research suggested that the amount of time fathers spend with children influences the quality of their interactions (Brophy-Herb et al., 1999) and children's developmental outcomes (Hanson, McLanahan, & Thompson, 1997; Mosely & Thomson, 1995). However, in the present study whether or not accessibility was entered as a control in step one did not affect the significance levels associated with parameter estimates of the amount of variance in dependent variables (i.e., Responsive-Didactic, Negative-Controlling, social competence, problem behavior) accounted for by the independent variables (e.g., partner closeness, partner conflict, extended family relationship quality). Therefore, the following sections present results of regressions that do not control for fathers' accessibility.

Fathers' family contexts and child social and emotional development. The first research question in the present study asks how the family context in which fathers parent (i.e., partner closeness, partner conflict, extended family relationship quality) is associated with children's social and emotional development. To answer this question, two linear regression models were run predicting social competence and problem behavior. In each regression model fathers' partner closeness, partner conflict, and extended family relationship quality were entered as a block to examine the proportion of variance in children's social and emotional development explained by these family context variables.

In the model predicting children's social competence shown in Table 6 the set of family context variables accounted for 16% ($p < .001$) of the variance in children's social competence. Fathers' partner closeness significantly and positively predicted children's social competence ($B = 1.24, p < .01$). Fathers with closer partner relationships rated their children as more socially competent than fathers in less close partner relationships.

Table 6.

Fathers' Family Contexts and Child Social and Emotional Development

Variables	Child Social and Emotional Development			
	Social Competence		Problem Behavior	
	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>SE B</i>
Partner Closeness	1.24**	.40	-.71	1.53
Partner Conflict	-.02	.05	.60*	.24
Extended Family Relationship Quality	.33	.39	1.05	1.11
<i>Total R²</i>	.16***		.22**	

$N = 72$; * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$.

In the model predicting children's problem behavior, the set of family context variables accounted for 22% ($p < .01$) of the variance in children's problem behavior. Fathers' partner conflict significantly and positively predicted children's problem behavior ($B = .60, p < .05$). Fathers with more quarrelsome partner relationships rated their children as displaying more problem behavior than fathers in less quarrelsome partner relationships.

Fathers' family contexts and quality of father-child interactions. The second research question in the present study asks how fathers' partner closeness, partner conflict, and extended family relationship quality are associated with the quality of

father-child interactions. To answer this question, two linear regression models were run predicting the two data-driven factor composites for quality of father-child interactions: Responsive-Didactic and Negative-Controlling. In each regression model, fathers' partner closeness, partner conflict, and extended family relationship quality were entered as a block to examine the proportion of variance these variables explain in fathers' Responsive-Didactic and Negative-Controlling behavior.

In the models shown in Table 7, the set of family context variables accounted for 1% ($p > .05$) of the variance in fathers' Responsive-Didactic and 3% ($p > .05$) of the variance in fathers' Negative-Controlling behavior. None of the beta values corresponding to fathers' partner closeness, partner conflict, and extended family relationship quality were significant, indicating that none of these aspects of fathers' family contexts independently predicted the quality of father-child interactions.

Table 7.

Fathers' Family Contexts and Quality of Father-Child Interactions

Variables	Quality of Father-Child Interactions			
	Responsive-Didactic		Negative-Controlling	
	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>SE B</i>
Partner Closeness	-.04	.10	-.04	.11
Partner Conflict	.01	.02	-.02	.02
Extended Family Relationship Quality	-.01	.13	-.10	.11
<i>Total R²</i>		.01		.03

$N = 78$; * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$.

Quality of father-child interactions and child social and emotional development.

To address the third research question, which asks how the quality of father-child

interactions is uniquely associated with children's social and emotional development, two hierarchical multiple regression models were run predicting social competence and problem behavior. In each regression model, family context variables were entered as a block in step one; then composite scores for Responsive-Didactic and Negative-Controlling behaviors were added as a block in step two to examine the unique portion of variance in children's social competence and problem behavior explained by the quality of father-child interactions.

Table 8.

Quality of Father-Child Interactions as a Mediator of the Association between Fathers' Family Contexts and Child Social and Emotional Development

Variables	Child Social and Emotional Development			
	Social Competence		Problem Behavior	
	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>SE B</i>
Step 1				
Partner Closeness	1.22**	.43	-.11	1.63
Partner Conflict	-.05	.05	.62*	.24
Extended Family Relationship Quality	.22	.40	.71	1.23
Step 2				
Responsive-Didactic	-.10	.46	.73	1.23
Negative-Controlling	-1.26**	.46	-.23	1.11
<i>Total R²</i>		.24**		.21*

N = 66; * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$.

Note: Standardized beta weights presented are from the final multiple regression equation. In models predicting social competence, $R^2 = .16$ ($p < .01$) for Step 1; and $\Delta R^2 = .08$ ($p < .05$) for Step 2. In models predicting problem behavior, $R^2 = .21$ ($p < .01$) for Step 1; and $\Delta R^2 = .01$ ($p > .05$) for Step 2.

In the model predicting children's social competence shown in Table 8, the quality of father-child interactions accounted for 8% ($p < .05$) of the variance in

children's social competence that was not explained by fathers' family contexts. Moreover, fathers' Negative-Controlling behavior independently and significantly predicted children's competence scores ($B = -1.26, p < .01$). Compared to fathers who were more Negative-Controlling, fathers who were less Negative-Controlling reported that their children were more socially competent.

In the model predicting children's problem behavior, after controlling for fathers' family context, the quality of father-child interactions accounted for an insignificant portion (1%) of the variance in children's problem behavior. Neither father Responsive-Didactic nor Negative-Controlling behavior independently and significantly predicted children's problem behavior.

Mediation by quality of father-child interactions. The present study's final research question asks to what extent the quality of father-child interactions mediates the association between fathers' family contexts and children's social and emotional development. Baron and Kenny's (1986) approach for testing mediation requires that the following criteria must have been met in the preceding analyses to test for mediation: (a) fathers' family contexts (IV) must significantly predict children's social competence and/or problem behavior (DV), (b) fathers' family contexts (IV) must significantly predict quality of father-child interaction (MV), and (c) quality of father-child interaction (MV) must significantly predict children's social competence and/or problem behavior (DV) while controlling for fathers' family contexts (IV).

The first criterion of Baron and Kenny's (1986) test of mediation was met; fathers' family contexts significantly predicted children's social competence ($R^2 = .18, p < .001$) and problem behavior ($R^2 = .14, p < .05$). However, the second criterion was not

met; fathers' family contexts did not significantly predict the quality of father-child interactions. Finally, the third criterion was met; the quality of father-child interactions, particularly fathers' Negative-Controlling behavior ($B = -1.20, p < .01$), significantly predicted children's social competence ($R^2 = .08, p < .05$). Because all three of Baron and Kenny's (1986) criteria for mediation were not met, no further tests of mediation were conducted.

In summary, results from the present study's multiple regression analyses suggest that children's social competence is directly and independently affected by fathers' closeness with their partners and fathers' Negative-Controlling behavior during father-child interactions. The overall quality of fathers' family contexts also significantly affects children's problem behavior. However, there is no evidence that the effect of fathers' family contexts on children's social competence or problem behavior is mediated by fathers' Negative-Controlling behavior because none of the measured aspects of fathers' family contexts significantly predicted fathers' Negative-Controlling behavior. Overall, the full set of independent variables representing fathers' family contexts and the quality of father-child interactions explained 22% ($p < .01$) of the variance in children's social competence and 14% ($p > .05$) of the variance in children's problem behavior.

Exploratory Analyses

Fathers' accessibility, measured as *spending at least an hour with child almost every day or more*, was not included as a control variable in the preceding analyses because it did not influence the significance of other predictor variables (e.g., quality of father-child interactions). However, accessibility was significantly correlated with fathers' partner closeness ($r = .26, p < .05$), partner conflict ($r = -.54, p < .01$), extended

family relationship quality ($r = .26, p < .05$), and children's problem behavior ($r = -.35, p < .01$). Previous studies have also found that when low-income, minority fathers have positive relationships with their partners and extended family they are allowed more access to their children (Allen & Hawkins, 1999; Coley & Chase-Lansdale, 1999; Gavin et al., 2002; Roy, 2004), and frequency of contact between fathers and children positively affects children's developmental outcomes (Hanson et al., 1997; Mosely & Thomson, 1995).

While the primary focus of the present study is the quality of father-child interactions, additional exploratory analyses were conducted to examine whether the same predictors and effects explain fathers' accessibility, a quantitative aspect of father involvement. According to the Dynamics Model, any conceptualization of father involvement, whether quality of father-child interactions or fathers' accessibility, directly affects children's development and mediates the effect of fathers' family context on child development. To test these propositions, linear and hierarchical regressions were conducted examining: (a) the direct effect of fathers' family contexts on fathers' accessibility, (b) the direct effect of fathers' accessibility on children's social competence and problem behavior while controlling for fathers' family contexts, and (c) the extent to which fathers' accessibility mediates the previously reported association between fathers' family contexts and children's social competence and problem behavior.

A linear multiple regression model predicting fathers' accessibility from fathers' partner closeness, partner conflict, and extended family relationship quality revealed that the set of family context variables ($R^2 = .26, p < .001$), particularly partner conflict ($B = -.18, p < .001$), significantly predicted fathers' accessibility. Fathers who reported less

quarrelsome partner relationships were more accessible to their children than fathers in partner relationships characterized by more conflict.

Two hierarchical multiple regressions were conducted predicting child social competence and problem behavior from the set of family context variables entered in step one and fathers' accessibility entered in step two. After controlling for fathers' family contexts, fathers' accessibility did not significantly predict children's social competence ($B = -.10, p < .05$) nor problem behavior ($B = -3.89, p < .05$). Without evidence of a unique, direct effect of fathers' accessibility on children's social competence, there was no support for further tests exploring the extent to which fathers' accessibility mediates the association between fathers' family context and children's social and emotional development.

To summarize, planned analyses showed that fathers' family contexts, particularly closeness of partner relationships, directly affect children's social competence and problem behavior in the expected directions. Moreover, fathers' negative and over-controlling behavior directly and negatively affects children's social competence. Additional exploratory analyses revealed that, whereas quality of father-child interactions was not significantly predicted by fathers' social competence, fathers' accessibility was significantly and negatively affected by partner conflict. However, there was no evidence to suggest that either quality of father-child interactions or fathers' accessibility mediates the effect of fathers' family contexts on children's social competence and problem behavior.

CHAPTER V

Discussion

The findings of the present research are some of the few that address the influence of low-income, African American fathers' relationships with their partners and extended family members on their interactions with toddlers and how fathers' relationships and parenting behavior influence their toddlers' social and emotional development. Hence, the present research responds to the following needs identified in a review of the literature: (a) to examine multiple subsystems of the family context in which low-income, minority fathers parent; (b) to elucidate qualities of low-income, minority fathers' involvement with their children; and (c) to explain how environmental factors (i.e., fathers' relationships, quality of father-child interactions) influence the social and emotional development of young children who are at-risk for emotional and behavioral problems. The present study specifically tested propositions of the Dynamics Model (Cabrera et al., in press a) which hypothesizes a direct effect of fathers' family contexts on children's social and emotional development and an indirect effect explained by the quality of father-child interactions. To test the hypotheses, multiple regression analyses were performed using data from a study in which quantitative interviews and observations of father-child interactions were conducted with a sample of 49 fathers of children enrolled in Early Head Start.

Low-Income, African American Fathers and Their Toddlers

Contrary to the view that low-income, minority fathers are not involved with and do not provide for their children, most of the low-income, primarily African American men in the present study were employed and reported spending at least an hour with their

child every day or almost every day. Moreover, fathers reported feeling very close to their partners and experiencing little conflict with them, and fathers tended to describe their current relationships with extended family members as “good”. When these fathers were observed interacting with their toddlers, they were moderately responsive to their children and displayed low levels of negative and over-controlling behavior (e.g., negative affect, intrusiveness), a pattern similar to other reports of parenting behavior among low-income, minority fathers (Shannon et al., 2002).

The overall positive nature of the family contexts and father involvement reported for this sample and noted in the selection bias analyses may be a consequence of sampling procedures. Specifically, mothers may have been more likely to identify and nominate for research fathers with whom they had positive relationships. Furthermore, when mothers did not have amicable relationships with their child’s biological fathers they may have selected him out of the study and nominated a father figure instead. Thus, the results in the present study may not generalize to fathers, particularly biological fathers, who have less positive relationships with their children’s mothers or are less involved with their children. However, asking mothers to identify and nominate fathers was critical for obtaining matching father-child data and for assessing father-child interactions because mothers’ consent was needed for children to participate.

In general, the toddlers in the present study were rated by their fathers as socially competent with few behavior problems according to the BITSEA, a measure of children’s social and emotional development commonly used with children between one and three years-old. Compared to a normative sample of their peers, the present study’s sample of children exhibited equivalent rates of social competence delays but slightly higher rates

of behavior problems (Briggs-Gowan et al., 2004). Rates of behavior problems in this sample may be higher than the norm because these toddlers came from low-income families, and poverty is associated with increased behavior problems (Dodge et al., 1994).

Overall, fathers in this sample, despite being low-income, were employed and accessible to their children, had positive relationships with their partners and extended family members, interacted positively with their children, and had young children who were socially competent with few behavior problems. Because this sample of children were being raised in low-income households and were thus at-risk for developing emotional and behavioral problems, it was important to explain how early environmental factors, such as fathers' family context and quality of father-child interactions, set the stage for children's later outcomes thereby suggesting interventions that may prevent future social and emotional problems.

Associations among Fathers' Family Contexts, Quality of Father-Child Interactions, and Children's Social and Emotional Development

The first goal of the present research was to test the direct effect of fathers' relationships with partners and extended kin on their children's social and emotional development. As expected based on the Dynamics Model and previous research with middle class families, the present study found that, as a set, qualities of fathers' relationships with their partners and extended family significantly predicted children's social competence and problem behavior. When fathers had more harmonious partner and extended family relationships they rated their children higher on social competence and lower on problem behavior than when fathers rated their partner and extended family

relationships as less amicable. In particular, when fathers had emotionally close and supportive partner relationships their children were more socially competent than children of fathers in less close partner relationships. Moreover, when fathers reported more disagreement with partners on child-rearing issues their children displayed more problem behavior than children of fathers in less quarrelsome partner relationships.

The direct effect of fathers' partner and extended family relationships on children's developmental outcomes has rarely been explored in low-income, minority populations, although research on middle class families found that fathers' perceived marital quality is positively associated with children's attachment security (Belsky, 1996) and that inter-parental conflict is positively associated with children's externalizing behavior (Cummings et al., 2000). The present study's findings expand on this existing literature by providing evidence that low-income, African American fathers' emotional closeness to their partners positively affects their young children's social competence; that disagreements between parents on child-rearing issues are associated with more problem behavior exhibited by their toddlers; and that the overall quality of the family context in which low-income, African American fathers parent affects both their children's social competence and problem behavior.

A possible explanation for the direct effect of fathers' family contexts on children's social and emotional development is that toddlers acquire social skills (e.g., cooperation, self-restraint) by observing positive interactions between their fathers and other family members. As the Dynamics Model (Cabrera et al., in press a) purports, when fathers and other family members have amicable relationships they may teach their children socially competent behaviors through modeling; also, the positive tone that

fathers set in their homes by maintaining amicable partner and extended family relationships may protect toddlers from developing emotional and behavioral problems in response to negative (i.e., contentious) family environments (Denham et al., 1997). In contrast, when fathers and mothers disagree they may model problem behaviors for their children or create a tense and unstable emotional climate which children respond to by displaying more problem behavior.

While the present study did not find a significant unique effect of fathers' extended family relationship quality on children's social and emotional development, this study extends the literature on family contexts by explicitly testing direct effects of fathers' extended family relationships on children's developmental outcomes. The present study may not have found a significant unique effect of fathers' extended family relationships on children's social and emotional development because closeness and conflict in fathers' partner relationships accounted for most of the variance in children's social competence and problem behavior. According to family systems (Cox & Paley, 1997) and social networks (Lewis, 2005) theories, children are more strongly affected by father-mother interactions than fathers' interactions with other family members because children are more often exposed to the former. Although African American parents and children are typically closely connected to extended kin (Dilworth-Anderson, 1992; McAdoo, 2001; Roy, 2004; Roy & Burton, 2007), children may still witness more father-mother interactions than father-extended family interactions and thus are mostly affected by the quality of fathers' partner relationships and less so by fathers' extended family relationships.

The second goal of the present research was to examine how the family contexts in which fathers parent affect the quality of father-child interactions. It was expected that, because fathers' parenting is closely linked to their partner relationships (Blair, Wenk, & Hardesty, 1994) and because extended family members influence levels of father involvement (Gavin et al., 2002), fathers' relationships with partners and kin would significantly predict fathers' Responsive-Didactic and Negative-Controlling behaviors. The findings did not support this hypothesis. It may be that any significant effect of partner and extended family relationships on fathers' parenting accumulates over time, meaning that measures of fathers' family context do not explain concurrent fathering behaviors but will predict fathers' later parenting if qualities of the family context persist. Alternatively, it may be that the effects of fathers' family contexts are not significant because fathers' behaviors toward their toddlers are predominantly child-driven (Rubin et al., 1999).

The lack of significant findings may also be related to measurement. In contrast to the present study's findings, prior research reported significant negative effects of interparental conflict on frequency of low-income fathers' involvement (Carlson & McLanahan, 2006) and on qualities of middle class fathers' interactions with their children (Cox, Owen, & Lewis, 1989). These studies employed broader measures of partner conflict that included issues about the romantic relationship compared to the present study's measure of amount of disagreement over childrearing issues. It may be that the intensity of conflict about the partner relationship has negative effects on low-income fathers' behavior whereas amount of partners' disagreement over child-rearing issues does not.

Another goal of the present research was to examine whether fathers' Responsive-Didactic behavior is positively associated with children's social competence and negatively associated with children's problem behavior and whether fathers' Negative-Controlling behavior is negatively associated with children's social competence and positively associated with children's problem behavior. Results partially supported the hypotheses. Fathers who were more intrusive and less flexible during interactions with their toddlers rated their children as less socially competent than did fathers who were less intrusive and more flexible. On the other hand, positive fathering, that is fathers' responsive and didactic behavior was not linked to children's social emotional development nor did fathers' negative behavior significantly affect children's problem behavior.

Expanding on previous evidence that low-income, minority fathers' intrusive behavior is associated with preschool children's increased behavior problems (Cabrera et al., under review b), this study's results suggest that fathers' intrusiveness negatively affects toddlers' social competence. Fathers' intrusive and inflexible behavior may exert a negative effect on toddlers' social competence by modeling socially *incompetent* behavior to children and by impeding the development of children's adaptive social skills (Cabrera et al., under review b). Children who experience fathers interrupting and controlling their play may assume that such behavior is acceptable and thus bully and/or refuse to cooperate with others. Moreover, fathers may hinder their children's development of social competence by restricting children's opportunities to practice social skills such as cooperation during play.

A possible explanation for the finding that fathers' negative and over-controlling behavior did not significantly affect toddler's behavior problems is that fathers may have over-reported the frequency of their children's problem behavior possibly because they are especially sensitive to young children's externalizing behaviors (e.g., tantrums). If fathers report more problem behavior than children actually exhibit because episodes of problem behavior are particularly salient to fathers, then there may be a restricted range of actual problem behavior that limits the explanatory power of fathers' negative and over-controlling behavior. Furthermore, because behavior problems tend to emerge later than toddlerhood as children approach school-age (NICHD, 2004), effects of fathers' negative and over-controlling behavior on children's problem behavior may not appear until children are older (Cabrera et al., in press b). Another possibility is that there are different explanatory pathways such that the effect of parenting behavior on young children's social competence is different from its effects on problem behavior. Other studies have reported such divergent effects; for example, Anthony and colleagues (2005) found a significant effect of parents' discipline practices on preschoolers' social competence but not problem behavior (Anthony et al., 2005).

Contrary to predictions based on prior evidence that fathers' responsiveness positively affects toddlers' cognitive development (Tamis-LeMonda et al., 2004), the present study, along with others examining fathers' behavior towards infants (Shannon et al., 2006) and older children (Cabrera et al., under review b), did not find that fathers' responsive and didactic behavior *significantly* influences toddlers' social competence or problem behavior. It may be that children's social and emotional development is not as sensitive to fathers' responsive behavior as it is to fathers' negative and intrusive

behavior. In other words, there may be a dosage effect such that any amount of negative parenting behavior impedes healthy social and emotional development, but there has to be a significant absence of positive parenting behaviors to disrupt normal social and emotional development. Alternatively, there may be a developmental lag in the effect of fathers' responsiveness such that its significant influence on children's social and emotional development does not emerge until children begin elementary school when they must draw upon social skills to navigate more frequent peer and adult interactions. Also, it may be that children respond to mothers' and fathers' responsiveness differently such that mothers' responsiveness predicts increased social competence (Denham, 1993) while fathers' responsiveness predicts enhanced cognitive development (Tamis-LeMonda et al., 2004).

Finally, the present study tested for mediation to uncover whether the effect of fathers' family contexts on children's social and emotional development is explained by the quality of father-child interactions. Incorporating Belsky's (1984) process model of parenting, the Dynamics Model's explicates direct and indirect effects of contextual factors (e.g., family context) on children's outcomes (e.g., social competence, problem behavior) mediated by father involvement (e.g., quality of father-child interactions). While studies of mothers' parenting support the hypothesized mediation (Appelbaum et al., 1999; Lemelin, Tarabulsy, & Provost, 2006; Smeekens, Riksen-Walraven, & van Bakel, 2007), to date, few studies have explicitly tested this mediation with fathers' parenting. The present study did not find evidence that fathers' Responsive-Didactic and Negative-Controlling behavior mediates the effects of partner closeness on children's social competence or partner conflict on children's problem behavior.

The expected mediation may not have been found because the present research tested associations among contemporaneously measured variables. The unsubstantiated component of the mediation model was the link between fathers' family contexts and the quality of father-child interactions, and this association may be revealed using longitudinal data. For example, continuous partner closeness may predict greater responsiveness towards children or consistent inter-parental conflict may predict increased negativity towards children. Alternatively, there may be unmeasured qualities of father-child interactions, such as warmth, that contemporaneously mediate the effect of fathers' family contexts on children's social competence and problem behavior.

It may also be that the effects of fathers' partner and extended family relationships on fathers' contact or accessibility to their children may be more immediate, and thus, accessibility mediates the effect of fathers' family contexts on children's social and emotional development. For example, if a father and his partner are in conflict, the father may not spend much time with the child because the mother is present, and thus the child's social competence may be negatively affected by the father's absence. To explore this possibility, an alternative mediation model was tested using father-reported accessibility to children as the mediating variable between fathers' family contexts and children's social competence. Results revealed that fathers' accessibility did not significantly mediate the association between fathers' family contexts and children's social and emotional development because fathers' accessibility did not uniquely predict children's social competence or problem behavior when family context variables were controlled. Thus, although the mediation model did not account for concurrent associations among low-income, African American fathers' family contexts, father

involvement (i.e., quality of father-child interactions, accessibility), and children's social and emotional development, it remains uncertain whether the mediation model explains longitudinal associations.

Limitations and Future Directions

There are several limitations of the present study to consider when interpreting the results. First, the low-income, African American fathers who participated in this study constitute a select group, thus the findings may not generalize to all low-income, African American fathers. While extensive efforts were made to recruit a representative sample of low-income fathers, the fathers who agreed to participate were more accessible to their children probably because they were more likely to be in romantic partner relationships than non-participating fathers. However, it remains important to explore the predictors and effects of father involvement for this sample of low-income, African American fathers who are accessible to their children and romantically involved with their partners because they are underrepresented in research. As involved fathers, these men have opportunities to engage with their children and are available for participation in intervention programs which means they may have a greater chance of positively influencing their children's social and emotional development than fathers who did not participate in the research.

A second limitation of the present study is that the small sample size makes it difficult to detect any real effects. Although pooling all of the observations increased the number of data points used in multivariate analyses, statistical power was low. Depending on the dependent variable (i.e., quality of father child interactions, children's social and emotional development), the power to detect a medium effect of the

independent variables (i.e., fathers' family contexts, quality of father-child interactions) ranged from only .68 to .81 (.80 is typically considered adequate).

The small sample size also precluded additional post hoc analyses testing interaction effects that may have revealed moderators of main effects. For example, while there was no significant main effect of fathers' Responsive-Didactic behavior on children's problem behavior the interaction term for accessibility x responsive-didactic behavior was significant. Plotting the interaction indicated that for accessible fathers, increased responsiveness predicted children's lower problem behavior, but for less accessible fathers, increased responsiveness was associated with children's increased problem behavior. However, interpreting this finding is unwarranted because there were not enough observations per cell to suggest real group differences; the majority of observations (65%) were categorized as highly accessible and highly responsive-didactic, but only 7% of observations were categorized as infrequently accessible and less responsive-didactic. By conducting similar analyses with a larger sample of low-income, minority fathers, future research would have more power than the present study to detect any direct, indirect and moderated effects of fathers' family contexts and quality of father-child interactions on children's social and emotional development.

A third limitation of the present study is that many of the measures of independent and dependent variables were susceptible to reporter bias related to social desirability and interviewer effects. All of the research assistants who interviewed participants were young (23-25 years-old), highly educated (bachelor and post-bachelor degrees), mostly European American women. Although an advantage of employing female interviewers is that fathers may feel more comfortable talking with women than with men about certain

issues, such as their children and parenting, (Huddy, Billig, & Bracciodieta, 1997), the “race of interviewer effect” (Davis, 1997) may have caused these African American fathers to respond to European American interviewers’ questions about relationships, parenting and children’s behavior in socially desirable ways. For example, they may have underreported partner conflict to undermine the notion that low-income, minority parents have unhealthy, non-marital relationships.

While it is difficult to collect objective reports of partner relationship quality, there are ways future studies could reduce reporter-bias in measures of children’s social and emotional development. For example, scores would be more reliable if based on triangulate reports of children’s behavior from multiple sources (e.g., mother, father, childcare provider/teacher). In the present study, child data were collected from fathers, who may not be the most knowledgeable reporters of their children’s behavior, especially the quarter of participants who did not reside with or had little contact with their children. However, in the present study, researchers did not have access to multiple reporters for each child, thus triangulation on the BITSEA was not possible. Another potential method for obtaining more objective data on children’s behavior would be to conduct direct assessments of social and emotional development; however, most published assessments are too costly and burdensome for use in small-scale studies whose scope comprises outcomes in various developmental domains (Martin & Fox, in press).

Another limitation of the present study was that the data were cross-sectional and therefore could not be used to examine lagged effects of fathers’ family contexts and quality of father-child interactions on children’s social and emotional development. The HAPPI: Father Study had a longitudinal design, but due to a combination of small sample

size and moderate retention rate (79%), there was not enough statistical power to test causal effects. Larger-scale studies suffer from the same retention problems as the present study (Mitchell et al., in press), but because of the size of their original samples, using such large-scale, longitudinal datasets would provide more power for future research to find causal effects of fathers' family contexts and quality of father-child interactions on children's later social and emotional development. Also, with a larger longitudinal study, future research could investigate changes in the predictors and effects of quality of father-child interactions across time and at different developmental stages.

Conclusion

In summary, findings in the present study provide initial evidence suggesting that positive qualities (e.g., closeness, low conflict) of low-income, African American fathers' partner and extended family relationships are associated with their young children's increased social competence and decreased problem behavior and that fathers' negative and over-controlling behavior during father-child interactions directly and negatively affects children's social competence. By uncovering both predictors (e.g., family context) of low-income, minority fathers' involvement and effects of the quality of their involvement on young children's social and emotional development the present study's findings extend the literature on father involvement in several ways that have manifold implications for the recent Healthy Marriage and Responsible Fatherhood initiatives.

First, by examining both partner and extended family subsystems that are central to low-income, minority fathers' parenting contexts (Dilworth-Anderson, 1992; McAdoo, 2001; Roy, 2004; Roy & Burton, 2007), the present research suggests specific means of enhancing fathers' positive involvement and children's healthy social and emotional

development. Evidence that fathers in close and less quarrelsome partner relationships have children who are more socially competent and exhibit fewer behavior problems than fathers in less close and more quarrelsome partner relationships suggests that policies and programs aimed at enhancing closeness and reducing disagreement in partner relationships (e.g., Healthy Marriage Initiative) may have the added benefit of boosting children's social competence and reducing behavior problems. Moreover, while supporting positive partner relationships seems to have the greatest impact on children's social and emotional development, evidence of significant correlations between fathers' extended family relationships and children's social and emotional development suggests there may be additional impacts as a result of encouraging fathers to build positive relationships with extended family members.

Second, by investigating how the *quality* (e.g., responsiveness, intrusiveness) of low-income, African American fathers' interactions with their children relates to young children's social and emotional development, this study's findings reveal nuanced ways fathers can influence the social competence of children as young as 2 years-old. The link between the quality of father-child interactions and children's social and emotional development suggests that fatherhood programs funded by the Responsible Fatherhood initiative can promote children's social competence by focusing on reducing fathers' intrusive and controlling behaviors towards their children instead of merely encouraging fathers to be present in their children's lives.

Finally, by focusing on toddlerhood, before poor children exhibit the emotional and behavioral problems for which they are at-risk (Dodge et al., 1994) and before low-income, minority fathers tend to become less involved (Lamb, Chuang, & Hwang, 2004;

Lerman, 1993), this research suggests how fathers, while they are present, can positively influence their children's social and emotional development. By maintaining emotionally close and less quarrelsome partner relationships and by refraining from displays of negative and over-controlling behavior towards their children, fathers can enhance their toddlers' social competence.

In conclusion, the present research demonstrates that both the quality of low-income, African American fathers' partner and extended family relationships and their behaviors during father-child interactions have important direct effects on young children's social competence and problem behavior. These findings imply that strengthening low-income, minority fathers' partner and extended family relationships and promoting less negative and over-controlling fathering behavior will yield positive social and emotional outcomes for impoverished toddlers who are at-risk for emotional and behavioral problems.

Appendix A. IRB Approval for HAPPI: Father Study



UNIVERSITY OF MARYLAND

INSTITUTIONAL REVIEW BOARD

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May 30, 2006

MEMORANDUM*Renewal Application Approval Notification*

To: Dr. Natasha Cabrera
Ms. Stephanie Jolley
Department of Human Development

From: Roslyn Edson, M.S., CIP, *RAE*
IRB Manager
University of Maryland, College Park

Re: **IRB Protocol Number:** 01451
Project Title: "Healthy Attachment Promotion for Parents and Infants: Father's Study"

Approval Date: May 11, 2006

Expiration Date: May 31, 2007

Type of Application: Renewal

Type of Research: Nonexempt

Type of Review For Application:	Full Board	Degree of Risk:	No greater than minimal
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The University of Maryland, College Park Institutional Review Board (IRB) approved your IRB application. The research was approved in accordance with 45 CFR 46, the Federal Policy for the Protection of Human Subjects, and the University's IRB policies and procedures. Please reference the above-cited IRB application number in any future communications with our office regarding this research.

Recruitment/Consent: For research requiring written informed consent, the IRB-approved and stamped informed consent document is enclosed. The IRB approval expiration date has been stamped on the informed consent document. Please keep copies of the consent forms used for this research for three years after the completion of the research.

Unanticipated Problems Involving Risks: You must promptly report any unanticipated problems involving risks to subjects or others to the IRB Manager at 301-405-0678 or redson@umresearch.umd.edu.

Student Researchers: Unless otherwise requested, this IRB approval document was sent to the Principal Investigator (PI). The PI should pass on the approval document or a copy to the student researchers. This IRB approval document may be a requirement for student researchers applying for graduation. The IRB may not be able to provide copies of the approval documents if several years have passed since the date of the original approval.

Additional Information: Please contact the IRB Office at 301-405-4212 if you have any IRB-related questions or concerns.

Appendix B. Mother Consent to Contact Father

Healthy Attachment Promotion for Parents and Infants: Fathers Study

*INFORMED CONSENT FORM:**Mother Permission for Researchers to Contact and Involve Father*

The purpose of the **HAPPI: Fathers Study** is to understand how men perceive their parenting role, their relationships with their children and their children's mothers; to learn about the challenges and joy fathers experience; to describe how fathers' are involved with their children and how their involvement relates to their children's behaviors; and to guide the design of programs serving fathers.

The procedure involves 2 home visits with my child and his/her father/father-figure over the course of 6 months: initial visit and 6-month follow-up. Each visit will consist of approximately a 90-minute in-person interview with closed-ended and opened questions, 3 questionnaires about my child's behaviors (20 minutes), and a 30-minute videotape of my child with his/her father playing. All visits will be conducted by D. Natasha Cabrera and her research team. For his time, he will receive \$50 and a small gift for my child at the end of each visit. At the end of the study, he will receive a copy of the videotape.

Please check one box and sign the form.

Consent **Not** Given to Contact Child's Father/Father-Figure

Consent Given to Contact Child's Father/Father-Figure; I provide permission for researchers on the HAPPI: Fathers Study conducted by Dr. Natasha Cabrera at the University of Maryland, College Park to contact

(Name of Father/Father-Figure)

Mother's Name

Child's Name

Mother's Signature

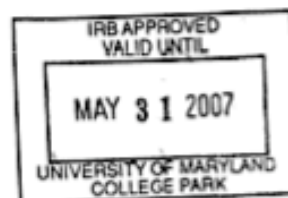
Date

Parent's Signature if Participant is under 18 years of age

Date

Interviewer's Signature

Date



Healthy Attachment Promotion for Parents and Infants: Fathers Study

INFORMED CONSENT FORM:

Mother Permission for Researchers to Contact and Involve Father

The purpose of the **HAPPI: Fathers Study** is to understand how men perceive their parenting role, their relationships with their children and their children's mothers; to learn about the challenges and joy fathers experience; to describe how fathers' are involved with their children and how their involvement relates to their children's behaviors; and to guide the design of programs serving fathers.

The procedure involves 2 home visits with my child and his/her father/father-figure over the course of 6 months: initial visit and 6-month follow-up. Each visit will consist of approximately a 90-minute in-person interview with closed-ended and open-ended questions, 3 questionnaires about my child's behaviors (20 minutes), and a 30-minute videotape of my child with his/her father playing. All visits will be conducted by Dr. Natasha Cabrera and her research team. For his time, he will receive \$30. At the end of the study, he will receive a copy of the videotape.

Please check one box and sign the form.

Consent **Not** Given to Contact Child's Father/Father-Figure

Consent Given to Contact Child's Father/Father-Figure; I provide permission for researchers on the HAPPI: Fathers Study conducted by Dr. Natasha Cabrera at the University of Maryland, College Park to contact

(Name of Father/Father-Figure)

Mother's Name

Child's Name

Mother's Signature

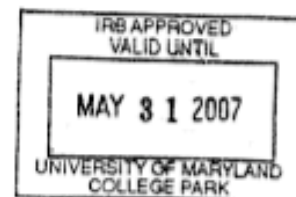
Date

Parent's Signature if Participant is under 18 years of age

Date

Interviewer's Signature

Date



Appendix C: Mother Survey about Father

HAPPI: Fathers Study
CONTACT INFORMATION

Today's Date: _____ Interviewer: _____

Mother's name: _____

Mother's Date of Birth: _____

Mother's Address: _____

_____ Phone: _____

Cell phone: _____ Email: _____

Work phone: _____ Pager: _____

Child's Name: _____

Child's Date of Birth: _____

Father's name: _____

Father's Address: _____

_____ Phone: _____

Cell phone: _____ Email: _____

Name of Father's Employer: _____

Father's Employment Address: _____

Work phone: _____ Pager: _____

Best day or times to contact father: _____

Other contacts for father:

Name: _____ Relationship: _____

Address: _____

_____ Phone: _____

Name: _____ Relationship: _____

Address: _____

_____ Phone: _____

Father-Mother Relationship/Father Involvement

Are you currently married to the biological father of your child?

YES 01 → GO TO Q4

NO 00

If not married, what is the status your relationship with (CHILD)'s biological father now?

Is he

CIRCLE ONE

X-HUSBAND/SEPARATED	01
LIVE-IN PARTNER	02
BOYFRIEND, NON-RESIDENT	03
FRIEND	04
DECEASED	05
SOMETHING ELSE, OR (SPECIFY)	06

NOT IN A RELATIONSHIP WITH HIM	07

2.1. IS FATHER STILL ROMANTICALLY INVOLVED WITH THE MOTHER?

Yes 01 → GO TO 2.1A

No 00 → GO TO 2.1B

2.1A. What are the reasons you and (CHILD'S FATHER) are not married?

No need to marry (already a couple)	0
Timing problems (haven't set date, planning wedding)	0.1
Don't get along	1
Too different	2
Don't know each other well enough	3
I'm too young / He's too young	4 / 5
I'm not in love / He's not in love	6 / 7
I'm not mature enough / He's not mature enough	8 / 9
I have a drug problem / He has a drug problem	10 / 11
Violence/Abuse	12
Incarceration	13
Financial reasons (don't have money; not working)	14
Distance (don't live in the same neighborhood)	15
I met someone else I have a romantic relationship with	16
He met someone else he has a romantic relationship with	17
He doesn't get along with my family	18
I don't get along with his family	19
Other, Specify _____	20

→ GO TO Q3

2.1B. Why did your romantic relationship with (CHILD'S FATHER) end?

Didn't get along	1
Too different	2
Didn't know each other well enough	3
I'm too young / He's too young	4 / 5
I'm not in love / He's not in love	6 / 7
I'm not mature enough / He's not mature enough	8 / 9
I have a drug problem / He has a drug problem	10 / 11
Violence/Abuse	12
Incarceration	13
Financial reasons (didn't have money; not working)	14
Distance (didn't live in the same neighborhood)	15
I met someone else I have a romantic relationship with	16
He met someone else he has a romantic relationship with	17
He didn't get along with my family	18
I didn't get along with his family	19
Other, Specify: _____	20

1) Which of the following statements best describes your current relationship your with (CHILD'S) father? (*adapted from FF and EHS*)

- We are committed to each other and romantically involved on a steady basis
01
- We are involved in an on-again and off-again committed and romantic relationship
02
- We are just friends, but he is committed to seeing our child on a steady basis
03
- We are just friends and he randomly sees our child
04
- We hardly ever talk to each other, but he is committed to seeing our child on a steady basis
05
- We hardly ever talk to each other, and he rarely sees our child
06
- We never talk to each other, and he never sees our child
07

4) INTERVIEWER: DOES CHILD'S BIOLOGICAL FATHER CURRENTLY LIVE WITH CHILD

(REFER TO Q 1&2)?

YES

01 → GO TO 4J (Resident)

NO

00 → GO TO 4A (Non-Resident)

Non-resident

4A) Has (FATHER) had any contact with (CHILD) in the last 3 months?

YES

01 → GO TO 4B

NO

00 → GO TO 4D

4B) How many nights (overnight) per week does he spend with (CHILD)?

_____ Where? _____

4C) How many weekends per month is he with (CHILD)? (*days and/or overnight*)

_____ Where? _____

4D) Has he ever lived with you?

Yes 01 → **Go to 4E**

No 00 → **Go to 4G**

4E) When did he start living with you? MM/DD/YYYY: _____

4E.1 How old was CHILD when he started living with you? _____ (months) or
NA -4

4F) When did he stop living with you? MM/DD/YYYY: _____

4F.1 How old was CHILD when he stopped living with you? _____ (months)
or NA -4

4G) Were you ever married to (CHILD's FATHER)?

Yes 01 → **Go to 4H**

No 00 → **Go to 5A**

4H) When were you and (CHILD's FATHER) married?

MM/DD/YYYY: _____

4I) When were you and (CHILD's FATHER) divorced/separated?

MM/DD/YYYY: _____ → **GO TO 5A**

Resident

4J) How old was (CHILD) when (FATHER) started living with you? _____

4K) When did (FATHER) start living with you?

MM/DD/YYYY: _____

4L) Interviewer: Is mother married to CHILD's FATHER?

Yes 01 → **Go to 4M**

No 00 → **Go to 5A**

4M) When were you and (CHILD's FATHER) married?

MM/DD/YYYY: _____

5A) In addition to the biological father, do you have a Father-Figure who is in your child's life?

YES 01
NO 00 → GO TO 5B.1

If yes, then what is your relationship? _____

5B) Does (FATHER-FIGURE) live with you and your child?

YES 01
NO 00

5B.1) INTERVIEWER: HAS FATHER AND/OR FATHER-FIGURE SEEN CHILD IN PAST 3 MONTHS?

YES 01 → GO TO Q6
NO 00 → GO TO Q10.1

6) In the past month, how often have Father/Father-figure spent one or more hours a day with (CHILD)? Was it...

	Biological father	Father-Figure
Every day	06	06
Almost every day	05	05
A few times a week	04	04
A few times a month	03	03
Once or twice, or	02	02
Never?	01	01

7) In the past month, how often has Father/Father-Figure looked after (CHILD) while you did other things? Was it ...

	Biological father	Father-Figure
Every day	06	06
Almost every day	05	05
A few times a week	04	04
A few times a month	03	03
Once or twice, or	02	02
Never?	01	01

INTERVIEWER: IN THE PAST MONTH, DID FATHER AND/OR FATHER-FIGURE SPEND TIME WITH CHILD?

YES 01 → GO TO Q8
NO 00 → GO TO Q10.1

8) In a typical day when Father/Father-Figure is with (CHILD), does he give you a lot, some, or no help in caring for (CHILD)?

	Biological Father	Father-Figure
A LOT	03	03
SOME	02	02
NO HELP	01	01

9) And, in a typical day when Father/Father-Figure is with (CHILD), does he and (CHILD) get to eat together at least once a day?

	Biological Father	Father-Figure
YES	01	01
NO	00	00

Which meals?

CIRCLE ALL THAT APPLY

	Biological Father	Father-Figure
Breakfast	01	01
Lunch	02	02
Dinner	03	03

10.1. Were you married to (CHILD'S) father at the time of (CHILD'S) birth?

YES	01 → GO TO Q10.4
NO	00

10.2. Is (FATHER'S) name on (CHILD'S) birth certificate?

YES	01
NO	00

10.3. Do either you or (FATHER) plan to establish legal paternity (*i.e., establish through the court system*)?

YES, MOTHER PLANS	01
YES, FATHER PLANS	02
YES, WILL BE DONE JOINTLY	03
ALREADY ESTABLISHED	04
NO, NEITHER PLANS	00
MOTHER IS UNAWARE OF PATERNITY ESTABLISHMENT SYSTEM	05

10.3A IS MOTHER CURRENTLY MARRIED TO BIOLOGICAL FATHER?

YES	01 → GO TO Q11
Otherwise	00 → GO TO Q10.4

10.4. Does your child's father share legal custody through the courts of (CHILD) with you?

YES, MOTHER HAS JOINT CUSTODY WITH CHILD'S FATHER	01
NO, MOTHER HAS SOLE CUSTODY (FATHER HAS <u>NO</u> CUSTODY RIGHTS)	02
NO, FATHER HAS SOLE CUSTODY (MOTHER HAS <u>NO</u> CUSTODY RIGHTS)	03
NEITHER MOTHER NOR FATHER HAS CUSTODY	00
PLANNING TO ESTABLISH CUSTODY ARRANGEMENT	04
MOTHER UNAWARE OF CUSTODY SYSTEM	05

10.5. Is (FATHER) required by a child support agency to make payments for (CHILD)'s support?

YES	01
NO	00 → GO TO Q11
NOT APPROPRIATE	-4 → GO TO Q11

10.5A. How much is father supposed to pay monthly? _____

10.5B. Did he pay this amount last month?

YES	01
NO	00, How much did he pay? _____

10.5C. How often has he paid the full amount in the past 6 months? _____

10.5D. If father hasn't paid the full amount on a monthly basis, how much does he typically pay you per

month? _____; How often has he paid this amount in the past 6 months? _____

Biological Father/Father-Figure Demographic Information:

	Biological Father	Father-Figure
11) DOB:	_____	_____
Age:	_____	_____

11A. If Age of Father/Father-Figure Not Known, Age Range:

	Biological Father	Father-Figure
Under 18 years	01	01
19 - 22 years	02	02
23 – 25 years	03	03
26 – 30 years	04	04
31 – 35 years	05	05
36 – 40 years	06	06
41 – 45 years	07	07
46 – 50 years	08	08
Over 51 years	09	09

12) Race/Ethnicity:

	Biological Father	Father-Figure
Asian or Asian American	01	01
Black or African American	02	02
Hispanic or Latino	03	03
White, Caucasian	04	04
American Indian/Native American	05	05
Mixed; Parents are from two different	06	06
Other (write in): _____	07	07

12B) Number of years in US: _____

12C) Is he a citizen of the United States (ECLS-B)?	Biological Father	Father-Figure
YES	01	01
NO	00	00

12D.1) How would you describe (CHILD's FATHER) (choose one of the following)? (Cuellar, I., Arnold, B., & Gonzalez, G., 1995)

- | | |
|----|---|
| 01 | He was born in another country, but is living in the U.S. |
| 02 | He was born in the U.S., but at least one of his parents was born in another country. |
| 03 | His parents and he were born in the U.S., but all of his grandparents were born in another country. |
| 04 | His parents, at least one of his grandparents, and he were all born in the U.S. |
| 05 | His parents, all of his grandparents, and he were born in the U.S. |

12D.2) How would you describe FATHER-FIGURE (choose one of the following)? (Cuellar, I., Arnold, B., & Gonzalez, G., 1995)

- 01 He was born in another country, but is living in the U.S.
 02 He was born in the U.S., but at least one of his parents was born in another country.
 03 His parents and he were born in the U.S., but all of his grandparents were born in another country.
 04 His parents, at least one of his grandparents, and he were all born in the U.S.
 05 His parents, all of his grandparents, and he were born in the U.S.

12E) Primary Language(s) at home:

Biological Father Father-Figure

12F.1) Please tell me how well does CHILD'S FATHER (ECLS-B)

	Very Well	Pretty Well	Not Very Well	Not Well At All
1. Speak English?	4	3	2	1
2. Read English?	4	3	2	1
3. Write English?	4	3	2	1
4. Understand someone speaking English?	4	3	2	1

12F.2) Please tell me how well does FATHER-FIGURE (ECLS-B)

	Very Well	Pretty Well	Not Very Well	Not Well At All
1. Speak English?	4	3	2	1
2. Read English?	4	3	2	1
3. Write English?	4	3	2	1
4. Understand someone speaking English?	4	3	2	1

13) Highest grade or year of regular school completed/GED:

<u>Biological Father</u>												<u>Father-Figure</u>											
Grade 1	2	3	4	5	6	7	8	9	10	11	12	Grade 1	2	3	4	5	6	7	8	9	10	11	12
13	Some College											13	Some College										
14	College Degree											14	College Degree										
15	Post graduate degree (Ph.D., M.A., M.D.)											15	Post graduate degree (Ph.D., M.A., M.D.)										
16	GED											16	GED										

13A) Currently in School/Training:

<u>Biological Father</u>		<u>Father-Figure</u>	
School (01) or Training (02)?	No 00	School (01) or Training (02)?	No 00
Full-time 02 or Part-time 01 ?		Full-time 02 or Part-time 01 ?	
Specify Program: _____		Specify Program: _____	

14) Currently working:

<u>Biological Father</u>		<u>Father-Figure</u>	
Full-time 02 or Part-time 01		Full-time 02 or Part-time 01	
Length of time working: _____ months		Length of time working: _____ months	
NO 00		NO 00	

15) Currently in Jail/Incarcerated:

	Biological Father	Father-Figure
YES	01	01
NO	00	00

16) Ever in Jail/Incarcerated:

	Biological Father	Father-Figure
YES	01	01
NO	00	00

17) Ever in Drug/Alcohol Rehab:

	Biological Father	Father-Figure
YES	01	01
NO	00	00

18) How many children does Father/Father-Figure have with you?

Father _____
 Father-Figure _____

19) How many children does Father/Father-Figure have with other women? Father _____

Father-Figure _____

20) Thinking of the coming years, how much do YOU want Father/Father-Figure to be involved in raising (CHILD)? Would you say

	Biological Father	Father-Figure
A lot	04	04
A little	03	03
Not very much	02	02
Not at all?	01	01

21) And, how much do you think Father/Father-Figure wants to be involved in raising (CHILD)?
 Would you say

	Biological Father	Father-Figure
A lot	04	04
A little	03	03
Not very much	02	02
Not at all?	01	01

Appendix D. Father Informed Consent Form

HAPPI: Fathers Study
Page 1 of 2

Initials _____ Date _____

Healthy Attachment Promotion for Parents and Infants: Fathers Study*INFORMED CONSENT FORM*

My child and I wish to participate in the Healthy Attachment Promotion for Parents and Infants: Fathers Study being conducted by Dr. Natasha Cabrera in the Department of Human Development at the University of Maryland, College Park.

The purpose of this study is to understand how men perceive their parenting role, their relationships with their children and their children's mothers; to learn about the challenges and joy fathers experience; to describe how fathers' are involved with their children and how their involvement relates to their children's behaviors; and to guide the design of programs serving fathers.

The procedure involves 2 home visits with my child and me over the course of a year: baseline visit and 6-month follow-up. Each visit will consist of approximately a 90-minute in-person interview with closed-ended and open-ended questions, 3 questionnaires about my child's behaviors (20 minutes), and a 30-minute videotape of me playing with my child with and without toys. During the interview I will be asked about my involvement with my child, attitudes and beliefs about children and parenting, my relationship with my child's mother, my education and work history, childcare arrangements, family background, and support I receive from family and friends. There will be a separate videotaping consent form at each visit. All visits will be scheduled at a time that is convenient for me and my family. All visits will be conducted by Dr. Natasha Cabrera and her research team. For my time, I will receive \$50 and a small gift for my child at the end of each visit. At the end of the study, I will receive a copy of the videotape.

All of the information I share will be strictly confidential. I am assured that the only people who will know about my opinions or responses will be the researchers on the Healthy Attachment Promotion for Parents and Infants: Fathers Study and the researchers on Dr. Brenda Jones-Harden's Healthy Attachment Promotion for Parents and Infants study. Other child assessments will be administered by Dr. Brenda Jones-Harden and her research team on the HAPPI study; data collected from those assessments will be used by Dr. Natasha Cabrera and her research team. No one except these researchers will know my identity; neither I nor my child will be identified by name in any summary or report. Even then, each participating family will be assigned a random number for data codification; families will not be specifically identified other than family number during data analysis. The only exceptions to this are that any researchers are required by law to inform appropriate authorities if I tell them or they witness any situation that involves child abuse or neglect. Also, since my child and I will be videotaped there are limits to my confidentiality with the videotaped portion of this study (e.g., our faces will be seen), however, no identifying information will be used. Also, all tapes will be destroyed after all information has been obtained from them. Identification and portions of the tapes that contain any information, which may be subject to subpoena, will be deleted.

HAPPI: Fathers Study
Page 2 of 2

Initials _____ Date _____

I understand that there are no known risks associated with my participation in this study beyond that of everyday life. If I find any of the questions upsetting, I may discuss my feelings with the researcher, or get a referral to a counselor or appropriate professional.

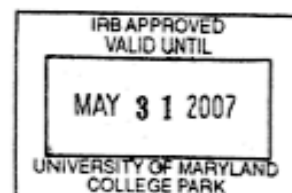
Although I may receive no direct benefits from this study, my participation will help the researchers learn more about how fathers' are involved in their young children's lives, the supports fathers' receive, and how fathers affect their children's development. I understand that my participation in this study is voluntary and I can choose whether to participate in this research or not. My decision to participate or not participate will not affect my receiving services from Early Head Start or any other program and there is no penalty or negative consequence for not being in the study. I understand that if I decide to participate, I am free to withdraw at any time without penalty. I may refuse to answer any questions during the interview or refuse the videotaped portion and still be in the study. Also, I understand that I may review the interview and/or videotapes at any time and that all or any portions of the interviews or videotapes will be destroyed at my request.

If I require additional information about the research study or have any questions I may contact Dr. Natasha Cabrera at the University of Maryland, Department of Human Development, College Park, Maryland, 20742; telephone: (301) 405-2801; nc78@umail.umd.edu.

If I have questions about my rights as a research subject or wish to report a research-related injury, I can contact: Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; (e-mail) irb@deans.umd.edu; (telephone) 301-405-4212.

I have read and understand this agreement and I agree to be a part of the Healthy Attachment Promotion for Parents and Infants: Fathers Study.
I have received a copy of this consent document to keep.

_____	_____
Participant's Name	Child's Name
_____	_____
Participant's Signature	Date
_____	_____
Parent's Signature if Participant is under 18 years of age	Date
_____	_____
Interviewer's Signature	Date



Healthy Attachment Promotion for Parents and Infants: Fathers Study*Father INFORMED CONSENT FORM*

My child and I wish to participate in the Healthy Attachment Promotion for Parents and Infants: Fathers Study being conducted by Dr. Natasha Cabrera in the Department of Human Development at the University of Maryland, College Park.

The purpose of this study is to understand parenting and child development in low-income families. Further, the study seeks to understand how men perceive their parenting role, their relationships with their children and their children's mothers; to learn about the challenges and joy fathers experience; to describe how fathers are involved with their children and how their involvement relates to their children's behaviors; and to guide the design of programs serving fathers.

The procedure involves 2 home visits with my child and me over the next six months: baseline visit and 6-month follow-up. Each visit will consist of approximately a 90-minute in-person interview with closed-ended and open-ended questions, 3 questionnaires about my child's behaviors (20 minutes), and a 30-minute videotape of me playing with my child with and without toys. During the interview I will be asked about my involvement with my child, attitudes and beliefs about children and parenting, my relationship with my child's mother, my education and work history, childcare arrangements, family background, and support I receive from family and friends. There will be a separate videotaping consent form at each visit. All visits will be scheduled at a time that is convenient for me and my family. All visits will be conducted by Dr. Natasha Cabrera and her research team. For my time, I will receive \$30. At the end of the study, I will receive a copy of the videotape.

The information I share will be kept confidential to the extent permitted by law. Research records are subject to subpoena (court order) and researchers are required by law to report child abuse or neglect to the appropriate authorities. I am assured that the only people who will know about my opinions or responses will be the researchers on the Healthy Attachment Promotion for Parents and Infants: Fathers Study. No one except these researchers will know my identity; neither I nor my child will be identified by name in any summary or report. Even then, each participating family will be assigned a random number for data codification; families will not be specifically identified other than family number during data analysis. The only exceptions to this are that any researchers are required by law to inform appropriate authorities if researchers learn of child abuse or neglect. Also, since my child and I will be videotaped there are limits to my confidentiality with the videotaped portion of this study (e.g., our faces will be seen), however, no identifying information will be used. Also, all tapes will be destroyed after all information has been obtained from them. Identification and portions of the tapes that contain any information, which may be subject to subpoena, will be deleted.

I understand that there are minimal risks associated with my participation in this study beyond that of everyday life. I am aware that researchers are asking about potentially illegal behavior and sensitive information and although the researchers take precautions to prevent disclosure, there is a risk of accidental disclosure of such information. If I find any of the questions

HAPPI: Fathers Study
Page 2 of 2

Initials _____ Date _____

upsetting, I may discuss my feelings with the researcher, or get a referral to a counselor or appropriate professional.

Although I may receive no direct benefits from this study, my participation will help the researchers learn more about how fathers' are involved in their young children's lives, the supports fathers' receive, and how fathers affect their children's development. I understand that my participation in this study is voluntary and I can choose whether to participate in this research or not. My decision to participate or not participate will not affect my receiving services from Early Head Start or any other program and there is no penalty or negative consequence for not being in the study. I understand that if I decide to participate, I am free to withdraw at any time without penalty. I may refuse to answer any questions during the interview or refuse the videotaped portion and still be in the study. Also, I understand that I may review the interview and/or videotapes at any time and that all or any portions of the interviews or videotapes will be destroyed at my request.

If I require additional information about the research study or have any questions I may contact Dr. Natasha Cabrera at the University of Maryland, Department of Human Development, College Park, Maryland, 20742; telephone: (301) 405-2801; ncabrera@umd.edu.

If I have questions about my rights as a research subject or wish to report a research-related injury, I can contact: Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; (e-mail) irb@deans.umd.edu; (telephone) 301-405-4212.

I have read and understand this agreement and I agree to be a part of the Healthy Attachment Promotion for Parents and Infants: Fathers Study.
I have received a copy of this consent document to keep.

Participant's Name

Child's Name

Participant's Signature

Date

Parent's Signature if Participant is under 18 years of age

Date

Interviewer's Signature

Date



Appendix E. Father Informed Consent to be Videotaped

HAPPI: Fathers Study
Page 1 of 2

Initials _____ Date _____

Healthy Attachment Promotion for Parents and Infants: Fathers Study

Father INFORMED CONSENT TO BE VIDEOTAPED

My child and I are taking part in the Healthy Attachment Promotion for Parents and Infants: Fathers Study being conducted by Dr. Natasha Cabrera in the Department of Human Development at the University of Maryland, College Park.

The purpose of the videotaped portion of the study will be used to examine how fathers play with their children and how children's language and play behaviors develop over time.

I understand that my child and I will be videotaped for about 30 minutes while we play together doing three short activities with and without toys. All visits will be conducted by Dr. Natasha Cabrera and her research team.

I understand that the activities filmed by videotape are confidential to the extent permitted by law and will be used for research purposes only. I understand that the videotape may be edited and copies will be made for research use only. I also understand that while the images, voices, and first names of my child and me will be on the videotape, no identifying information such as full name and address will be released to anyone except as may be required by law. These tapes will be labeled only with a code number, which will be kept in the Investigator's files. The research staff who views the videotape will have signed an assurance of confidentiality that says they agree with all these restrictions. I understand that the videotapes will be destroyed upon completion of data entry and coding. Research records are subject to subpoena (court order) and researchers are required by law to report child abuse or neglect to the appropriate authorities.

I understand that my participation in the study is voluntary. I may stop participating in the videotaped activities at any time. I understand that the compensation I receive for participating in the study represents full compensation for my participation. I also understand that there are no direct benefits or risks of participating in the study, but that it will help researchers learn how fathers and their children play and work together and how children solve problems.

I have had an opportunity to ask any questions I may have and have received a satisfactory explanation of any language or information I did not fully understand. I agree to participate and to permit the voices and images of my child and me to be videotaped. I have the authority to invite the interviewers to enter and remain on the premises in order to conduct the videotaping.

If I agree to participate in this portion of the study, my signature on this consent form gives the researchers permission to make and retain the videotape for this study. I have the right to review the videotape and to request that all or any portion of the tape be erased.

HAPPI: Fathers Study
Page 2 of 2

Initials _____ Date _____

I understand that if I require any additional information about the study or have any questions I may contact Dr. Natasha Cabrera at the University of Maryland, Department of Human Development, College Park, Maryland, 20742; telephone: (301) 455-2801; ncabrera@umd.edu.

If I have questions about my rights as a research subject or wish to report a research-related injury, I will contact: Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; (e-mail) irb@deans.umd.edu; (telephone) 301-405-4212

I have received a copy of this consent form.

Participant's Name

Child's Name

Participant's Signature

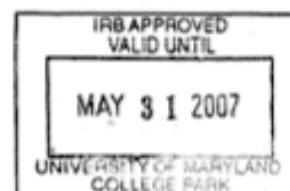
Date

Parent's Signature if Participant is under 18 years of age

Date

Interviewer's Signature

Date



Appendix F. Father Additional Consent to be Videotaped

Healthy Attachment Promotion for Parents and Infants: Fathers Study

*ADDITIONAL CONSENT TO BE VIDEOTAPED:
Informed Consent for Additional Research and Educational Uses*

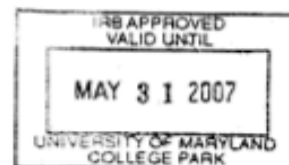
The interviewer has explained to me about the additional videotape consent requested. I understand that the researchers would like to use brief excerpts from the videotapes for training purposes and to illustrate their findings in scientific publications or at professional meetings and workshops. My additional consent for this use is optional, and I am free to refuse this request and still participate in the study. If I agree that the videotapes will be used for training in scientific journals or professional presentations, I will not be identified by name in any publication or presentation of this material. I understand that the compensation payment discussed earlier represents full compensation for participation in the study by me and my child and no additional compensation will be provided. My signature in the space below indicates my consent for these additional uses of the videotapes.

Please check one box and sign the form.

- [] Additional Consent Given
 [] Additional Consent Not Given

If I have questions about your rights as a research subject or wish to report a research-related injury, I will contact: Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; (e-mail) irb@deans.umd.edu; (telephone) 301-405-4212.

_____	_____
Participant's Name	Child's Name
_____	_____
Participant's Signature	Date
_____	_____
Interviewer's Signature	Date
_____	_____
Parent's Signature if Participant is under 18 years of age	Date



Appendix G. HAPPI: Father Study Father Survey (Baseline)

Healthy Attachment Promotion for Parents and Infants: Father Study

BASELINE SURVEY

ID#:	_____
Data Collector ID#:	_____
Date:	_____
	MO DAY
YEAR	
Time Start:	_____
Time End:	_____

INTRODUCTION

Now we're going to do the interview portion of the visit. I just want to remind you that all the information you give me is confidential. Neither your name nor (CHILD)'s will be attached to any of the information you give us. If there is ever anything you are not comfortable talking about or doing, please let me know and we will skip that part.

If at any time you need to take a break to take care of (CHILD) (or your other children), please let me know.

Do you have any questions?

SECTION 1. FAMILY DEMOGRAPHIC INFORMATION

Biological Father's Demographic Information:

1.1) Age (years): _____ 1.2) DOB (MM/DD/YYYY): _____

1.3) Race/Ethnicity: _____ 1.4) Country of Origin: _____

1.5) # of years in US: _____ 1.5a) Are you a citizen of the United States (*ECLS-B*)?
01 Yes 00 No

1.5b) How would you describe yourself (choose one of the following)? (*Cuellar, I., Arnold, B., & Gonzalez, G., 1995*)

- 01 I was born in another country, but am living in the U.S.
- 02 I was born in the U.S., but at least one of my parents was born in another country.
- 03 My parents and I were born in the U.S., but all of my grandparents were born in another country.
- 04 My parents, at least one of my grandparents, and I were all born in the U.S.
- 05 My parents, all of my grandparents, and I were born in the U.S.

1.6) Primary language spoken at home: _____

1.7) Highest grade or year of regular school completed:

- grade 1 2 3 4 5 6 7 8 9 10 11 12
- 13 Some College
- 14 College Degree
- 15 Post graduate degree (Ph.D., M.A., M.D.)
- 16 GED

1.8) Current or previous employment: Current 01 Previous 00 No employment 0.1
→ **Go to 1.9**

1.8a) Employer: _____

1.8b) Full-time 02 or Part-time 01 ?

1.8c) Position: _____

1.8d) Length of time working: _____ months

1.9) Currently in school (01) or training (02)? No 00 → **Go to 1.10**

1.9a) Full-time 02 or Part-time 01 ?

1.9b) Specify Program: _____

1.10) Father type:

Resident Biological father	01
Resident Father-figure	02
Non-Resident Biological father	03
Non-Resident Father-figure	04

Mother's Demographic Information:

1.11) Age (years): _____ 1.12) DOB (MM/DD/YYYY): _____

1.13) Race/Ethnicity: _____ 1.14) Country of Origin: _____

1.15) # of years in US: _____ 1.15a) Is she a citizen of the United States (*ECLS-B*)?
01 Yes 00 No

1.15b) How would you describe (CHILD's MOTHER) yourself (choose one of the following)? (*Cuellar, I., Arnold, B., & Gonzalez, G., 1995*)

- 01 She was born in another country, but is living in the U.S.
- 02 She was born in the U.S., but at least one of her parents was born in another country.
- 03 Her parents and she were born in the U.S., but all of her grandparents were born in another country.
- 04 Her parents, at least one of her grandparents, and she were all born in the U.S.
- 05 Her parents, all of her grandparents, and she were born in the U.S.

1.16) Primary language spoken at home: _____

1.17) Highest grade or year of regular school completed:

grade 1 2 3 4 5 6 7 8 9 10 11 12
 13 Some College
 14 College Degree
 15 Post graduate
 degree (Ph.D., M.A., M.D.)
 16 GED

1.18) Current or previous employment: Current 01 Previous 00 No employment 0.1
 → **Go to 1.19**

1.18a) Employer: _____

1.18b) Full-time 02 or Part-time 01 ?

1.18c) Position: _____

1.18d) Length of time working: _____ months

1.19) Currently in school (01) or training (02)? No 00 **Go to 1.20**

1.19a) Full-time 02 or Part-time 01 ?

1.19b) Specify Program: _____

Child's Demographic Information:

1.20) Child's Date of birth: _____

INTERVIEWER 1.21) Child's Age (months): _____

1.22) Child's Race/Ethnicity: _____ 1.22a) Is your Child: boy 01 girl 02

Other Children:

1.23) Do you have any biological children other than (CHILD)?

Yes 01 → **Go to 1.23A** No 00 → **Go to 1.24**

1.23A) How many? _____

1.23B) What are their ages (in years)? _____

1.24) Does (CHILD's MOTHER) any biological children other than (CHILD)?

Yes 01 → **Go to 1.24A** No 00 → **Go to 1.25**

1.24A) How many? _____

1.24B) What are their ages (in years)? _____

1.25) How many biological children you have with (CHILD'S MOTHER)? _____

1.25A) What are their ages (in years)? _____

SECTION 2. FATHER'S CURRENT RELATIONSHIPS/SUPPORTS

2A. MOTHER-FATHER RELATIONSHIP

2.1. Are you currently married for the first time, widowed, divorced, separated, remarried, or have you never been married?

CIRCLE ONE

MARRIED FOR FIRST TIME	01
WIDOWED	02
DIVORCED	03
SEPARATED	04
NEVER MARRIED	05 → GO TO 2.1B
REMARRIED	06

2.1A. Are you (married to/widowed from/divorced from/separated from/remarried to) (CHILD'S) mother or someone else?

FOCUS CHILD'S MOTHER	01 → GO TO 2.1C
SOMEONE ELSE	02 → GO TO 2.1B

2.1B. If NOT married (TO FOCUS CHILD MOTHER), what is your relationship with (CHILD)'s biological mother now? Is she your:

CIRCLE ONE

LIVE-IN PARTNER	01
GIRLFRIEND	02
FRIEND	03
DECEASED	04
SOMETHING ELSE, OR (SPECIFY)	05
<hr/>	
NOT IN A RELATIONSHIP WITH HER	06

2.1C. Would you say that your relationship with (CHILD'S MOTHER) is... (*ECLS-B, resident father 24mo*)

Very Happy 01

Fairly Happy 02

Not too happy 03

2.1Ca. IS FATHER Married to Child's mother?

Yes 01 → GO TO 2.2
 No 00 → GO TO 2.1Cb

2.1Cb. IS FATHER STILL ROMANTICALLY INVOLVED WITH THE MOTHER?

Yes 01 → GO TO 2.1D
 No 00 → GO TO 2.1E

2.1D. What are the reasons you and (CHILD'S MOTHER) are not married? **Circle all that apply.**

No need to marry (already a couple)	0
Timing problems (haven't set date, planning wedding)	0.1
<u>Relationship reasons:</u>	
Didn't get along	1
Too different	2
Didn't know each other well enough	3
I'm too young / She's too young	4 / 5
I'm not in love / She's not in love	6 / 7
I'm not mature enough / She's not mature enough	8 / 9
I have a drug problem / She has a drug problem	10 / 11
Violence/Abuse	12
Incarceration	13
Financial reasons (didn't have money; not working)	14
Distance (didn't live in the same neighborhood)	15
I met someone else I have a romantic relationship with	16
She met someone else she has a romantic relationship with	17
She didn't get along with my family	18
I didn't get along with her family	19
Other,	20
Specify _____	

→ GO TO 2.1F

2.1E. Why did your romantic relationship with (CHILD'S MOTHER) end? **Circle all that apply.**

Relationship reasons:

Didn't get along	1
Too different	2
Didn't know each other well enough	3
I'm too young / She's too young	4 / 5
I'm not in love / She's not in love	6 / 7
I'm not mature enough / She's not mature enough	8 / 9
I have a drug problem / She has a drug problem	10 / 11
Violence/Abuse	12
Incarceration	13
Financial reasons (didn't have money; not working)	14
Distance (didn't live in the same neighborhood)	15
I met someone else I have a romantic relationship with	16
She met someone else she has a romantic relationship with	17
She didn't get along with my family	18
I didn't get along with her family	19
Other, Specify: _____	20

2.1F. Which of the following statements best describes your current relationship with (CHILD'S MOTHER)? (*adapted from FF and EHS*)

- 01 You are committed to each other and romantically involved on a steady basis
- 02 You are involved in an on-again and off-again committed and romantic relationship
- 03 You are just friends, but you are committed to seeing your child on a steady basis
- 04 You are just friends and you randomly see your child
- 05 You hardly ever talk to each other, but you are committed to seeing your child on a steady basis
- 06 You hardly ever talk to each other, and you rarely see the child
- 07 You never talk to each other, and you never see your child

2.2. Do you currently live with (CHILD)?

- YES 01 → GO TO 2.2J (RESIDENT)
- NO 00 → GO TO 2.2A (NON-RESIDENT)

Non-resident

2.2A Have you had any contact with (CHILD) since birth?

- YES 01 → GO TO 2.2B
- NO 00 → GO TO 2.2D

2.2B How many nights per week do you spend with (CHILD)?

_____ Where? _____

2.2C. How many weekends per month are you with (CHILD)?

_____ Where? _____

2.2D Have you ever lived with CHILD's MOTHER?

Yes 01 → Go to 2.2E

No 00 → Go to 2.2G

2.2E When did you start living with CHILD's MOTHER?

MM/DD/YYYY: _____

2.2F When did you stop living with CHILD's MOTHER?

MM/DD/YYYY: _____

2.2G Were you ever married to CHILD's MOTHER?

Yes 01 → Go to 2.2H

No 00 → Go to 2.3

2.2H When were you and CHILD's MOTHER married?

MM/DD/YYYY: _____

2.2I When were you and CHILD's MOTHER divorced/separated?

MM/DD/YYYY: _____ → GO TO 2.3

Resident

2.2J How old was (CHILD) when you started living with his/her mother? _____

2.2K When did you start living with CHILD's MOTHER?

MM/DD/YYYY: _____

2.2L Interviewer: Is father married to CHILD's MOTHER?

Yes 01 → Go to 2.2M

No 00 → Go to 2.3

2.2M When were you and CHILD's MOTHER married?

MM/DD/YYYY: _____

2.3. Some fathers are unable to spend much time with their children. I'm going to read you a list of reasons some parents have given us. For each reason, please tell me whether you strongly agree, mildly agree, mildly disagree or strongly disagree with this reason.

	Strongly Agree	Mildly Agree	Mildly Disagree	Strongly Disagree
A. I live too far away to see (CHILD) more	04	03	02	01
B. I don't have enough time	04	03	02	01
C. I'm not good with children	04	03	02	01
D. I don't know (MOTHER) well	04	03	02	01
E. I don't know if this is my child	04	03	02	01
F. (MOTHER) won't let me see (him/her)	04	03	02	01
G. I'm not interested in seeing (CHILD)	04	03	02	01
H. The hours I have to work interfere	04	03	02	01
I. I'm in jail	04	03	02	01
J. I have a court order preventing me to see our child	04	03	02	01
K. (MOTHER'S) husband/boyfriend doesn't like me	04	03	02	01
L. (MOTHER'S) family doesn't like me	04	03	02	01
M. My family discourages me	04	03	02	01
N. Domestic violence	04	03	02	01

2.3a. Are there any reasons that I haven't mentioned?

YES 01

NO 00

2.3b. What are they?

RECORD VERBATIM _____

2.4. Thinking about your relationship with (CHILD'S MOTHER), how often would you say that the following happens. Would you say that this happens often, sometimes or never?

	Often	Sometimes	Never
A. She is fair and willing to compromise when you have a disagreement.	1	2	3
B. She hits or slaps you when she is angry	1	2	3
C. She expresses affection or love to you	1	2	3
D. She insults or criticizes you or your ideas	1	2	3
E. She encourages or helps you to do things that are important to you	1	2	3
F. She tries to distance you from family and friends	1	2	3

2.5. There are various ways that people deal with serious disagreements. When you have a serious disagreement with (CHILD'S MOTHER), how often do you do the following? Do you do this never, seldom, sometimes, very often or always?

	NEVER	SELDOM	SOME- TIMES	VERY OFTEN	ALWAYS
A. Just keep your opinions to yourself? 01	02	03	04	05	
B. Discuss your disagreements calmly? 01	02	03	04	05	
C. Argue heatedly or shout at each other? 01	02	03	04	05	

2.6 Now, please tell me whether you agree or disagree with the following statements. Please think about how your relationship is right now. Do you strongly agree, mildly agree, mildly disagree, or strongly disagree with the following?

	STRONGLY AGREE	MILDLY AGREE	DON'T KNOW	MILDLY DISAGREE	STRONGLY DISAGREE
A. (CHILD'S MOTHER) listens to me when I need someone to talk to.	04	03	-1	02	01
B. I can state my feelings without her getting defensive.	04	03	-1	02	01
C. I often feel distant from (CHILD'S MOTHER).	04	03	-1	02	01
D. (CHILD'S MOTHER) can really understand my hurts and joys.	04	03	-1	02	01
E. I feel neglected at times by (CHILD'S MOTHER).	04	03	-1	02	01
F. I sometimes feel lonely when we're together.	04	03	-1	02	01

2.7 I'm going to read you some statements about how you and (CHILD'S MOTHER) get along and settle arguments. Please tell me if you strongly agree, mildly agree, mildly disagree, or strongly disagree with each statement.

	STRONGLY AGREE	MILDLY AGREE	MILDLY DISAGREE	STRONGLY DISAGREE
A. We fight a lot	04	03	02	01
B. We hardly ever lose our tempers	04	03	02	01
C. We sometimes get so angry we throw things	04	03	02	01
D. We often criticize each other	04	03	02	01
E. We sometimes hit each other	04	03	02	01

CO-PARENTING

2.8 Do you talk to (CHILD'S MOTHER) about (CHILD)? 01 YES 00 NO

2.9 Mothers and fathers have areas of agreement and disagreement. In these next set of questions, we want to focus on the areas of disagreement. I'm going to read you a list of issues that you and (CHILD'S MOTHER) may have disagreements about. How much disagreement do you have about the following? Is it none, some, or a great deal of disagreement? (*Co-parenting: Joint Family Management- Conflict*)

	NONE	SOME	A GREAT DEAL
A. Where (CHILD) lives?	00	01	02
B. How (CHILD) is raised?	00	01	02
C. How you spend money on (CHILD)?	00	01	02
D. How (MOTHER) spends money on (CHILD)?	00	01	02
E. How much time you spend with (CHILD)?	00	01	02
F. Your financial contribution to (CHILD'S) support?	00	01	02
G. Child care for (CHILD)?	00	01	02
H. Disciplining (CHILD)?	00	00	01
I. Your child's sleeping arrangements.	00	01	02
J. The activities your child does.	00	01	02
K. Taking care of (CHILD) (i.e. feeding, toileting, bathing your child).	00	01	02
L. Household responsibilities (i.e. cleaning, shopping).	00	01	02
M. Spending enough time with (CHILD).	00	01	02
N. Wanting spend more time with (CHILD) than (MOTHER) allows.	00	01	02

2.10 How much influence do you have in making major decisions about the following? And how much influence would you like to have? (*Co-parenting: Joint Family Management- decision making*)

How much influence in making decisions about your child's....	AMOUNT OF INFLUENCE YOU HAVE			AMOUNT OF INFLUENCE YOU WOULD LIKE TO HAVE		
	None	Some	A great deal	None	Some	A Great deal
1. education?	01	02	03	01	02	03
2. religion?	01	02	03	01	02	03
3. healthcare?	01	02	03	01	02	03
4. general family routines?	01	02	03	01	02	03
5. sleeping routing/schedule?	01	02	03	01	02	03
6. feeding schedule/eating habits?	01	02	03	01	02	03
7. socializing your child with other children?	01	02	03	01	02	03
8. learning and play activities to do with your child?	01	02	03	01	02	03
9. disciplining?	01	02	03	01	02	03

2.11 These questions are about what happens between you and (CHILD's MOTHER).
Please give your **first** reaction to each statement.

	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	NA
1. My child's mother does not express confidence in my ability to be a good parent. (<i>U</i>)	4	3	-1	2	1	-4
2. When there is a problem with our child, we work out a good solution together. (<i>CR</i>)	4	3	-1	2	1	-4
3. My child's mother and I communicate well about our child. (<i>JFM</i>)	4	3	-1	2	1	-4
4. My child's mother is willing to make personal sacrifices to help take care of our child. (<i>S- trust</i>)	4	3	-1	2	1	-4
5. My child's mother and I agree on what our child should and should not be permitted to do. (<i>CR</i>)	4	3	-1	2	1	-4
6. My child's mother knows how to handle children well. (<i>S/U</i>)	4	3	-1	2	1	-4
7. My child's mother and I are a good team. (<i>global</i>)	4	3	-1	2	1	-4
8. My child's mother believes I am a good parent. (<i>S/U</i>)	4	3	-1	2	1	-4
9. I believe my child's mother is a good parent. (<i>S/U</i>)	4	3	-1	2	1	-4
10. My child's mother makes my job of being a parent easier. (<i>S/U, quality DL</i>)	4	3	-1	2	1	-4
11. If your child needs to be punished, my child's mother and I usually agree on the type of punishment. (<i>CR</i>)	4	3	-1	2	1	-4
12. I feel good about my child's mother's judgment about what is right for our child. (<i>S/U- trust</i>)	4	3	-1	2	1	-4
13. My child's mother tells me I am a good parent. (<i>S/U</i>)	4	3	-1	2	1	-4
14. My child's mother and I have the same goals for our child. (<i>S/U</i>)	4	3	-1	2	1	-4
15. My child's mother and I share responsibility for our child's care (in general) (<i>DL</i>)	4	3	-1	2	1	-4

2.11A Thinking of the coming years, how much do YOU want to be involved in raising (CHILD)? Would you say...

A lot	04
A little	03
Not very much	02
Not at all?	01

2.11B And, how much do you think (MOTHER) wants YOU to be involved in raising (CHILD)? Would you say...

A lot	04
A little	03
Not very much	02
Not at all?	01

2B. CURRENT SUPPORT NETWORKS
QUALITY OF RELATIONSHIPS

2.12 We'd like to know how well you get along with various people in your life and (CHILD'S) life. I am going to first ask you about how you get along with (MOTHER'S) family and then about your family. Please tell me, in general, if you would say your relationships are excellent, very good, good, fair, or poor as we go through each person.

Person	No such person	Excellent	Very Good	Good	Fair	Poor
1. (Child's) biological mother	-4	5	4	3	2	1
2. (CHILD's MOTHER's) mother	-4	5	4	3	2	1
3. (CHILD's MOTHER's) other adult female relatives (for example, her grandmothers, sisters, aunts)	-4	5	4	3	2	1
4. (CHILD's MOTHER's) father	-4	5	4	3	2	1
5. (CHILD's MOTHER's) other adult male relatives (for example, her grandfathers, brothers, uncles)	-4	5	4	3	2	1
6. (CHILD's MOTHER's) friends	-4	5	4	3	2	1
7. YOUR mother	-4	5	4	3	2	1
8. YOUR other adult female relatives (for example, your grandmothers, sisters, aunts)	-4	5	4	3	2	1
9. YOUR father	-4	5	4	3	2	1
10. YOUR other adult male relatives (for example, your grandfathers, brothers, uncles)	-4	5	4	3	2	1
11. YOUR friends	-4	5	4	3	2	1

SUPPORT IN BEING A FATHER

2.13 We are also interested in learning about how much support in being a (father/father-figure) you get from others. Some fathers do not get much support or encouragement in being a father and others get a lot of support. Please tell me, in general, if you would say people are very supportive of your being a father, somewhat supportive, do not care one way or the other, or try to prevent you from having a relationship with (CHILD) as we go through each person.

Person	No such person	Very Supportive	Somewhat Supportive	Do Not Care	Try to Prevent You
1. (Child's) biological mother	-4	1	2	3	4
2. (CHILD's MOTHER's) mother	-4	1	2	3	4
3. (CHILD's MOTHER's) other adult female relatives (for example, her grandmothers, sisters, aunts)	-4	1	2	3	4
4. (CHILD's MOTHER's) father	-4	1	2	3	4
5. (CHILD's MOTHER's) other adult male relatives (for example, her grandfathers, brothers, uncles)	-4	1	2	3	4
6. (CHILD's MOTHER's) friends	-4	1	2	3	4
7. YOUR mother	-4	1	2	3	4
8. YOUR other adult female relatives (for example, your grandmothers, sisters, aunts)	-4	1	2	3	4
9. YOUR father	-4	1	2	3	4
10. YOUR other adult male relatives (for example, your grandfathers, brothers, uncles)	-4	1	2	3	4
11. YOUR friends	-4	1	2	3	4

2C. CHILDHOOD RELATIONSHIP WITH MOTHER/MOTHER-FIGURE

2.14) What females did you grow up with (have contact with)?

- | | | | |
|----|-----|----|---|
| | YES | NO | |
| 1. | 01 | 00 | Biological mother |
| 2. | 01 | 00 | Grandmother(s): # _____ Paternal Maternal |
| 3. | 01 | 00 | Stepmother/adoptive mother |
| 4. | 01 | 00 | Foster-mother |
| 5. | 01 | 00 | Aunt(s):# _____ |
| 6. | 01 | 00 | Sister(s): # _____ |
| 7. | 01 | 00 | Other: _____ |

2.14A) Who was most a like a mother to you growing up? _____

2.15) How many children did your biological mother have? _____

2.16) What is the highest grade of school your biological mother completed? _____

2.17) Did your biological mother work outside the home? 1 Yes 0 No

2.18) What type of housing did your family live in while growing up? _____

2.19) Was your biological mother ever married to your biological father?

1 Yes → Go to 2.19A

0 No → Go to

2.19B

2.19A) Were your mother and father ever divorced?

1 Yes → Go to 2.19C 0 No → Go to 2.20

2.19B) What was your mother's and father's relationship? _____

2.19C) Was your mother married to someone else (or remarry)? 1 Yes 0 No

2.20) How often did you see your biological mother when you were growing up?

Every Day 06 A few times a week 03

Almost Every Day 05 A few times a month 02

Once a week 04 A few times a year

(or less) 01

2.21) Overall, how would you rate the quality of your relationship with your **mother and mother-figure** while you were growing up? (**Interviewer: rate relationship for both biological mother and mother-figure; indicate which answer belongs to which person**)

Excellent	Very Good	Good	Fair	Poor
5	4	3	2	1

2.22) The following statements describe the way different mothers act toward their children. Think about how well it describes the way **your mother and mother-figure** treated you while you were growing up. Respond to each statement the way you feel **your mother and mother-figure** really was and not the way you might have liked her to be. (Parental-Acceptance -Rejection Questionnaire; Rohner, 1991) (**Interviewer: rate for both biological mother and mother-figure; indicate which answer belongs to which person**)

	TRUE OF MY MOTHER		NOT TRUE OF MY MOTHER	
	Almost Always True	Sometimes True	Rarely True	Almost Never/Never True
My mother and mother-figure:				
a. Said nice things to me.	1	2	3	4
b. Saw me as big bother.	1	2	3	4
c. Made it easy for me to tell her things that were important.	1	2	3	4
d. Punished me severely when she was angry.	1	2	3	4
e. Said nice things when I deserved them.	1	2	3	4
f. Seemed to dislike me.	1	2	3	4
g. Paid a lot of attention to me.	1	2	3	4
h. Went out of her way to hurt my feelings.	1	2	3	4
i. Was interested in the things I did.	1	2	3	4
j. Said many unkind things to me.	1	2	3	4
k. Cared about what I thought and liked to talk about it.	1	2	3	4
l. Treated me gently and with kindness.	1	2	3	4

2D. CHILDHOOD RELATIONSHIP WITH FATHER/FATHER-FIGURE

2.23) What males did you grow up with (have contact with)?

	YES	NO			
1.	01	00	Biological father		
2.	01	00	Grandfather(s): # _____	Paternal	Maternal
3.	01	00	Stepfather/adoptive father		
4.	01	00	Foster-father		
5.	01	00	Uncle(s):# _____		
6.	01	00	Brother(s): # _____		
7.	01	00	Other: _____		

2.23A) Who was most a like a father to you growing up? _____

2.24) How many children did your biological father have (including yourself)? _____

2.25) What is the highest grade of school your biological father completed? _____

2.26) Did your biological father work regularly? 1 Yes 0 No

2.27) Was your biological mother ever married to your biological father?

1 Yes → Go to 2.27A

0 No → Go to
2.27B

2.27A) Were your mother and father ever divorced?

1 Yes → Go to 2.27C 0 No → Go to 2.28

2.27B) What was your mother and father's relationship? _____

2.27C) Was your father married to someone else (or remarry)? 1 Yes 0 No

2.28) Did your father live with you when you were growing up? 1 Yes 0 No

2.29) How often did you see your biological father when you were growing up?

Every Day 06 A few times a week 03

Almost Every Day 05 A few times a month 02

Once a week 04 A few times a year
(or less) 01

2.30) Overall, how would you rate the quality of your relationship with your **father and father-figure** while you were growing up? (**Interviewer: rate for both biological father and father-figure; indicate which answer belongs to which person**)

Excellent	Very Good	Good	Fair	Poor
5	4	3	2	1

2.31) The following statements describe the way different fathers act toward their children. Think about how well it describes the way **your father and father-figure** treated you while you were growing up. Respond to each statement the way you feel **your father and father-figure** really was and not the way you might have liked him to be. (Interviewer: rate for both biological father and father-figure; indicate which answer belongs to which person)

	TRUE OF MY FATHER		NOT TRUE OF MY FATHER	
	Almost Always True	Some-Times True	Rarely True	Almost Never/Never True
My father and father-figure:				
a. Said nice things to me.	1	2	3	4
b. Saw me as big bother.	1	2	3	4
c. Made it easy for me to tell him things that were important.	1	2	3	4
d. Punished me severely when he was angry.	1	2	3	4
e. Said nice things when I deserved them.	1	2	3	4
f. Seemed to dislike me.	1	2	3	4
g. Paid a lot of attention to me.	1	2	3	4
h. Went out of his way to hurt my feelings.	1	2	3	4
i. Was interested in the things I did.	1	2	3	4
j. Said many unkind things to me.	1	2	3	4
k. Cared about what I thought and liked to talk about it.	1	2	3	4
l. Treated me gently and with kindness.	1	2	3	4

SECTION 3. FATHER INVOLVEMENT AND FAMILY/CHILD ROUTINES
FATHER-CHILD INVOLVEMENT
PRENATAL/BIRTH INVOLVEMENT

	YES	NO
3. Did you visit (CHILD's MOTHER) in the hospital?	01	00
3A. Did you do any of the following before the child was born...		
1) Go to the doctor with (CHILD's MOTHER)?	01	00
2) See an ultrasound of (him/her)?	01	00
3) Listen to (her/his) heartbeat?	01	00
4) Talk to (her/him)?	01	00
5) Feel (her/him) move?	01	00
6) Discuss how (CHILD's MOTHER's] pregnancy was going?	01	00
7) Attend childbirth or Lamaze classes with (CHILD's MOTHER)?	01	00
8) Give (CHILD's MOTHER) money or buy things for the baby?	01	00
3B. When did you find out about the pregnancy?		
Before the birth 01	a. What month of pregnancy? _____	
After the birth 02	b. How old was CHILD? _____ (months)	
3C. After you found out (CHILD's MOTHER) was pregnant (or had child), would you say your relationship with (CHILD's MOTHER) got better, worse, or stayed the same?		
Better 01		
Worse 02		
Stayed the Same 03		

ACCESSIBILITY

Now I'm going to ask you some questions about your involvement with (CHILD).

3.1) In the past month, how often have you spent one or more hours a day with (CHILD)?
Was it...

Every day	06
Almost every day	05
A few times a week	04
A few times a month	03
Once or twice, or	02
Never?	01

3.2) In the past month, how often have you looked after (CHILD) while (CHILD'S MOTHER/PRIMARY CAREGIVER) did other things? Was it. ..

Every day	06
Almost every day	05
A few times a week	04
A few times a month	03
Once or twice, or	02
Never?	01

3.2A) INTERVIEWER: IN THE PAST MONTH, DID FATHER SPEND TIME WITH CHILD?

YES	01 → GO TO 3.3
NO	00 → GO TO 3.5A

3.3) In a typical day when you are with (CHILD), do you give child's mother a lot, some, or no help in caring for (CHILD)?

A LOT	03
SOME	02
NO HELP	01

3.4) And, in a typical day when you are with (CHILD), do you and (CHILD) get to eat together at least once a day?

YES	01
NO	00 → GO TO 3.5

3.4A) Which meals?

CIRCLE ALL THAT APPLY

Breakfast	01
Lunch	02
Dinner	03

FATHER-CHILD ENGAGEMENT ACTIVITIES

3.5) The next questions are about things you may do with (CHILD). How many times in the *past month* have you done the following things with your child? (*Newborn EHS*)

	More Than Once A Day	About Once A Day	A Few Times a Week	A Few Times A Month	Rarely	Not At All	(Do not Read) Don't Know
1. Play peek-a-boo with (CHILD)?	1	2	3	4	5	6	-1
2. Sing nursery rhymes like "Jack and Jill" with (him/her)?	1	2	3	4	5	6	-1
3. Sing songs with (him/her)?	1	2	3	4	5	6	-1
4. Dance with (him/her)?	1	2	3	4	5	6	-1
5. Read stories to (him/her)?	1	2	3	4	5	6	-1
6. Tell stories to (him/her)?	1	2	3	4	5	6	-1
7. Play outside in the yard, a park, or a playground with (him/her)?	1	2	3	4	5	6	-1
8. Play chasing games?	1	2	3	4	5	6	-1
9. Have relatives visit you?	1	2	3	4	5	6	-1
10. Take (CHILD) with you to visit relatives?	1	2	3	4	5	6	-1
11. Take (CHILD) shopping with you?	1	2	3	4	5	6	-1
12. Take (CHILD) with you to a religious service or religious event?	1	2	3	4	5	6	-1
13. Take (CHILD) with you to an activity at a community center or "Y"?	1	2	3	4	5	6	-1
14. Go to a restaurant or out to eat with (CHILD)?	1	2	3	4	5	6	-1
15. Go to a public place like a zoo or museum with (CHILD)?	1	2	3	4	5	6	-1

	More Than Once A Day	About Once A Day	A Few Times a Week	A Few Times A Month	Rarely	Not At All	(Do not Read) Don't Know
16. Try to tease (CHILD) to get (him/her) to laugh?	1	2	3	4	5	6	-1
17. Take (CHILD) for a ride on your shoulders or back?	1	2	3	4	5	6	-1
18. Turn (CHILD) upside down or toss (him/her) up in the air?	1	2	3	4	5	6	-1
19. Play together with toys for building things, like blocks, Tinkertoys, Lincoln Logs, or Duplos?	1	2	3	4	5	6	-1
20. Visit friends with (CHILD)?	1	2	3	4	5	6	-1
21. Take (CHILD) to play with other children?	1	2	3	4	5	6	-1
22. Put (CHILD) to bed?	1	2	3	4	5	6	-1
23. Give (CHILD) a bath?	1	2	3	4	5	6	-1
24. Roll a ball, toss a ball, or play games with a ball?	1	2	3	4	5	6	-1
25. Go for a walk with (CHILD)?	1	2	3	4	5	6	-1
26. Bounce (CHILD) on your knee?	1	2	3	4	5	6	-1
27. Take (CHILD) to the doctor?	1	2	3	4	5	6	-1
28. Stay home to care for (CHILD) when (he/she) is ill?	1	2	3	4	5	6	-1
29. Help get (CHILD) dressed?	1	2	3	4	5	6	-1
30. Change (CHILD)'s diaper, or help (him/her) use the toilet?	1	2	3	4	5	6	-1
31. Help (CHILD) brush his/her teeth?	1	2	3	4	5	6	-1

	More Than Once A Day	About Once A Day	A Few Times a Week	A Few Times A Month	Rarely	Not At All	(Do not Read) Don't Know
32. Prepare meals or bottles for (CHILD)?	1	2	3	4	5	6	-1
33. Assist (CHILD) with eating or give (him/her) a bottle?	1	2	3	4	5	6	-1
34. Get up with (CHILD) when (he/she) wakes up during the night?	1	2	3	4	5	6	-1

3.5A. Fathers can do several types of things for their children. All of these roles can be important. Which of these is the most important to you? (Probe: If you could only do one thing for your child, which of these would it be?) *ECLS-B, resident father- 9month*

- Provide regular financial support 1
- Teach child about life 2
- Provide direct care, such as feeding, dressing, and child care 3
- Show love and affection to the child 4
- Provide protection for the child 5
- Serve as an authority figure and discipline the child 6

3.5AA. Which of these is the least important to you? (Probe: If you had to choose one role to drop, which would it be?) *ECLS-B, resident father- 9month*

- Provide regular financial support 1
- Teach child about life 2
- Provide direct care, such as feeding, dressing, and child care 3
- Show love and affection to the child 4
- Provide protection for the child 5
- Serve as an authority figure and discipline the child 6

LITERACY/COGNITIVE STIMULATION ACTIVITIES

From HOME inventory, Short Form (Bradley, 2001)

3.6) [NC42; 6] About how many hours is the TV on in your home each day?

_____ HOURS PER DAY

ALL DAY.....	80
HAS NO TV.....	90 →GO TO Q.3.8

3.7) [NC42; 49] When (CHILD) watches TV with you or another adult in the household, are the TV programs discussed with (CHILD):

fairly often.....	1
once in while, or.....	2
hardly ever.....	3

Why or why not?

3.8) [NC42; 7] My next questions are about (CHILD). About how often do you read stories to (CHILD)? Would you say...

never.....	1
several times a year.....	2
several times a month.....	3
once a week.....	4
at least three times a week, or.....	5
every day?.....	6

3.9) [NC42; 8] How often do you and (CHILD) go to the library? Would you say...

never.....	1
several times a year.....	2
once a month.....	3
two to three times a month, or.....	4
about once a week?.....	5

3.10) [NC42; 9] Do either you or (CHILD) have a library card?

YES.....	1
NO.....	0

3.11) [NC42; 31] About how many books does (CHILD) have of (his/her) own?

_____ # OF BOOKS

3.12) [NC42; 36] Do you have a dictionary (here) at home?

YES..... 1
 NO..... 0 → GO TO 3.14

3.13) [NC42; 37] Does (CHILD) ever use it?

YES..... 1
 NO..... 0

3.14) [NC42; 34] Is there a radio, tape recorder, or CD player here that (CHILD) can use?

YES..... 1
 NO..... 0

NOTE: THEY MAY BE SHARED WITH SISTER OR BROTHER; IT MAY BE PARENT'S MACHINE IF CHILD IS ALLOWED TO USE IT.

3.15) [NC42; 10] Is there any kind of musical instrument – for example, a piano, drum, guitar, and so on – that (CHILD) can use here at home?

YES..... 1
 NO..... 0

3.16) [NC42; 42] How often have you or another family member taken or arranged to take (CHILD) to any type of live musical program, play, or dance performance within the past year?

Never..... 1
 Once or twice..... 2
 Several times..... 3
 About once a month, or..... 4
 About once a week or more often?..... 5

3.17) [NC42; 11] How often have you or another family member taken or arranged to take (CHILD) to any type of museum-children's scientific, art, historical, etc. – within the past year:

Never..... 1
 Once or twice..... 2
 Several times..... 3
 About once a month..... 4
 About once a week or more often?..... 5

3.18) [NC42; 43] Has (CHILD) taken a trip more than 50 miles away from home – for example, with a family member, church group, or youth organization – within the past year:

YES..... 1
NO..... 0 → GO TO 3.20

3.19) [NC42; 44] How many trips did (he/she) take this past year?

_____ # OF TRIPS

DISCIPLINE

Young children sometimes do things they are asked not to do, or don't do things they are asked to do. I'm going to read you three examples of the ways children can misbehave. For each one I'd like you to tell me what you do if (CHILD) behaves in this way.

3.20 If (CHILD) keeps playing with breakable things what do you do first? **(Do not read answers.)**

PROBE FOR "NEVER HAPPENS": What would you do?

CODE FIRST MENTIONED

NOTHING—IGNORE CHILD.....	01
KEEP (HIM/HER) IN PLAYPEN (STROLLER, CRIB, WALKER) AND OUT OF EVERYTHING.....	02
SLAP (HIS/HER) HAND WHENEVER (HE/SHE) TOUCHES SOMETHING.....	03
TELL (HIM/HER) "NO!" AND EXPECT (HIM/HER) TO OBEY	04
TELL (HIM/HER) "NO!" AND EXPLAIN WHY.....	05
PUT (CHILD) IN (HIS/HER) ROOM	06
GIVE (CHILD) "TIME OUT" (HAVE CHILD SIT DOWN OR GO TO ROOM FOR PERIOD OF QUIET TIME).....	07
SHOUT AT (HIM/HER)	08
PUT THINGS OUT OF REACH	09
DISTRACT THE CHILD WITH A TOY/SONG/GAME/ACTIVITY.....	10
TAKE CHILD AWAY	11
OTHER (SPECIFY) _____.....	12

3.21 If (CHILD) refuses to eat, what do you usually do? **(Do not read answers.)**

PROBE FOR "NEVER HAPPENS": What would you do?

CODE FIRST MENTIONED

IGNORE (HIM/HER)	01
STOP FEEDING (CHILD), (CHILD) PROBABLY NOT HUNGRY.....	02
TAKE FOOD AWAY	03
FORCE (CHILD) TO EAT	04
PUNISH (HIM/HER) VERBALLY.....	05
PUNISH (HIM/HER) PHYSICALLY	06
MAKE NEW FOOD.....	07
PLAY A GAME TO GET (HIM/HER) TO EAT	08
BRIBE (HIM/HER)	09
EXPLAIN THE IMPORTANCE OF EATING TO (HIM/HER)	10
SEND CHILD TO (HIS /HER) ROOM	11
GIVE (CHILD) "TIME OUT" (HAVE CHILD SIT DOWN OR GO TO ROOM FOR PERIOD OF QUIET TIME)	12
CONTINUE TRYING TO FEED, BUT DON'T FORCE (CHILD)	13
OTHER (SPECIFY) _____.....	14

3.22 If (CHILD) has a tantrum in a public place, such as a supermarket or bus stop, and words do not work, what do you do? **(Do not read answers.)**

PROBE FOR “NEVER HAPPENS”: What would you do?

CODE FIRST MENTIONED

IGNORE (HIM/HER)	01
SLAP OR PHYSICALLY PUNISH (HIM/HER).....	02
PICK UP CHILD AND LEAVE THE PLACE	03
LEAVE AND EXPECT CHILD TO FOLLOW	04
PUNISH (HIM/HER) VERBALLY.....	05
SHAKE (HIM/HER)	06
SHOUT AT CHILD.....	07
TELL (CHILD) YOU WILL PUNISH (HIM/HER) AT HOME.....	08
THREATEN TO TAKE AWAY TREATS.....	09
THREATEN “TIME OUT” WHEN YOU GET HOME.....	10
GIVE (CHILD) FOOD	11
HOLD (CHILD)	12
OTHER (SPECIFY).....	13

3.23 Sometimes children mind pretty well and sometimes they don't. In the past week, have you or anyone in the household spanked (CHILD) because (he/she) was misbehaving or acting up?

PROBE: Last seven days.

YES 01
NO 00 **GO to 4.1**

3.23a. How often did this happen in the past week?

TIMES

3.23b. How many times did you spank (CHILD) in the past week?

TIMES

**SECTION 4. FATHER'S PSYCHOLOGICAL HEALTH, WELLBEING
AND ETHNIC IDENTITY**

PARENTAL AGGRAVATION/STRESS INVENTORY

(Short Form; Abidin, Jenkins, & McGaughey, 1992)

4.1) Please tell me how much you agree with the following statements:	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
1. I often have the feeling that I cannot handle things very well.	1	2	-1	3	4
2. I find myself giving up more of my life to meet my children's needs than I ever expected.	1	2	-1	3	4
3. I feel trapped by my responsibilities as a parent.	1	2	-1	3	4
4. Since having this child, I have been unable to do new and different things.	1	2	-1	3	4
5. Since having a child, I feel that I am almost never able to do things that I like to do.	1	2	-1	3	4
6. I am unhappy with the last purchase of clothing I made for myself.	1	2	-1	3	4
7. There are quite a few things that bother me about my life.	1	2	-1	3	4
8. Having a child has caused more problems than I expected in my relationship with my spouse or partner (male/female friend).	1	2	-1	3	4
9. I feel alone with my friends.	1	2	-1	3	4
10. When I go to a party, I usually expect not to enjoy myself.	1	2	-1	3	4
11. I am not as interested in people as I used to be.	1	2	-1	3	4
12. I don't enjoy things as I used to.	1	2	-1	3	4
13. My child rarely does things that make me feel good.	1	2	-1	3	4
14. Most times I feel that my child does not like me and does not want to be close to me.	1	2	-1	3	4
15. My child smiles at me much less than I expected.	1	2	-1	3	4
16. When I do things for my child, I get the feeling that my efforts are not appreciated very much.	1	2	-1	3	4
17. When playing, my child doesn't often giggle or laugh.	1	2	-1	3	4
18. My child doesn't seem to learn as quickly as most children.	1	2	-1	3	4
19. My child doesn't seem to smile as much as most children.	1	2	-1	3	4
20. My child is not able to do as much as I expected.	1	2	-1	3	4
21. It takes a long time and is very hard for my child to get used to new things.	1	2	-1	3	4

4.1) Please tell me how much you agree with the following statements:	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
22. I expected to have warmer and closer feelings for my child than I do and this bothers me.	1	2	-1	3	4
23. Sometimes my child does things that bother me just to be mean	1	2	-1	3	4
24. My child seems to cry or fuss more often than most children.	1	2	-1	3	4
25. My child generally wakes up in a bad mood.	1	2	-1	3	4
26. I feel that my child is very moody and easily upset.	1	2	-1	3	4
27. My child does a few things that bother me a great deal.	1	2	-1	3	4
28. My child reacts very strongly when something happens that he/she doesn't like.	1	2	-1	3	4
29. My child gets upset over the smallest things.	1	2	-1	3	4
30. My child's sleeping or eating schedule was much harder to establish than I expected.	1	2	-1	3	4
31. There are some things that my child does that really bother me a lot.	1	2	-1	3	4
32. My child turned out to be more of a problem than I had expected.	1	2	-1	3	4
33. My child makes more demands on me than most children.	1	2	-1	3	4

34. I feel that I am:

- | | |
|---|---------------------------------|
| 1. Not very good at being a parent | 4. A better than average parent |
| 2. A person who has some trouble being a parent | 5. A very good parent |
| 3. An average parent | |

35. I have found that getting my child to do something or stop doing something is:

- | | |
|------------------------------------|------------------------------------|
| 1. Much harder than I expected | 4. Somewhat easier than I expected |
| 2. Somewhat harder than I expected | 5. Much easier than I expected |
| 3. About as hard as I expected | |

For this item, choose your response	1-3	4-5	6-7	8-9	10+
36. How many things does your child do that bother you? (Think carefully and count the number of things that your child does that bother you). For example: dawdles, refuses to listen, overactive, cries, fights, etc.	O	O	O	O	O

37. My next few questions are about what it's like to raise a CHILD. How often during the past month have you:

	All of the time	Most of the time	Some of the time	None of the time
a. Felt your child is much harder to care for than most?	4	3	2	1
b. Felt your child does things that really bother you a lot?	4	3	2	1
c. Felt you are giving up more of your life to meet your child's needs than you ever expected?	4	3	2	1
d. Felt angry with your child?	4	3	2	1

DEPRESSION SCALE (CES-D; Radloff, 1977)

4.2) These are ways you might have felt or behaved. How often have you felt this way during the past week?	Rarely Less than one day	Some or a little: 1-2 Days	Occasionally 3-4 Days	Most or all of the time: 5-7 Days
1. I was bothered by things that usually don't bother me.	0	1	2	3
2. I did not feel like eating; my appetite was poor.	0	1	2	3
3. I felt that I could not shake off the blues with help from family and friends.	0	1	2	3
4. I felt that I was just as good as other people.	0	1	2	3
5. I had trouble keeping my mind on what I was doing.	0	1	2	3
6. I felt depressed.	0	1	2	3
7. I felt that everything I did was an effort.	0	1	2	3
8. I felt hopeful about the future.	0	1	2	3
9. I thought my life had been a failure.	0	1	2	3
10. I felt fearful.	0	1	2	3
11. My sleep was restless.	0	1	2	3
12. I was happy.	0	1	2	3
13. I talked less than usual.	0	1	2	3
14. I felt lonely.	0	1	2	3
15. People were unfriendly.	0	1	2	3
16. I enjoyed life.	0	1	2	3
17. I had crying spells.	0	1	2	3
18. I felt sad.	0	1	2	3
19. I felt people disliked me.	0	1	2	3
20. I could not "get going".	0	1	2	3

21. During the **past 4 weeks** have you had any of the following problems with your work or other regular daily activities **as a result of any emotional problems** (such as feeling depressed or anxious)?

	Yes	No
21a. Accomplished less than you would like to have accomplished.	1	0
21b. Didn't do work or other activities as carefully as usual.	1	0

22. During the **past 4 weeks**, to what extent has your **physical health** or **emotional problems** interfered with your normal social activities with family, friends, neighbors or groups?

Not at all	Slightly	Moderately	Quite a Bit	Extremely
1	2	3	4	5

STRESSFUL EVENTS

4.3) We'd like to know which of these, if any, have happened to you in the <u>past year</u> .	Yes	No	N/A
1. Have you ever been robbed, mugged, or attacked in the past year?	1	0	-4
2. Has one of your children been robbed, mugged or attacked in the past year?	1	0	-4
3. Have you had a relative or close friend in jail?	1	0	-4
4. Has your electricity or phone been cut off?	1	0	-4
5. Have you had people living with you - relatives or friends - who you wish weren't there?	1	0	-4
6. Have you had some sort of problems with any of your former girlfriends (wife/partner)?	1	0	-4
7. Has someone you were close to died or been killed in the last year?	1	0	-4
8. During the past year, have you lived in a household where someone had a drug problem with alcohol or drugs?	1	0	-4
9. Has someone abused you physically, emotionally, or sexually?	1	0	-4

ANTI-SOCIAL BEHAVIOR

4.4) Now think about your whole life...	Yes	No
1. Have you ever been expelled from school?	1	0
2. Have you ever been fired or laid off from a job because of behavior, attitude, or work performance?	1	0
3. Have you ever been put in jail, arrested or convicted of a crime, other than drunk driving?	1	0
4. Have you seen a professional for a psychological or emotional problem in the <u>past year</u> ?	1	0
5. Have you <u>ever</u> seen a psychiatrist, psychologist, social worker, doctor, or other health professional for a psychological or emotional problem?	1	0
6. Have you ever been in a facility overnight for a psychological problem?	1	0
7. Have you ever had a drinking or drug problem or have other people thought you had one?	1	0

EXPOSURE TO VIOLENCE

4.5) For each of the following items please tell me how often each one happened to you in the past year: never, once, or more than once.

	Never	Once	More Than Once	(Do not read) Refused
1. You heard or saw a violent crime take place in your neighborhood.	1	2	3	-3
2. You know someone who was a victim of a violent crime in your neighborhood.	1	2	3	-3
3. You were a victim of a violent crime in your neighborhood.	1	2	3	-3
4. You feel unsafe in your neighborhood.	1	2	3	-3

Positive Aspects of Parenting

4.6) Think of your experience as a father **over the past 12 months**. Please tell me how good of a job you think you did as a father on the following. Was it very poor, poor, below average, average, above average, good, excellent, or does not apply? (*Hawkins, Bradford, Palkovitz, Christiansen, Day, & Call, 1999*)

Note: questions do not refer to specific child.

	Very Poor	Poor	Below Average	Average	Above Average	Good	Excellent	NA
a. Praising your children for being good or doing the right thing.	0	1	2	3	4	5	6	-4
b. Praising your children for something they have done well	0	1	2	3	4	5	6	-4
c. Telling your children that you love them.	0	1	2	3	4	5	6	-4
d. Showing physical affection to your children (touching, hugging, kissing).	0	1	2	3	4	5	6	-4

Now I'm going to ask you some questions about what fatherhood has been like for you.
(Palkovitz)

4.10) What are the primary feelings/emotions, both positive and negative, that you associate with fatherhood?

Positive: _____

Negative: _____

4.11) What do you view to be the primary benefits of fatherhood?

4.12) The primary costs?

4.13) Overall, do you view fatherhood to be a positive or negative shaper of your life and why?

4.14) What goals do you have for your child's future?

SECTION 5. FATHER'S EDUCATIONAL EXPERIENCES, BELIEFS, AND PRACTICES

FATHER'S LITERACY ACTIVITIES AND LITERACY LEVEL

- 5.1. The next questions are about some of the ways you may spend your time. About how often do you read at home? Is it...

Circle One

Every day or almost every day. ....	.01
A few times a week. ....	.02
Once a week (Only on Sunday). ....	.03
A few times a month. ....	.04
A few times a year. ....	.05
Never. ....	.06

GO TO 5.3

- 5.2. Sometimes the only chance a parent gets to read is when his (child/children) asleep or being cared for by someone else. When do you do your own reading? Is it...

Circle One

Only when (CHILD/children) around.	01
Only when (CHILD/children) asleep or with someone else.	02
Sometimes when (CHILD/children) around.	03
Or do you never have the time or opportunity for your own reading.	04

- 5.3. About how many books do you have in the house (Books that are written for adults not children)? Is it...

Circle One

1-9.	01
10-20.	02
More than 20.	03
NONE.	04

- 5.4. Now, I am going to name some things that people may have difficulty reading. I'd like you to tell me if you have any difficulty reading any of the following in English. Do you have any difficulty reading...

	Yes	Sometimes	No	N A
Newspapers?	1	2	0	-4
Directions for taking medicines?	1	2	0	-4
Forms or notes from your child's child care or school?	1	2	0	-4
Labels on food packages?	1	2	0	-4
Recipes?	1	2	0	-4
Children's books?	1	2	0	-4
Anything else? (Specify)	1	2	0	-4

- 5.5 Do you ever read these kinds of things in another language?
 YES.....01
 NO.....00
GO to 5.6A

a. In what language do you read these materials?

Circle One

- SPANISH.....01
 CHINESE (CANTONESE/MANDARIN/FUKANESE).....02
 FRENCH.....03
 OTHER _____ 04

5.6. Please tell me if you have any difficulty reading any of the following in the language chosen above. Do you have any difficulty reading...(if more that one language is listed above, use the language that is used the most)

	Yes	Sometimes	No	NA
Newspapers?	1	2	0	-4
Directions for taking medicines?	1	2	0	-4
Forms or notes from your child's child care or school?	1	2	0	-4
Labels on food packages?	1	2	0	-4
Recipes?	1	2	0	-4
Children's books?	1	2	0	-4
Anythingelse? (Specify)	1	2	0	-4

5.6A Please tell me how well do you (*ECLS-B*)

	Very Well	Pretty Well	Not Very Well	Not Well At All
1. Speak English?	4	3	2	1
2. Read English?	4	3	2	1
3. Write English?	4	3	2	1
4. Understand someone speaking English?	4	3	2	1

VALUING OWN EDUCATION

5.7) What's your opinion...	Agree A Lot	Agree	Disagree	Disagree A Lot
1. Going to a school that teaches basic reading and math would help me get a good job.	1	2	3	4
2. Going to a job training program would help me get a good job.	1	2	3	4
3. I could get a good job if I went to a program to get help looking for a job.	1	2	3	4
4. I like going to school.	1	2	3	4
5. Right now, I'd really like to be going to school to improve my reading and math skills.	1	2	3	4

PARENTS AND EDUCATION (*Wentzel*)

5.8) How much do you agree with each statement: strongly disagree, disagree, sort of disagree, sort of agree, agree, or strongly agree?

	Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree
1. Parents are very limited in how much they can teach their children because a child's teacher has a large influence on learning.	1	2	3	4	5	6
2. When it comes right down to it, a parent can't do much to help their children at school because most of a child's motivation and school performance depends on the teacher and classroom environment.	1	2	3	4	5	6
3. If teachers would do more for their students, parents could do more for the children.	1	2	3	4	5	6
4. Parents do not have a powerful influence on children's achievement when all factors are considered.	1	2	3	4	5	6
5. Even a parent with good teaching abilities cannot teach their child as well as a classroom teacher.	1	2	3	4	5	6

SECTION 6. EMPLOYMENT VALUES AND EXPERIENCES

EMPLOYMENT DYNAMICS

The next questions are about all paid jobs you've had, including paid baby-sitting or housekeeping jobs, or any other jobs you've had in the past 6 months. Again, I would like to remind you that your answers will remain entirely confidential.

6.1 In the past 6months, have you worked for pay at all? (Please don't count unpaid experience.) (IF "NO", PROBE: A lot of people have irregular jobs on the side to make ends meet. Have you done any jobs like that for pay?)

YES.....	1	
NO.....	0	GO TO Q6.14
Doesn't Know/Doesn't Remember.....	-1	GO TO Q6.14
REFUSED.....	-3	GO TO Q6.14

6.2 [P124] Are you currently working for pay?

YES.....	1	
NO.....	0	GO TO Q6.5
DK/DR.....	-1	GO TO Q6.5
REFUSED.....	-3	GO TO Q6.5

6.3 [P124] How many jobs do you currently have? Please count each employer as a separate job. (SELF-EMPLOYMENT, LIKE BABYSITTING, COUNTS AS ONE JOB.)

_____ NUMBER OF JOBS
IF 6.3 = 1, GO TO 6.5. ELSE, GO TO 6.4

DON'T KNOW.....	-1	
REFUSED.....	-3	

6.4 For whom do you (usually) work the most hours (Company/Employer's name)?

6.5 What kind of work are you doing/did you do on this job? _____

6.6 When did you start this job?

START: _____ / _____
 MONTH YEAR

If no current job, when did you end this job?

END: _____ / _____
 MONTH YEAR

DON'T KNOW..... -1
 REFUSED..... -3
 STILL WORKING..... 77/77

6.7 Including overtime, how many hours per week do you/did you work on this job at (EMPLOYER NAME)?

_____ HRS/WK (ALLOW RANGE UP TO 80)

DON'T KNOW..... -1
 REFUSED..... -3

6.8 How many days per week do/did you work?

_____ # OF DAYS

DON'T KNOW.....-1
 REFUSED.....-3

6.8a. What are your typical work hours on a typical day (e.g., 8:30am to 3:30pm)?
 ____ (am / pm) to ____ (am / pm)

6.9 How much are your earnings now/were your earnings PER MONTH, before taxes and other deductions **for your main job**? Please include tips, commissions, and regular overtime pay.

\$ _____

DON'T KNOW..... -1
 REFUSED..... -3

6.10 Does/Did your employer offer any of the following benefits to you:

	<u>YES</u>	<u>NO</u>	<u>DK</u>	<u>RF</u>
Sick day, with full pay.....	1	0	-1	-3
Paid vacation	1	0	-1	-3
Dental Benefits	1	0	-1	-3
Training classes or tuition reimbursement	1	0	-1	-3

6.11 Does/Did your employer offer you a health plan or medical insurance?

YES.....	1
NO.....	0
DON'T KNOW.....	-1
REFUSED.....	-3

6.12 In the last four weeks, were you looking for a full-time or part-time job?

FULL-TIME.....	1	GO TO Q6.14
PART-TIME.....	2	GO TO Q6.13
BOTH.....	3	GO TO Q6.13
NEITHER.....	4	GO TO Q6.13
DON'T KNOW.....	-1	GO TO Q6.13
REFUSED.....	-3	GO TO Q6.14

6.13 What were the main reasons you did not look for another full-time job? (PROBE: What else?)

6.13A. IF MORE THAN ONE Reason: Which one of these is the most important reason you did not look for another full-time job?

INCOME

Now I have some questions about the various sources of income you may receive. Again, I want to assure you that none of your answers will be discussed with anyone.

Interviewer: IF RESPONDENT ANSWERS "DON'T KNOW" FOR AMOUNTS, PROBE WITH: Do you think it was closer to \$100, \$200, \$400, \$600, \$800, \$1,000, or \$1,500 more?

6.14 In (PRIOR MONTH), did you have a job or do any work for pay?

YES	01	Go to Q6.14A
NO	00	Go to Q6.15

6.14.A. How much did you earn in (PRIOR MONTH) in total before taxes and other deductions were taken out **from all sources of income**? \$ _____

6.15. A lot of people have additional jobs or do other work on the side to make ends meet. In (PRIOR MONTH), did you do anything like this on the side?

YES 01 **Go to Q6.15A**
NO 00 **Go to Q6.16**

6.15A. What did you do? _____

6.16. In (PRIOR MONTH), did you receive any income or benefits from...?
(READ ENTIRE DESCRIPTION OF EACH SOURCE)

YES	NO	
01	00	a. Supplemental Security Income – that is, SSI or aid for the disabled
01	00	b. Social Security – that is, SSA or any kind of private or government pensions
01	00	c. Unemployment Insurance
01	00	d. Worker’s Compensation
01	00	e. General Assistance or General Relief, which is also known as welfare for individuals with no dependent children
01	00	f. Refugee Assistance
01	00	g. Foster child payments
01	00	h. Any money from family or friends <u>outside of the household</u> to help pay for living expenses
01	00	i. Any other sources of income? SPECIFY: _____

If any benefits, go to Q6.16A.

If no benefits, go to Q6.17.

6.16A. How much did you receive in (PRIOR MONTH)? \$ _____

WORKPLACE DISCRIMINATION

(Hughes & Dodge, 1997)

6.17 Now I'm going to ask you some questions about the environment at your workplace.

Do you <i>agree</i> or <i>disagree</i> that at the place where you work ...	Disagree Strongly	Disagree Somewhat	Agree Somewhat	Agree Strongly	NA
1. [<i>Ethnic group</i>]s get the least desirable assignments.	1	2	3	4	-4
2. There is discrimination against [<i>ethnic group</i>] in salaries.	1	2	3	4	-4
3. [<i>Ethnic group</i>]s have to work harder to get a promotion than other workers do.	1	2	3	4	-4
4. [<i>Ethnic group</i>] workers get jobs that have fewer fringe benefits than other jobs have.	1	2	3	4	-4
5. There is discrimination against [<i>ethnic group</i>] in hiring.	1	2	3	4	-4
6. Differences between [<i>ethnic group</i>] and Anglo culture sometimes cause trouble.	1	2	3	4	-4
7. You overhear jokes or slurs about [<i>ethnic group</i>].	1	2	3	4	-4
8. People you work with have stereotypes about [<i>ethnic group</i>] that affect how they judge you.	1	2	3	4	-4
9. You deal with people on your job who are prejudiced against [<i>ethnic group</i>].	1	2	3	4	-4
10. People notice your ethnic background before they notice anything else about you.	1	2	3	4	-4
11. People you work with assume that [<i>ethnic group</i>]s are not as competent as others.	1	2	3	4	-4
12. You work with people who assume all [<i>ethnic group</i>]s are the same.	1	2	3	4	-4

SATISFACTION WITH FAMILY, JOB & FINANCIAL SITUATION

6.18)

This next section asks how you feel about different things in your life.	VERY DISSATISFIED	SOMEWHAT DISSATISFIED	SOMEWHAT SATISFIED	VERY SATISFIED	N
1. How satisfied are you with your family?	1	2	3	4	
2. How satisfied are you with your relationship with your wife/girlfriend?	1	2	3	4	
3. How satisfied are you with your children?	1	2	3	4	
4. How satisfied are you with the number of children in your family?	1	2	3	4	
5. How satisfied are you with your own health?	1	2	3	4	
6. How satisfied are you with the health of other family members?	1	2	3	4	
7. How satisfied are you with your job?	1	2	3	4	
8. How satisfied are you with your job security?	1	2	3	4	
9. How satisfied are you with your level of income?	1	2	3	4	
10. How satisfied are you with the amount of money you have for family necessities?	1	2	3	4	
11. How satisfied are you with your ability to handle financial emergencies?	1	2	3	4	
12. How satisfied are you with the amount of money you owe?	1	2	3	4	
13. How satisfied are you with the level of your savings?	1	2	3	4	
14. How satisfied are you with the amount of money you have for future needs of your family?	1	2	3	4	
15. How satisfied are you with where you live?	1	2	3	4	

SECTION 7. HOUSEHOLD ARRANGMENTS AND CHILD SUPPORT

Housing Type/Arrangements

7.1. What adults do you live with?

	YES	NO	Number		
a. Wife/Live-in-Partner .....	.01	00	_____		
b. Mother.....	.01	00	_____		
c. Father.....	.01	00	_____		
d. Sister.....	.01	00	_____		
e. Brother.....	.01	00	_____		
f. Grandmother .....	.01	00	_____	Maternal	Paternal
g. Grandfather.....	.01	00	_____	Maternal	Paternal
h. Friend .....	.01	00	_____		
i. Other Relative.....	.01	00	_____		
Specify: _____					
			TOTAL	_____	

7.2. What children do you live with?

	YES	NO	Number	Ages (years)
a. Roommate's child .....	.01	00	_____	_____
b. Friend's child.....	.01	00	_____	_____
c. Cousin.....	.01	00	_____	_____
d. Sister .....	.01	00	_____	_____
e. Brother .....	.01	00	_____	_____
f. Nephew.....	.01	00	_____	_____
g. Niece .....	.01	00	_____	_____
h. Son.....	.01	00	_____	_____
i. Partner's Son .....	.01	00	_____	_____
j. Daughter.....	.01	00	_____	_____
k. Partner's Daughter.....	.01	00	_____	_____
l. Other- specify: _____	.01	00	_____	_____
			TOTAL	_____

7.3. Do you have any children who don't live with you?

YES..... 01, # _____ Ages (yrs): _____
 NO..... 00

7.4. Does your child's mother have children who don't live with you?

YES..... 01, # _____ Ages (yrs): _____
 NO..... 00

7.5 What is your current type of housing?

Own single family home..... 08
 Rent single family home..... 07
 Own apartment..... 06
 Rent apartment..... 05
 Doubled up with family..... 04
 Doubled up with someone else..... 03
 Project/Public Housing..... 02
 Shelter..... 01

7.6. What month and year did you start living here? _____

7.6A. **(Interviewer: If doubled up)** how many families share your apartment? _____

7.7. How many total rooms are in your home (kitchen, bedrooms, bathroom, etc.)? _____

7.8. Do you currently receive Section 8 Housing?

YES..... 01 → GO TO Q7.9A
 NO..... 00

7.9. **Have you ever lived in public housing before your current type of housing?**

YES..... 01 → GO TO Q7.9A
 NO..... 00 → GO TO Q7.10

7.9A. How long did you live in public housing?

(Years, months, days)

CHILD SUPPORT

7.10. People organize their household finances in different ways. Do you and (CHILD'S MOTHER) share all of your combined income and benefits, with both of you fully sharing the money that the other person earns or receives? This means that both of your earnings and benefits become part of the pool of money used for the household.

YES 01 → **GO TO Q7.14**
NO 00

a. How do you and (CHILD's MOTHER) share common expenses, such as food, rent, and utilities?

Do you share 50/50? 00
Do you pay most? 01
Does she pay most? 02
Do you pay ALL? 03
Does she pay ALL? 04

b. How do you and (CHILD's MOTHER) share expenses for (CHILD)?

Do you share 50/50? 00
Do you pay most? 01
Does she pay most? 02
Do you pay ALL? 03
Does she pay ALL? 04

7.11. I am going to read you a list of things that children might need. Please tell me if you pay for these for (CHILD), (CHILD's MOTHER) pays for them, you both pay for them, or someone else is the main person who pays for them.

	FATHER	MOTHER	BOTH	SOMEONE ELSE	NO ONE ELSE	NA
a. clothing?	01	02	03	04	05	-4
b. toys?	01	02	03	04	05	-4
c. medicine?	01	02	03	04	05	-4
d. household items?	01	02	03	04	05	-4
e. child care items such as diapers, baby wipes, etc.?	01	02	03	04	05	-4
f. food?	01	02	03	04	05	-4
g. babysitting?	01	02	03	04	05	-4
h. preschool /childcare?	01	02	03	04	05	-4
i. summer camp?	01	02	03	04	05	-4
j. extracurricular activities?	01	02	03	04	05	-4
k. school supplies?	01	02	03	04	05	-4
l. anything else?	01	02	03	04	05	-4
SPECIFY: _____						

7.12. In the past month, how much have you spent on these items?

PROBE: Round to the nearest dollar

\$

7.13. Not including the items just mentioned, did you give money to support (CHILD) last month?

YES	01
NO	00
DON'T KNOW	-1
REFUSED	-3

7.13A Are you required by a child support agency to make payments for (CHILD)'s support?

YES	01 → GO TO Q7.13B
NO	00 → GO TO Q7.14
NOT APPROPRIATE	-4 → GO TO Q7.14

7.13B How much are you supposed to pay monthly? _____

7.13C Did you pay this amount last month?

YES	01 → GO TO Q7.13D
NO	00 → GO TO Q7.13C.1

7.13C.1 How much did you pay?

PROBE: Your best estimate is fine.

\$,

DON'T KNOW	-1
REFUSED	-3

7.13D How often have you paid the full amount in the past 6 months? _____

7.13D.1 (**Interviewer: If he hasn't paid the full amount on a monthly basis**) how much do you typically pay per month? _____

7.13D.2. How often have you paid this amount in the past 6 months? _____

7.13E Is it a financial problem for you to provide money for (CHILD)?

YES	01 → GO TO Q7.13E.1
NO	00 → GO TO Q7.14
DON'T KNOW	-1 → GO TO Q7.13E.1
REFUSED	3 → GO TO Q7.13E.1

7.13E.1 How much do you think you could comfortably give each week to help support (CHILD)?

PROBE: Include money spent on food, clothing, or gifts for child

, \$ PER WEEK

NOTHING 00

7.14 How many children do you help to support financially?

PROBE: Include your own children and your partner's.

If 1 → GO TO 7.17

7.14.A. How many children that you help support do not live with you?

If 0 → GO TO 7.17

7.15. How much money did you pay for all your children last month?

PROBE: Your best estimate is fine.

,

DON'T KNOW -1

REFUSED -3

7.15A. How much money did you pay for all your children who do not live with you?

PROBE: Your best estimate is fine.

,

DON'T KNOW -1

REFUSED -3

7.16. How do you decide which children and how much money to provide for all your children?

7.17 Were you married to (CHILD'S MOTHER) at the time of (CHILD'S) birth?

YES 01 → GO TO 7.20
NO 00

7.18 Is your name on (CHILD'S) birth certificate?

YES 01
NO 00

7.19 Do either you or (CHILD'S MOTHER) plan to establish your legal paternity (*i.e., establish through the court system*)?

YES, MOTHER PLANS 01
YES, FATHER PLANS 02
YES, WILL BE DONE JOINTLY 03
ALREADY DONE 04
NO, NEITHER PLANS 00

FATHER IS UNAWARE OF PATERNITY ESTABLISHMENT SYSTEM 05

7.20 IS FATHER CURRENTLY MARRIED TO CHILD'S MOTHER?

YES 01 → GO TO 8.1
NO 00 → GO TO 7.21

7.21 Do you share legal custody through the courts of (CHILD) with (CHILD'S MOTHER)?

YES, MOTHER HAS JOINT CUSTODY WITH CHILD'S FATHER 01
NO, MOTHER HAS SOLE CUSTODY (FATHER HAS NO CUSTODY RIGHTS) 02
NO, FATHER HAS SOLE CUSTODY (MOTHER HAS NO CUSTODY RIGHTS) 03
NEITHER MOTHER NOR FATHER HAS CUSTODY 00
PLANNING TO ESTABLISH CUSTODY ARRANGEMENT 04
FATHER UNAWARE OF CUSTODY SYSTEM 05

SECTION 8. CHILD CARE DYNAMICS
PARENT INVOLVEMENT IN CHILD'S DAYCARE/EARLY HEAD START PROGRAM

8.1) Now I'm going to ask you about your involvement with your child's Early Head Start program.

How often do you do these things?	Rarely	Some-Times	Often	Always	NA
All Fathers					
1. attend parent workshops or training offered by your child's Early Head Start.	1	2	3	4	-4
2. participate in parent and family social activities at (CHILD's) Early Head Start.	1	2	3	4	-4
3. feel that teachers and staff welcome and encourage fathers to be involved at the Early Head Start center.	1	2	3	4	-4
Home-based only					
4. know about (CHILD's) Early Head Start home visit.	1	2	3	4	-4
5. talk to (CHILD's MOTHER) about the Early Head Start home visit.	1	2	3	4	-4
6. participate in (CHILD's) Early Head Start home visit.	1	2	3	4	-4
7. feel that (CHILD's) Early Head Start home visit is good for (CHILD).	1	2	3	4	-4
Center-based only					
8. talk to your child's teacher about (CHILD's) daily Early Head Start routine.	1	2	3	4	-4
9. take (CHILD) to Early Head Start in the morning.	1	2	3	4	-4
10. volunteer in your child's classroom.	1	2	3	4	-4
11. pick (CHILD) up from Early Head Start in the afternoon.	1	2	3	4	-4

8.2 How satisfied are you with your child's Early Head Start program?

Very Satisfied **Satisfied** **Unsatisfied** **Very Unsatisfied**
4 3 2 1

8.2a. How many hours per week is your child at his/her Early Head Start Center? _____
(-4 Home-based)

8.3 What other type of childcare program does your child attend?

No other care	0	→ Interview is over
Center-Based Care	1	a. Hours per week: _____
Home-Based Care	2	b. Hours per week: _____
Relative Care	3	c. Who? _____
		d. Hours per week: _____

8.4. How satisfied are you with your child's other childcare?

Very Satisfied **Satisfied** **Unsatisfied** **Very Unsatisfied**
4 3 2 1

INTERVIEW COMPLETE

Section 9. Interviewer Observations (to be filled out after the interview)

- 9.1 During the entire visit, how at ease did the father/father-figure appear?
- | | |
|------------------------|----|
| Very uncomfortable | 01 |
| Slightly ill at ease | 02 |
| Moderately comfortable | 03 |
| Completely comfortable | |
| And at ease | 04 |
- 9.2 During the entire visit, how disruptive do you think your presence was?
- | | |
|-----------------------|----|
| Not at all disruptive | 01 |
| Minimally disruptive | 02 |
| Moderately disruptive | 03 |
| Highly disruptive | 04 |
- 9.3 How well did father/father-figure understand the questions on the interview? Did he... (by understand, we do not just mean understanding the language, rather, did he understand the meaning or intent of the questions?)
- | | |
|--|----|
| Understand all of the questions | 05 |
| Understand most of the questions | 04 |
| Understand some of the questions | 03 |
| Have trouble understanding the questions | 02 |
| Often seem confused by the questions | 01 |
- 9.4 **I have read this completed questionnaire and certify that all questions requiring answers have been appropriately filled in, and that this interview has been administered to the designated sample member.**

Interviewer

Participant ID Number

Date

Appendix H. BITSEA (Briggs-Gowan, et al., 2004)

The Brief Infant-Toddler Social & Emotional Assessment (BITSEA) – Parent Version
(Briggs-Gowan & Carter, 2002) ©

Child's birth date: _____
month / day / year

Today's date: _____
month / day / year

Sex of child: 1: Boy 2: Girl

Your relationship to child: 1: Mother 2: Father 3: Other

Child's ethnicity: 1: White/Caucasian
2: Black/African American

3: Hispanic/Latino 5: Native American/Eskimo
4: Asian/Pacific Islander 6: Other: _____

Instructions: This questionnaire contains statements about 1- to 3-year-old children. Many statements describe normal feelings and behaviors, but some describe things that can be problems. Some may seem too young or too old for your child. Please do your best to answer every question.

For each statement, please circle the answer that best describes your child in the LAST MONTH.

0 = not true/rarely

1 = somewhat true/sometimes

2 = very true/often

- | | | | |
|---|---------|--|-------|
| 1. Shows pleasure when s/he succeeds (For example, claps for self). | 0 1 2 | 24. Gags or chokes on food. | 0 1 2 |
| 2. Gets hurt so often that you can't take your eyes off him/her. | 0 1 2 | 25. Imitates playful sounds when you ask him/her to. | 0 1 2 |
| 3. Seems nervous, tense or fearful. | 0 1 2 | 26. Refuses to eat. | 0 1 2 |
| 4. Is restless and can't sit still. | 0 1 2 | 27. Hits, shoves, kicks, or bites children (not including brother/sister). (N = No contact with other children) | 0 1 2 |
| 5. Follows rules. | 0 1 2 | 28. Is destructive. Breaks or ruins things on purpose. | 0 1 2 |
| 6. Wakes up at night and needs help to fall asleep again. | 0 1 2 | 29. Points to show you something far away. | 0 1 2 |
| 7. Cries or tantrums until s/he is exhausted. | 0 1 2 | 30. Hits, bites or kicks you (or other parent). | 0 1 2 |
| 8. Is afraid of certain places, animals or things. What is s/he afraid of? _____ | 0 1 2 | 31. Hugs or feeds dolls or stuffed animals. | 0 1 2 |
| 9. Has less fun than other children. | 0 1 2 | 32. Seems very unhappy, sad, depressed or withdrawn. | 0 1 2 |
| 10. Looks for you (or other parent) when upset. | 0 1 2 | 33. Purposely tries to hurt you (or other parent). | 0 1 2 |
| 11. Cries or hangs onto you when you try to leave. | 0 1 2 | 34. When upset, gets very still, freezes or doesn't move. | 0 1 2 |
| 12. Worries a lot or is very serious. | 0 1 2 | The following questions are about feelings and behaviors that can be problems for young children. Some of the questions may be a bit hard to understand, especially if you have not seen this in a child. Please do your best to answer them anyway. | |
| 13. Looks right at you when you say his/her name. | 0 1 2 | 35. Puts things in a special order, over and over. | 0 1 2 |
| 14. Does not react when hurt. | 0 1 2 | 36. Repeats the same action or phrase, over and over. Describe: _____ | 0 1 2 |
| 15. Is affectionate with loved ones. | 0 1 2 | 37. Repeats a particular movement, over and over (like rocking, spinning, etc.). Describe: _____ | 0 1 2 |
| 16. Won't touch some objects because of how they feel. | 0 1 2 | 38. "Spaces out." Is totally unaware of what's happening around him/her. | 0 1 2 |
| 17. Has trouble falling asleep or staying asleep. | 0 1 2 | 39. Does not make eye contact. | 0 1 2 |
| 18. Runs away in public places. | 0 1 2 | 40. Avoids physical contact. | 0 1 2 |
| 19. Plays well with other children (not including brother/sister). (N = No contact with other children) | 0 1 2 N | 41. Eats or drinks things that are not edible, like paper or paint. Describe: _____ | 0 1 2 |
| 20. Can pay attention for a long time. (Not including TV) | 0 1 2 | 42. Hurts him/herself on purpose. For example, bangs his or her head. Describe: _____ | 0 1 2 |
| 21. Has trouble adjusting to changes. | 0 1 2 | | |
| 22. Tries to help when someone is hurt. For example, gives a toy. | 0 1 2 | | |
| 23. Often gets very upset. | 0 1 2 | | |

- A. How worried are you about your child's behavior, emotions & relationships? 1=Not at all worried 2=A little worried 3=Worried 4=Very worried
- B. How worried are you about your child's language development? 1=Not at all worried 2=A little worried 3=Worried 4=Very worried

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The Brief Infant-Toddler Social & Emotional Assessment (BITSEA) – Parent Version
(Briggs-Gowan & Carter, 2002) ©

Scoring Instructions:

- 1) Convert all "N" (no opportunity) responses to 0
N responses are possible for the following two items:
"Plays well with other children"
"Hits, shoves, kicks or bites other children."
- 2) Problem domain:
Sum the responses to the following questions: 2, 3, 4, 6, 7, 8, 9, 11, 12, 14, 16, 17, 18, 21, 23, 24, 26, 27, 28, 30, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42
If 6 or more problem questions are unanswered, we recommend that you do not use the problem sum.
- 3) Competence domain:
Sum the responses to the following questions: 1, 5, 10, 13, 15, 19, 20, 22, 25, 29, 31
If 2 or more competence questions are unanswered, we recommend that you do not use the competence sum.

Cutpoints:

Problem scores that fall at or above the values listed below are considered high problems.

Competence scores that fall at or below the values listed below are considered to indicate low competence.

BITSEA Scale:	Girls Cutpoint	Boys Cutpoint
Problems		
12-17 months	13	15
18-23 months	15	15
24-29 months	13	14
30-35 months	14	14
Competence		
12-17 months	11	11
18-23 months	15	13
24-29 months	15	14
30-35 months	15	14

Combining a child's status on the Problem and Competence cutpoints provides most sensitive detection of problems and delays in competence. By combining cutpoints we mean that if a child has a high problem score and/or a low competence score s/he would be considered to screen positive on the BITSEA.

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Appendix I. C-CARES (Tamis-LeMonda et al., 2002; 14-month version)

Caregiver-Child Affect, Responsiveness, and Engagement Scale (C-CARES)

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Fourteen-Month Version

Introduction

The Caregiver-Child Affect, Responsiveness, and Engagement Scale (C-CARES) was developed based on parent-child engagements during 8 to 10-minutes of semi-structured free play videotaped in the home. Three separate bags of toys are presented to dyads. Bag #1 contains a book, Bag #2 contains a pizza set and cell phone/stove, pots and food, and Bag #3 contains a farmhouse with animals and farmer/Noah's ark with animals. Given that this coding system was developed during 8 to 10 minute observations of mother- and father-child interactions, it is not recommended for use in coding interactions that are less than 8 minutes.

The C-CARES was adapted and expanded from the Meadow-Orlans (Meadow and Schlesinger, 1976) and the Mahoney (1992) Scales of Mother-Child Interaction. It assesses caregiver and child on a number of conceptually parallel behaviors, using items that are unipolar, rather than bipolar. That is, items are coded on either a positive continuum or a negative continuum. For example, two items assess affect, one positive and one negative. This eliminates the problem of coders assigning average scores to parents who display competing behaviors. For example, a parent who displays several instances of both positive and negative affect would likely receive a "4" on positive affect and a "4" on negative affect on the C-CARES, rather than an average score of "3" on a bipolar item.

Graduate research assistant-coders were trained at New York University and reached 85 % agreement within 1 with "gold standard tapes" before coding interactions. Ten percent of all tapes were randomly assigned to ensure reliability.

This infancy version of the Caregiver-Child Affect, Responsiveness, and Engagement Scale (C-CARES) contains 18 items that assess behaviors of the caregiver, 9 items that assess behaviors of the child, and 3 items that assess the quality of the dyad.

All items are rated on 5-point Likert scales. For each behavior, the scale is constructed as follows:

5. Behavior is **constantly** observed
4. Behavior is **frequently** observed
3. Behavior is **occasionally** observed
2. Behavior is **rarely** observed
1. Behavior is **not** observed

Caregiver-Child Affect, Responsiveness, and Engagement Scale (C-CARES)

FOURTEEN-MONTH VERSION

Instructions for Coders

Coders view the videotaped interaction three times. During the first pass, the coder views the entire interaction and records any general impressions on the score sheet. During the second pass, caregiver items are coded. During the third pass, child items and the dyad item are coded.

As previously mentioned, the C-CARES is based upon a 5-point Likert scale. Coders must consider each item separately. A high or low score on one item should not be the basis for determining another item's score (for example, see Positive Affect and Negative Affect). In general, high scores reflect behaviors that occur with great frequency, and low scores reflect behaviors that rarely occur or are not observed. Distribution of items does *not* need to be evenly spaced across the interaction. For example, during a 10-minute interaction, if caregiver provides child with 8 different positive verbal statements during the first 5-min of the interaction and *no* positive verbal statements during the second 5-min, the caregiver would obtain a 5 "constantly observed," just as a caregiver who provided 4 instance during the 1st half and 4 instances during 2nd half). For this codebook, rates and percentages are based on a 5-minute interaction so that each user must adjust the scale according to their length of observed interaction.

CAREGIVER BEHAVIOR

A. Affect

1. Positive Affect

This item reflects the caregiver's displays of positive affect, attitudes, and emotions towards the child. The item indicates the frequency of positive expressions such as approval, enjoyment, and affection. These may be expressed through the caregiver's facial expression, tone of voice, and body positioning.

Because caregivers vary in the ways they express positive affect, both exuberant displays and quieter displays constitute positive affect equally. It is important to remember that positive affect is a unipolar item, so that caregiver harshness or negative affect DOES

NOT in itself constitute a low score on positive affect, particularly if the caregiver vacillates between negative and positive displays.

5. Caregiver **constantly** expresses positive affect. Emotional expressions of affection and enjoyment (either in an upbeat or quiet demeanor) are observed throughout most of the interaction (more than 81% of the interaction).
4. Caregiver **frequently** expresses positive affect. Caregiver expresses positive affect (laughter, upbeat tone, loving gazes) toward child for approximately 61% - 80% of the interaction.
3. Caregiver **occasionally** expresses positive affect. Caregiver expresses positive affect toward child for approximately 31% - 60% of the interaction.
2. Caregiver **rarely** expresses positive affect. Brief demonstrations of positive affect (e.g., smiling) are observed for approximately 11% - 30% of the interaction.
1. Positive affect is largely **not observed**. Indicators of positive affect are observed for 0% - 10% of the interaction.

Indicators of Positive Affect

- Smiling at child
- Laughing with child or in delight of interaction
- Clapping in approval of child actions
- Displaying a “loving gaze” through warm facial expression
- Speaking in a soft tone to child

2. Negative Affect

This item reflects the caregiver’s displays of negative affect, attitudes, and emotions towards the child. This item indicates the frequency of negative expressions such as anger, hostility, frustration, impatience, and disapproval. These may be expressed through the caregiver’s facial expression, tone of voice, and body positioning.

Because caregivers vary in the ways they express negative affect, both angry and subtler displays constitute negative affect equally. The caregiver who displays positive affect frequently may still receive a high score on negative affect.

5. Caregiver **constantly** expresses negative affect. Expressions of negative affect (e.g., hostility, frustration, sadness) are observed throughout most of the interaction (81% or more of the interaction).
4. Caregiver **frequently** expresses negative affect. Caregiver expresses negative affect (e.g., hostility, frustration) toward child for approximately 61% - 80% of the interaction.
3. Caregiver **occasionally** expresses negative affect. Caregiver expresses negative affect toward child for approximately 31% - 60% of the interaction.
2. Caregiver **rarely** expresses negative affect. Brief expressions of negative affect (e.g., sadness, anger) are observed for approximately 11% - 30% of the interaction.
1. Negative affect is largely **not observed**. Indicators of negative affect are observed for 0% - 10% of the interaction.

Indicators of Negative Affect

- Frowning, pouting, and sulking towards child
- Glaring looks toward child
- Commenting in an angry, harsh, or raised tone of voice
- Sighing in exasperation/frustration at child and his/her actions
- Using a sarcastic tone
- Expressing depression or sadness

3. Positive Touch

This item refers to both amount and quality of caregiver positive touch, which includes gentle, loving touch or active and playful touch. Caregivers can touch with their hands, face and body. If the caregiver uses toys to touch the child (such as using a toy to lovingly stroke a child), it is included as positive touch.

When coding touch, it is important to note the caregiver's intention. ***Positive touch must be deliberate and intentional.***

Note: Caregivers who playfully touch their children in a destabilizing manner (i.e. tickling) *should also* be given credit for teasing according to the indicators for that item.

5. Caregiver **constantly** engages in positive touch. Caregiver displays many instances of positive touch (at a rate of approximately 4 instances per 5-min). For continuous displays of positive touch (child on caregiver's lap), caregiver touches the child for 81% or more of the interaction.
4. Caregiver **frequently** engages in positive touch. Caregiver displays positive touch (e.g., kisses) at a rate of approximately 3 instances per 5-min. For continuous displays of positive touch (closely framing child), caregiver touches child for approximately 61% - 80% of the interaction.
3. Caregiver **occasionally** engages in positive touch. Caregiver expresses positive touch (e.g., kisses) at a rate of approximately 2 instances per 5-min. For continuous displays of positive touch (closely framing child), caregiver touches child for approximately 31% - 60% of the interaction.
2. Caregiver **rarely** engages in positive touch. Caregiver expresses few indicators of positive touch (at a rate of approximately 1 instance per 5-min) and continuous forms of touch are brief in nature (11% - 30% of the interaction).
1. Positive touch is largely **not observed**. Indicators of positive touch are observed for 0% - 10% of the interaction.

Indicators of Positive Touch

- Holding/carrying/rocking the child
- Hugging the child in a gentle, non-intrusive manner
- Kissing the child in a gentle, non-intrusive manner
- Stroking/Nuzzling a child's hair, back, leg, arm, etc.
- Guiding a child's hand to a toy
- Sitting child on caregiver's lap or leg
- Framing the child's body with caregiver's own body

4. Negative Touch

This item refers to both amount and quality of negative touch, which includes forceful or abrupt touching of the child. Caregivers can touch with their hands, face, and body. If the caregiver uses a toy to touch the child (such as abruptly pulling a toy from the child's hand), it is included as negative touch.

When coding touch, it is important to note the caregiver's intention. *Negative touch must be deliberate and intentional.* For example, negative touch would not be coded if the caregiver accidentally hits a child's head while reaching for an object.

Note 1: Caregivers who touch their child in a taunting way for their own amusement *should also* be given credit for teasing according to the indicators for that item.

Note 2: If negative touch is observed for a prolonged period of time (10% or more of a 5-min interaction) this will override coding the frequency of observed bouts of negative touch. For example, if the caregiver provides negative touch only once, but harshly squeezes the child's arm for a long period of time, than this would be coded as 5 "constantly" observed rather than 2 "rarely" observed.

5. Caregiver **constantly** engages in negative touch. Caregiver displays many instances of negative touch (at a rate of approximately 4 instances per 5-min). For continuous displays of negative touch (e.g., caregiver squeezing child's arm tightly/harshly), caregiver negatively touches the child for more than 10% of the interaction.
4. Caregiver **frequently** engages in negative touch. Caregiver displays negative touch (e.g., hitting) at a rate of approximately 3 instances per 5-min.
3. Caregiver **occasionally** engages in negative touch. Caregiver expresses negative touch (e.g., hitting) at a rate of approximately 2 instances per 5-min.
2. Caregiver **rarely** engages in negative touch. Caregiver expresses few indicators of negative touch (at a rate of approximately 1 instance per 5-min).
1. Negative touch is **not observed**. Indicators of negative touch are not observed at all.

Indicators of Negative Touch

- Hitting, kicking, or poking child with hand/leg
- Grabbing or pulling child (common instance is when the child is trying to leave mat area)
- Forcefully guiding the child towards a toy or to perform a task
- Holding child tightly so that he/she is restricted from moving
- Abruptly or forcefully repositioning child on the mat
- Using a toy to poke/peck at child
- Throwing toys at child (includes caregiver throwing toy to child who has not learned how to catch)

- Kissing or hugging child in a harsh or disruptive manner

4. Positive Verbal Statements

This item reflects the number of positive verbal statements that the caregiver expresses to the child. Expressions of affection such as “I love you” are coded each time they are articulated, but the consistent use of a term of endearment such as papi, mama or sweetie are only coded as one instance.

Expressions of approval, praise, and positive reinforcement are positive verbal statements to the child. Praise may be given for compliance, achievement, and for the child being him/herself.

Note: *Tone of voice is **not an indicator of this item***. Positive tone of voice is considered an expression of positive affect and should be coded accordingly.

5. Caregiver **constantly** uses positive verbal statements. Caregiver verbally expresses many instances of affection and praise (e.g., "I love you", "papi", "good job") to child at a rate of approximately 4 instances per 5-min.
4. Caregiver **frequently** uses positive verbal statements. Caregiver expresses positive verbal statements (e.g., praise, encouragement, reinforcement) at a rate of approximately 3 instances in 5-min.
3. Caregiver **occasionally** uses positive verbal statements. Caregiver expresses affection and praise (e.g., "You're so smart" or "You're wonderful") at a rate of approximately 2 instances in 5-min.
2. Caregiver **rarely** uses positive verbal statements. Caregiver expresses few forms of positive verbal statements (at a rate of approximately 1 instance in 5-min).
1. Positive verbal statements are **not observed**. Indicators of positive verbal statements are not observed at all.

Indicators of Positive Verbal Statements

- Praising (e.g., “Good boy”, “Good job”, “Wow!”, “You’re so smart!”)
- Reinforcing (e.g., “Yeah”, “All right”, “There you go”, “That’s a girl”)
- Encouraging (e.g., “You can do it!”/”You did it!”, “You’re going to be a great reader/athlete/etc.”)
- Expressing affection or endearment (e.g., “I love you”, “What a wonderful girl/boy”)

6. Negative Verbal Statements

This item reflects the number of negative verbal statements that the caregiver expresses to the child. Expressions of disapproval and criticism given for noncompliance, negative behavior, or for the child being him/herself are considered negative verbal statements. Name-calling is also considered a type of negative verbal statement.

“No” for *corrective and appropriate* feedback or instruction is not a negative verbal statement. However, caregivers may use “no” as a form of disapproval and criticism and so the intent of the caregiver must be taken into consideration when scoring this item.

Tone of voice is not an indicator of this item. Negative tone of voice is considered an expression of negative affect and should be coded accordingly.

5. Caregiver **constantly** uses negative verbal statements. Caregiver expresses many instances of criticism, threats and/or name-calling to child at a rate of approximately 4 instances in 5-min.
4. Caregiver **frequently** uses negative verbal statements. Caregiver expresses negative verbal statements (e.g., name-calling, threats, criticism) at a rate of approximately 3 instances in 5-min.
3. Caregiver **occasionally** uses negative verbal statements. Caregiver expresses negative verbal statements (e.g., name-calling) at a rate of approximately 2 instances in 5-min.
2. Caregiver **rarely** uses negative verbal statements. Caregiver expresses few forms of negative verbal statements (a rate of approximately 1 instance in 5-min).
1. Negative verbal statements are **not observed**. Indicators of negative verbal statements are not observed at all.

Indicators of Negative Verbal Statements

- Criticizing (e.g., “No, “Don’t do that”, “That’s not good”, “That’s not nice”, “That’s not right”, “Why can’t you make up your mind”, “What is your problem”)
- Name-calling (e.g., “Stupid”, “Bad girl/boy/baby”, “Brat”, “Crazy”, “Annoying”)
- Threatening (e.g., “I am not going to play with you”, “You’re not going to get _____ after this”)
- Accusing (e.g., “You don’t like me”, “You are bad”, “You don’t care about this”)
- Making other examples of inappropriate statements (e.g., “No, this is mine!”)

7. Teasing

This item refers to the extent to which the caregiver teases the child in either a playful or antagonistic manner. Teasing refers to the caregiver exhibiting unexpected, novel behaviors in order to destabilize the child by contradicting his/her ongoing actions and expectations. It also includes the repetitive disturbance of the child for the amusement of the caregiver. Teasing should be viewed as actions that contradict the typical smoothness of caregiver behavior towards the child. A common instance of the caregiver teasing a child is when the caregiver offers and then withdraws an object repeatedly.

Note 1: Teasing should be considered separately from touch. Caregivers who touch child during teasing with a hand, leg, toy or other object *should also* be coded for *positive* or *negative* touch.

Note 2: If teasing behavior is observed for a prolonged period of time (10% or more of a 5-min interaction) this will override coding the frequency of observed bouts of teasing. For example, if the caregiver teases a child only once, but taunts the child for a long

period of time, than this would be coded as 5 "constantly" observed rather than 2 "rarely" observed.

5. Caregiver **constantly** teases the child. Caregiver deliberately taunts child in a playful or antagonistic manner at a rate of approximately 4 instances in 5-min. Caregiver continuously teases child for more than 10% of the interaction.
4. Caregiver **frequently** teases the child. Caregiver expresses negative verbal statements (e.g., name-calling, threats, criticism) at a rate of approximately 3 instances in 5-min.
3. Caregiver **occasionally** teases the child. Caregiver taunts child (e.g., keeping toy out of child's reach while repeatedly reaching for it, or pretend gruffness in play) at a rate of approximately 2 instances in 5-min.
2. Caregiver **rarely** teases the child. Caregiver minimally displays teasing (e.g., taunting and playful) behaviors to child (at a rate of approximately 1 instance in 5-min).
1. Teasing is **not observed**. Indicators of teasing are not observed at all.

Indicators of Teasing

- Keep away (showing the child a toy and then repeatedly withdrawing it as child reaches it)
- Taunting by refusing to give an object (keeping it out of child's reach but in the child's sight)
- Hiding toys
- Throwing toys at the child
- Frustrating the child by tapping (with hand, leg, or object), pushing or pulling the child
- Pretending gruffness, aggressive play, or pretend fighting
- Knocking over or throwing toys that child is playing with

B. Sensitivity

1. Participation with Child

This item reflects the amount of caregiver participation with the child. This item represents the *amount* of involvement, *not* the quality of participation. Participation refers to the caregiver who is engaged with the child or involved in the child's play. The caregiver is an active participant and observer in the child's play, regardless of whether the play was caregiver-initiated or child-initiated.

Note: Caregivers should not be given low scores on participation for being intrusive, insensitive, overbearing, or inflexible in their engagements. Again, participation indicates the sheer amount of participation, while other items signifies the quality of caregiver participation.

5. Caregiver **constantly** participates with the child. Caregiver is almost always involved with child (81% or more of the interaction), regardless of caregiver's intrusiveness or responsiveness.

4. Caregiver **frequently** participates with the child. Caregiver is typically engaged and participatory with child (actively or passively), with only brief moments of disengagement observed. Caregiver participates with child for 61% - 80% of interaction.
3. Caregiver **occasionally** participates with the child. Caregiver displays a combination of participation and disengagement with child. Caregiver participates with child for 31% - 60% of interaction.
2. Caregiver **rarely** participates with the child. Caregiver is typically disengaged with child and only briefly demonstrates involvement with child. Caregiver participates with the child for 11% - 30% of the interaction.
1. Participation with the child is largely **not observed**. Indicators of participation are observed for 0% - 10% of the interaction. Almost no attention (actively or passively) is provided to child. Caregiver frequently stares into space, plays in parallel to child and/or appears more interested in observing other activities occurring in the room.

Indicators of Participation with Child

- Playing with child throughout interaction
- Playing with toys with the intent to redirect or introduce an activity with the child (as opposed to parallel play in which the caregiver is only interested in their own activity)
- Actively commenting on the actions of the child
- Actively commenting on the interaction materials for the child
- Observing child's activity (which is active monitoring, not passive viewing)

2. Responsiveness to Non-Verbal Non-Distress

Responsiveness is the extent to which the caregiver contingently and appropriately responds to the child's **non-verbal non-distress cues**. The caregiver contingently responds to the child with timely actions and/or verbal, facial, or gestural responses. Caregiver appropriate responses consist of verbal responses to the child, responses to child requests, and verbalizations of child actions or feelings.

Contingent and appropriate responsiveness of the caregiver should be based on child *non-verbal non-distress* cues such as demands and intentions shown by gestures, body language, gazes, and facial expressions. Specific cues displayed by children are extending hands, kicking, gazing towards toys or other objects, smiling, and shaking.

5. Caregiver **constantly** responds promptly and appropriately to the child's non-verbal cues. Caregiver is almost always (81% or more of the time) contingently responsive to child's behavioral cues.
4. Caregiver **frequently** responds promptly and appropriately to the child's non-verbal cues. Typically, caregiver responds contingently to child's cues (61% - 80% of the time), only a few times when he/she is unresponsive to child.
3. Caregiver **occasionally** responds promptly and appropriately to the child's non-verbal cues. Half the time the caregiver responds appropriately to the child's

behavioral cues (31% - 60% of the time) and half the time the caregiver doesn't respond or responds inappropriately.

2. Caregiver **rarely** responds promptly and appropriately to the child's non-verbal cues. Although caregiver is typically unresponsive to child's behavioral cues, caregiver may exhibit some responsiveness to child's cues (11% - 30% of the time).
1. Appropriate responsiveness to the child's non-verbal cues is largely **not observed**. Indicators of responsiveness to non-verbal distress are observed for 0% - 10% of the interaction.

Indicators of Responsiveness to Non-Verbal Non-Distress

- Explaining what an object is when the child looks perplexed
- Handing the child a toy that he/she is gazing or reaching for
- Verbalizing an action of the child (e.g., child pushes toy away and caregiver responds by saying, "you don't want it" or "you didn't want to play with that")
- Verbalizing a child's positive feelings (e.g., child smiles at farm and caregiver responds by saying, "you like that, don't you?")

3. Responsiveness to Verbal Non-Distress

Responsiveness is the extent to which the caregiver contingently and appropriately responds to the child's **verbal non-distress cues**. The caregiver contingently responds to the child's vocalizations with timely actions and/or verbal, facial, or gestural responses. Caregiver appropriate responses consist of responses to child vocalizations, responses to child verbal requests, and verbalizations of child vocalizations

Note: Responsiveness of the caregiver should be based on the vocalizations and communicative cues displayed by the child. If the child **does not vocalize**, this item is to be coded as '1'.

5. Caregiver **constantly** responds promptly and appropriately to the child's vocalizations. Caregiver is almost always (81% or more of the time) contingently responsive to child's vocalizations.
4. Caregiver **frequently** responds promptly and appropriately to the child's vocalizations. Typically, caregiver responds contingently to child's vocalizations (61% - 80% of the time), only a few times when he/she is unresponsive to child's vocalizations.
3. Caregiver **occasionally** responds promptly and appropriately to the child's vocalizations. Half the time the caregiver responds appropriately to the child's vocalizations (31% - 60% of the time) and half the time the caregiver doesn't respond or responds inappropriately.
2. Caregiver **rarely** responds promptly and appropriately to the child's vocalizations. Although caregiver is typically unresponsive to child's vocalizations, caregiver may exhibit some responsiveness to child's vocalizations (11% - 30% of the time).
1. Appropriate responsiveness to the child's vocalizations is largely **not observed**. Indicators of responsiveness to verbal non-distress are observed for 0% - 10% of the interaction.

Indicators of Responsiveness to Verbal Non-Distress

- Vocalizing back to child when child speaks (e.g., “Yeah”, “Okay”, “Uh huh”)
- Imitating the child’s vocalizations/verbalizations, imitating sounds or words
- Pretending the child is engaging in an actual conversation by responding in “adult” language
- Responding with questions (e.g., “What?”, “You want that?”)

4. Emotional Attunement

This item reflects the degree to which the caregiver expresses, emulates, and supports the child’s displays of emotions using body, voice quality, gestures and facial expressions. This item extends beyond sheer positive or negative responses to the child’s emotions by the caregiver. Animation and intensity are considered in this rating. The caregiver who is emotionally attuned will key into the subtle nuances of the child’s emotional tone and reciprocate it.

Note: This is a child-dependent category and should be evaluated with consideration to the quantity of emotion displayed by the child. This category may not be applicable to all caregivers as a child who **does not** show any emotional responses will warrant a score of ‘1’ both for caregiver and for child categories.

5. Caregiver **constantly** shows emotional attunement. Caregiver almost always (81% or more of the time) emulates and supports the child’s display of emotions (positive or negative).
4. Caregiver **frequently** shows emotional attunement. Typically, caregiver emulates and supports the child’s display of emotions (61% - 80% of the time), only a few times when he/she is unresponsive to child’s emotional expressions.
3. Caregiver **occasionally** shows emotional attunement. Half the time the caregiver responds appropriately to the child’s display of emotions (31% - 60% of the time) and half the time the caregiver doesn’t respond or responds inappropriately to child’s display of emotions.
2. Caregiver **rarely** shows emotional attunement. Although caregiver typically doesn’t show emotional response to child’s display of emotions, caregiver may exhibit some attunement to child’s emotions (11% - 30% of the time).
1. Emotional attunement is largely **not observed**. Indicators of emotional attunement are observed for 0% - 10% of the interaction.

Indicators of Emotional Attunement

- Child smiles at caregiver – Caregiver smiles back at child
- Child expresses an emotion – Caregiver makes an exaggerated facial expression in response
- Matching force or intensity of behaviors
 - Ex. 1 Child bangs toy (such as spoon)– Caregiver loudly says, “I’m hungry!”
 - Ex. 2 Child gently touches toy (such as animal figure) – Caregiver whispers, “Oh, you’re being nice to the horsie.”
- Child demonstrates surprise at toy (ex. seeing kitchen set for first time) – Caregiver imitates child and says, “Wow!”

- Child cries because he/she is tired – Caregiver says, “It’s okay, I know you’ve had a long day.”
- Child exhibits frustration at activity – Caregiver sighs and says, “Ugh, that’s hard to do.”

5. Flexibility

This item refers to the degree to which the caregiver is willing to let the child direct an activity. It can also be illustrated by how far the caregiver will “bend the rules” during play. A lower score is indicated if the caregiver corrects play or activities initiated by the child. (An exception is given when caregiver curtails activities which will hurt the child or others). The score is also based on willingness of the caregiver to accept the disinterest of the child in a particular activity that the caregiver has initiated. The caregiver does not need to verbalize flexibility, but instead can demonstrate flexible behavior towards the child. In this age group, caregivers who score low on this item forcibly redirect the child to activities that the child has no interest in.

5. Caregiver **constantly** shows flexible behavior. Caregiver supports and guides the child's independent exploration of toys and his/her environment throughout the interaction. Flexibility of the caregiver is observed for 81% - 100% of the interaction.
4. Caregiver **frequently** shows flexible behavior. Caregiver typically guides and supports the child's exploration. Flexibility of the caregiver is observed for 61% - 80% of interaction.
3. Caregiver **occasionally** shows flexible behavior. Half the time caregiver is supportive and accepting of the child's independence. Flexibility of the caregiver is observed for 31% - 60% of the interaction.
2. Caregiver **rarely** shows flexible behavior. Caregiver displays almost no signs of allowing child to explore independently. Flexibility of the caregiver is observed for 11% - 30% of the interaction.
1. Flexible behavior is largely **not observed**. Indicators of flexibility are observed for 0% - 10% of the interaction.

Indicators of Flexibility

- Telling child, “Okay, you want to do that?” when he/she has chosen a toy
- Accepting child disinterest in a toy and does not force child to play with it any longer
- Guiding child in an activity (stirring food, turning pages) but allows he/she the freedom to independently manipulate items
- Allowing child to explore a toy through developmentally appropriate means (such as banging)

6. Intrusiveness

This item reflects the degree to which the caregiver is intrusive during play. Intrusive interactions are adult-centered in that the caregiver ignores the signals and cues from

the child. Intrusive behaviors are characterized by caregiver interruptions in the child's play or overbearing behaviors on the part of the caregiver. The caregiver's intrusive and controlling behavior prevents a child from initiating or maintaining an activity.

Intrusive caregivers restrict child opportunities to explore and play naturally. The intrusive caregiver may appear to hover over the child and also confine the personal space of the child. A caregiver who physically restricts or forcefully takes an object from a child should also be coded for negative touch.

5. Caregiver **constantly** shows intrusive behavior. Caregiver characteristically hovers over the child and/or restricts child's exploration and play throughout the interaction. Intrusiveness of the caregiver is observed for a rate of approximately 4 instances in 5-min.
4. Caregiver **frequently** shows intrusive behavior. Caregiver typically restricts the child's exploration, with a few instances of allowing child to explore. Intrusiveness of the caregiver is observed for a rate of approximately 3 instances in 5-min.
3. Caregiver **occasionally** shows intrusive behavior. Half the time caregiver is restrictive and controlling of the child. Intrusiveness of the caregiver is observed for a rate of approximately 2 instances in 5-min.
2. Caregiver **rarely** shows intrusive behavior. Caregiver displays almost no signs of restricting child. Intrusiveness of the caregiver is observed for a rate of approximately 1 instance in 5-min.
1. Intrusive behavior is largely **not observed**. Indicators of intrusiveness are not observed at all.

Indicators of Intrusiveness

- Taking a toy away from a child
- Introducing a toy before the child is ready to move one to new activity
- Forcing the child to hold or play with a particular toy
- Physically restricting the child from activity
- Placing toy or self close to child's face

C. Didactic

1. Structuring

This item refers to the extent to which the caregiver organizes the play environment for the child. A caregiver who structures the environment positions toys in such a manner that maximizes play and learning opportunities for the child. A structure-oriented caregiver will also initiate play for a child who is not responding to the materials and aid a child in manipulating an object (turning pages, shaking roll).

The caregiver can also structure the environment by verbally helping the child organize the play materials. Verbal limit setting, such as the use of 'No' as a constructive comment is not counted as structuring.

5. Caregiver **constantly** structures the environment. Caregiver continuously organizes the play environment for the child, which maximizes the child's learning opportunities. Structuring of the environment is observed for 81% - 100% of the interaction.
4. Caregiver **frequently** structures the environment. Caregiver typically organizes the play environment for child, only a few instances when caregiver structuring restricts child's play. Structuring of the environment is observed for 61% - 80% of interaction.
3. Caregiver **occasionally** structures the environment. Half the time caregiver provides a supportive learning environment for the child, and half the time no efforts are made to provide an enriching environment. Structuring of the environment is observed for 31% - 60% of the interaction.
2. Caregiver **rarely** structures the environment. Although caregiver almost never provides an enriching environment, a few instances are observed. Structuring of the environment is observed for 11% - 30% of the interaction.
1. Structuring the environment is largely **not observed**. Indicators of structuring are observed for 0% - 10% of the interaction.

Indicators of Structuring

- Placing materials within child's reach
- Presenting materials to child in an organized manner
- Placing toys aside during an activity such as rolling the ball
- Making appropriate comments geared to support unfocused child or refocus child
- Initiating play activity to unresponsive child
- Helping child with task (e.g., placing animal figure inside of cart, taking pizza out of a baking pan, turning a page of the book)

2. Achievement Orientation

This item is concerned with the caregiver's encouragement of the child's cognitive achievement and knowledge. It assesses the extent to which the caregiver fosters cognitive development through instruction. The caregiver must have the explicit goal of edifying the child through directive teaching and/or task solicitation.

This item also is independent of the developmental appropriateness of the instruction. Caregiver teaching may be positive (appropriate) or negative (over-bearing). For example, a caregiver who harshly and frequently prods a child to look at a book, even though the child clearly does not want to, will be given the same score of a caregiver who appropriately times her requests to the child's interests. Thus, the coder should note the frequency of caregiver attempts to instruct a child regardless of quality and child response.

5. Caregiver **constantly** encourages the child towards cognitive achievement. Caregiver fosters child's development through instructing child to perform in activities (e.g., pushing a button or shaking a rattle, describing picture in book) at a rate of approximately 4 instances in 5-min.

4. Caregiver **frequently** encourages the child towards cognitive achievement. Caregiver encourages child to participate in activity (e.g., hit a ball, touch pictures in book) at a rate of approximately 3 instances in 5-min.
3. Caregiver **occasionally** encourages the child towards cognitive achievement. Caregiver fosters child's development through instruction at a rate of approximately 2 instances in 5-min.
2. Caregiver **rarely** encourages the child towards cognitive achievement. Caregiver minimally makes efforts to foster child's cognitive development through instruction at a rate of approximately 1 instance in 5-min.
1. Encouragement toward cognitive achievement is **not observed**. No indicators of achievement orientation are observed.

Indicators of Achievement Orientation

- Encouraging the child to look at a book
- Encouraging the child to participate in a activity (such serving food or calling someone over the phone)
- Asking the child questions (e.g., “What is this?”)
- Describing the colors or numbers of objects for the child

3. Toy Play

This item reflects the amount of the caregiver’s play with the toys. For this item, caregivers can receive high scores by involvement in *all types and levels of play*, including caregiver engagements in exploratory, nonsymbolic, and symbolic play. The caregiver’s sophistication of play is not considered in coding this item, but rather the *amount* of play that a caregiver engages in with the toys.

5. Caregiver **constantly** is involved in toy play. Caregiver physically manipulates toys for 81% or more of the interaction.
4. Caregiver **frequently** is involved in toy play. Caregiver typically manipulates toys presented; there are only a few instances when caregiver does not handle a toy. The caregiver is involved in toy play for 61% - 80% of interaction.
3. Caregiver **occasionally** is involved in toy play. Half the time caregiver is handling toys presented, and half the time no toy manipulation is observed. The caregiver is involved in toy play for 31% - 60%of the interaction.
2. Caregiver **rarely** is involved in toy play. Although caregiver almost never physically manipulates toys provided, a few instances are observed. The caregiver is involved in toy play for 11% - 30% of the interaction.
1. Toy play is largely **not observed**. Indicators of toy play are observed for 0% - 10% of the interaction.

4. Play Sophistication

This item reflects that amount of symbolic play the caregiver exhibits when engaging with toy materials. It assesses the use of symbolic and/or creative play activities as opposed to exploratory, functional non-symbolic play activity such as pressing buttons on

a phone or banging objects. *Symbolic* play processes are characterized by the caregiver's re-enactment of activities performed by self, others, and objects in simple pretense scenarios. Symbolic play activities include pretending to drink from a cup, feeding a doll and pretending to cook. *Creative* play processes are characterized by the caregiver's willingness to play with toys in a different and unique manner, through novel scenarios or uses of a toy that are not typical of the material.

For play to be coded as highly sophisticated, caregiver must show evidence of symbolic and/or creative behavior in every set of toys (or scenario). Note: Solely putting phone to ear or manipulating pizza is not counted as sophisticated play. Sophisticated play must include an element of pretense or imagination.

5. Caregiver **constantly** shows sophisticated play. Caregiver is continuously engaged in symbolic and/or creative play for 81% or more of the interaction.
4. Caregiver **frequently** shows sophisticated play. Caregiver typically plays symbolically and/or creatively with toys throughout much of the interaction, there are only a few instances of non-symbolic play or no involvement playing with toys. The caregiver is involved in sophisticated play for 61% - 80% of interaction.
3. Caregiver **occasionally** shows sophisticated play. Caregiver equally incorporates symbolic/creative play and either non-symbolic or no play with toy materials. The caregiver is involved in sophisticated play for 31% - 60% of the interaction.
2. Caregiver **rarely** shows sophisticated play. Caregiver typically does not play with toys or plays with toys in exploratory and functional non-symbolic ways (push buttons). There is about 1 brief instance of symbolic/creative play observed at a rate of 5-min. The caregiver is involved in sophisticated play for 11% - 30% of the interaction.
1. Sophisticated play is largely **not observed**. Indicators of sophisticated play are observed for 0% - 10% of the interaction.

Indicators of Play Sophistication

- Pretending to cook for child, stirring pots, moving oven knobs, and serving food
- Pretending to call family member and have a conversation with him/her over the phone
- Pretending the pots are mountains by turning them upside down and the spoons are people walking up the mountains
- Pretending to have farmer drive his tractor to the store
- Placing cow figure with pizza set and pretends that the cow is eating pizza

5. Amount of Language

This item is concerned with the amount of verbal stimulation provided by the caregiver toward the child, irrespective of verbal content and style. A high score represents a caregiver who is extremely verbal throughout the interaction.

Note: This rating is based on general impression of the amount of verbal stimulation, NOT on counting instances of verbal stimulation. Also, keep in mind that issues of verbal

content and style are coded in “quality of language” and can also be coded as “positive” and “negative verbal statements” if it meets previously specified criteria for those items.

5. Caregiver **constantly** provides verbal stimulation. Caregiver is extremely verbal throughout the interaction. The amount of language provided by the caregiver is evident for 81% or more of the interaction.
4. Caregiver **frequently** provides verbal stimulation. Caregiver is typically verbal during interaction, although there are brief periods of silence observed. The amount of language provided by the caregiver is evident for 61% - 80% of the interaction.
3. Caregiver **occasionally** provides verbal stimulation. Caregiver is verbal for half the interaction and verbally unresponsive for about half the interaction. A period of silence might be evident for 31%-60% of the interaction.
2. Caregiver **rarely** provides verbal stimulation. Prolonged silences are evident during the majority of the interaction, with only 11% - 30% of any verbalizations.
1. Verbal stimulation is largely **not observed**. Indicators of verbal stimulation are observed for 0% - 10% of the interaction.

6. Quality of Language

This item is concerned with the quality of verbal stimulation and richness of language provided by the caregiver. Language quality is coded according to the level of explanatory verbal style. During the early stages of language, an explanatory style is characterized by a high use of labels, adjectives, and adverbs to transmit information to the child.

The use of imperatives and pronouns such as “Look,” “Get it,” and “You do it,” do not express the explanatory verbal style, but rather an imperative style. Note: If the amount of language is scored as ‘1’, then the quality of language should be scored as ‘1’ as well.

5. Caregiver **constantly** uses the explanatory verbal style. Caregiver expresses a rich amount of language (e.g., elaborating on child's vocalizations/attempts to communicate, a high use of elaborate stories related to child play) throughout (81% or more) the interaction.
4. Caregiver **frequently** uses the explanatory verbal style. Typically, caregiver expresses a sophisticated level of language, only a few instances of directives and pronouns are observed during interaction. Caregiver's expressions of sophisticated language are observed for 61% - 80% of the interaction.
3. Caregiver **occasionally** uses explanatory verbal style. Caregiver expresses a rich amount of language (e.g., elaborately describes object child is playing with) during half the interaction and expresses less sophisticated language (e.g., directives) for about half the interaction. Caregiver's expressions of sophisticated language are observed for 31% - 60% of the interaction.
2. Caregiver **sporadically** uses explanatory verbal style. Caregiver seldom expresses a sophisticated level of language during interactions with child, only a few instances of labeling objects or activities are observed during interaction.

Caregiver's expressions of sophisticated language are observed for 11% - 30% of the interaction.

1. Use of explanatory verbal style is largely **not observed**. Indicators of explanatory verbal style are observed for 0% - 10% of the interaction.

Indicators of Quality of Language

- Labeling - caregiver provides proper names for objects rather than uses pronouns (e.g., "it" or general words such as "toy")
- Labeling actions (e.g., "You cut the pizza")
- Describing toys or activities with the high use of adjectives and adverbs (e.g., "big," "little," "loudly," "softly" etc).
- Describing toys with the high use of colors or numbers (e.g., "the blue spoon" or "two lions")
- Narrating during activities. Referring to the farm set, "This is the farm where all the animals live and at night they also sleep here" or with the cooking set, "We're going to make carrots and peas for dinner tonight and it's going to be great!" and relating play with own experiences, "We're going to make peas for lunch like we did yesterday at home."

II. CHILD BEHAVIOR ITEMS

A. Affect

1. Positive Affect

This item indicates the child's demonstration of positive attitude, or positive emotional tone, toward the caregiver and play activities. It examines the frequency of displays by the child to the caregiver and/ or toys as evidenced by the child's facial expression and body positioning. It is important to note children may express positive affect differently. Positive emotional tone may be expressed in a jovial manner or in a more quiet, loving, and warm way. It is important to note that because the items are unipolar items, child negative affect DOES NOT in itself constitute a low score on positive affect, particularly if a child mixes positive with negative (thereby receiving, for example, a "3" for positive affect).

5. Child **constantly** expresses positive affect. Emotional expressions of joy or content are observed throughout most of the interaction (81% or more of the interaction).
4. Child **frequently** expresses positive affect. Child expresses positive affect (laughter, smiles, loving gazes) toward caregiver or toy play for approximately 61% - 80% of the interaction.
3. Child **occasionally** expresses positive affect. Child expresses positive affect toward caregiver and/or toy play for approximately 31% - 60% of the interaction.
2. Child **rarely** expresses positive affect. Brief demonstrations of positive affect (e.g., smiling) are observed for approximately 11% - 30% of the interaction.

1. Positive affect is largely **not observed**. Indicators of positive affect are observed for 0% - 10% of the interaction.

Indicators of Positive Affect

- Smiling at caregiver
- Laughing/giggling with caregiver or in delight of interaction
- Displaying a “loving gaze” at caregiver through warm facial expression
- Clapping or waving hands in enjoyment
- Verbalizing or vocalizing in a soft or light tone

2. Negative Affect

This item refers to the child’s demonstration of negative attitude, or negative emotional tone, toward the caregiver and play activities. It examines the frequency of displays of negative feelings by the child to the caregiver and/or play activities, as evidenced through the child’s facial expression and body positioning.

It is important to note that a negative emotional tone can be displayed in different ways in children. Negative emotional tone may be expressed outwardly such as through angry behaviors (e.g., crying, yelling) or in more subtle ways such as through depressed behaviors (e.g., frowning, pouting).

5. Child **constantly** expresses negative affect. Expressions of negative affect (e.g., crying, frowning, discontent) are observed throughout most of the interaction (81% or more of the interaction).
4. Child **frequently** expresses negative affect. Child expresses negative affect (e.g., sadness, whining) toward caregiver and/or play activities for approximately 61% to 80% of the interaction.
3. Child **occasionally** expresses negative affect. Child expresses negative affect toward caregiver and/or play materials for approximately 31% to 60% of the interaction.
2. Child **rarely** expresses negative affect. Brief expressions of negative affect (e.g., unhappiness, crying,) are observed (11% to 30% of the interaction).
1. Negative affect is largely **not observed**. Indicators of negative affect are observed for 0% - 10% of the interaction.

Indicators of Negative Affect

- Crying
- Frowning/Pouting
- Whining and other behaviors indicating frustration or crankiness
- Arching body
- Yelling demonstrating anger

3. Positive Touch

This item refers to both amount and quality of child’s positive touch, which includes gentle, loving touch or active and playful touch. Children can touch with their hands,

face, and body. If child uses toys to touch caregiver (such as using a toy to lovingly stroke caregiver), it is included as positive touch.

When coding touch, it is important to note the child's intention. ***Positive touch must be deliberate and intentional.***

5. Child **constantly** engages in positive touch. Child displays many instances of positive touch (a rate of approximately 4 or more instances in 5-min). For continuous displays of positive touch (burying head or leaning in caregiver's lap), child touches the caregiver for 81% or more of the interaction.
4. Child **frequently** engages in positive touch. Child displays positive touch (e.g., kisses) at a rate of approximately 3 instances in 5-min. For continuous displays of positive touch (leaning on caregiver), child touches caregiver for approximately 61% - 80% of the interaction.
3. Child **occasionally** engages in positive touch. Child expresses positive touch (e.g., kisses) at a rate of approximately 2 instances in 5-min. For continuous displays of positive touch (leaning on caregiver), child touches child for approximately 31% - 60% of the interaction.
2. Child **rarely** engages in positive touch. Child expresses few indicators of positive touch (a rate of approximately 1 instance in 5-min) and continuous forms of touch are brief in nature (11% - 30% of the interaction).
1. Positive touch is largely **not observed**. Indicators of positive touch are observed for 0% - 10% of the interaction.

Indicators of Positive Touch

- Hugging or cuddling of caregiver
- Kissing caregiver
- Touching hand or arm of caregiver
- Leaning or burying head in caregiver's lap

4. Negative Touch

This item refers to both amount and quality of negative touch, which includes forceful or abrupt touching of the caregiver. Children can touch with their hands, face, and body. If a child uses a toy to touch a caregiver (e.g., such as grabbing a toy out of caregiver's hand or hitting caregiver with toy), it is included as negative touch.

When coding touch, it is important to note the child's intention. ***Negative touch must be deliberate and intentional.*** For example, negative touch would not be coded if the child accidentally hits a caregiver's head while reaching for an object.

5. Child **constantly** engages in negative touch. Child displays many instances of negative touch (a rate of approximately 4 or more instances in 5-min).
4. Child **frequently** engages in negative touch. Child displays negative touch (e.g., hitting, kicking) at a rate of approximately 3 instances in 5-min.
3. Child **occasionally** engages in negative touch. Child expresses negative touch (e.g., hitting, kicking) at a rate of approximately 2 instances in 5-min.

2. Child **rarely** engages in negative touch. Child expresses few indicators of negative touch (at a rate of approximately 1 instance in 5-min).
1. Negative touch is **not observed**. Indicators of negative touch are not observed at all.

Indicators of Negative Touch

- Hitting, kicking, pushing, pinching, or biting caregiver
- Grabbing or pulling caregiver's body part or clothing
- Pulling toy out of caregiver's hand
- Striking caregiver with toy or throwing toy at caregiver

5. Emotional Regulation

This item reflects the child's ability to regulate all aspects of emotion. The score for this item indicates the ability of the child to control his/her excitability and stimulation during the interaction. The stimulation can be provided by the play material, the caregiver, or the evaluator.

High scores indicate a child who is generally content during the interaction. A child who becomes distressed during the interaction may still receive a high score if he/she is able to soothe him/herself quickly and without much prompting from the caregiver. Low scores indicate a child who is unable to self-soothe during the interaction and is upset during much of the interaction, a hypersensitive or distractible child who may be so disrupted by the sights and sounds of the play session, so he/she cannot attend to the tasks, or a child who appears to be "looking into space" for a significant amount of time.

5. Child **constantly** regulates emotions. Child demonstrates ability to stay content throughout interaction and, if distressed (e.g., by taunting of caregiver), he/she quickly brings self back to a calm and alert state. Child exhibits ability to be emotionally regulated for 81% or more of the interaction.
4. Child **frequently** regulates emotions. Child is typically content, however may exhibit a few instances of difficulties with transitioning or calming self down when upset. Child exhibits ability to be emotionally regulated for 61% - 80% of the interaction.
3. Child **occasionally** regulates emotions. Half the time the child is calm and content and half the time the child is easily overwhelmed (e.g., averting gaze, crying, overly excited). Child exhibits ability to be emotionally regulated for 31% - 60% of the interaction.
2. Child **rarely** regulates emotions. Child is typically unable to self-soothe and his/her overly excited, and/or fidgety behaviors get in the way of his/her ability to focus on activities. Child exhibits ability to be emotionally regulated for 11% - 30% of the interaction.
1. Emotional regulation abilities is largely **not observed**. Indicators of emotional regulation are observed for 0% - 10% of the interaction. Child is easily distressed and quickly moves from a calm state to a full-blown cry. He/she is easily over stimulated and almost never able to self-soothe and/or appears to be on the edge

of falling apart throughout the interaction. Typically needs full support from caregiver to calm down.

Indicators of High Emotional Regulation

- Behaving contently or positively throughout interaction
- Able to self-soothe after distress
- Able to focus for a reasonable amount of time when presented with new stimuli

Indicators of Low Emotional Regulation

- Unable to calm down or self-soothe when distressed; caregiver will repeatedly attempt to soothe child by holding or providing food
- Unable to adapt to presentation of new stimuli, becoming overly excited or upset
- Fidgeting
- Averting gaze, appearing to look “out into space”

B. Sensitivity

1. Participation with Caregiver

This item shows the degree to which the child shows interest in interacting with the caregiver. A child may initiate an activity or may be involved in a caregiver initiated activity. Activities are not limited to play or exploration of toys with the caregiver; participation may also be initiated through body language and gaze. This category is concerned only with the child and the degree to which interest is displayed in participating with the caregiver. Thus, this item should be scored irrespective of caregiver behavior.

Note: The item is coded on the *amount* of participation and not the *quality* of participation. For quality, coders should refer to responsiveness to caregiver and emotional attunement.

5. Child **constantly** participates with the caregiver. Child is almost always involved with caregiver (81% or more of the interaction).
4. Child **frequently** participates with the caregiver. Child is typically engaged and participatory with caregiver, with only brief moments of disengagement observed. Child participates with caregiver for 61% - 80% of interaction).
3. Child **occasionally** participates with the caregiver. Child displays a combination of participation and disengagement with caregiver. Child participates with caregiver for 31% - 60% of interaction.
2. Child **rarely** participates with the caregiver. Child is typically disengaged with caregiver and only briefly demonstrates involvement with or interest in caregiver. Child participates with caregiver for 11% - 30% of the interaction.
1. Participation with the child is largely **not observed**. Indicators of participation with caregiver are observed for 0% - 10% of the interaction.

Indicators of Participation with Caregiver

- Carrying through with caregiver initiated activities
- Gazing at caregiver in attempt to initiate activity or response
- Looking at and/or maintaining eye contact with caregiver

- Verbalizing/vocalizing, as well as pointing, waving, or outstretching hand to initiate play or signal to caregiver that a toy is wanted
- Approaching caregiver
- Opening body toward caregiver

2. Responsiveness to Caregiver

This item refers to the degree to which the child responds positively and appropriately to caregiver requests for interaction. Responsiveness can include the child being ‘tuned in’ to the caregiver’s request, cooperation with caregiver requests for interaction, or a caregiver and child engaging in conversation.

A high score indicates a child who makes a clear effort to comply with the caregiver’s suggested activity, but the effort does not have to be immediate. A low score indicates a child who either responds negatively and/or defiantly to caregiver’s ideas, or has no response to caregiver.

5. Child **constantly** responds to caregiver. The child is almost always (81% or more of the time) responsive to caregiver verbalizations and actions.
4. Child **frequently** responds to caregiver. Typically, the child responds to caregiver's initiations and/or verbalizations (61% - 80% of the time), only a few times when he/she is unresponsive to caregiver.
3. Child **occasionally** responds to caregiver. Half the time the child responds appropriately to caregiver’s initiations and verbalizations (31% - 60%of the time) and half the time the child doesn't respond or responds defiantly.
2. Child **rarely** responds to caregiver. Although child is typically unresponsive or defiant toward caregiver's efforts to engage child, the child may exhibit some interest in and responsiveness to caregiver's attempts (11% - 30% of the time).
1. Responsiveness to caregiver is largely **not observed**. Indicators of responsiveness to caregiver are observed for 0% - 10% of the interaction.

Indicators of Responsiveness to Caregiver

- Responding to caregiver requests such as reading book
- Stopping own activity and interacting with caregiver when caregiver presents a new toy
- Verbalizing, vocalizing, or gazing at caregiver’s verbalizations
- Walking towards or reaching out for caregiver

3. Emotional Attunement

The item reflects the degree to which the child emulates and supports the expressions of the caregiver using body, voice quality, gestures and facial expressions. This item extends beyond the sheer negative or positive to encompass the sharing of emotions with the caregiver. Animation and intensity are considered in this rating. Thus, a low score would indicate a child who appears rigid and lackluster, has flat affect with dull voice quality and little variance in facial expression.

Note: This is a caregiver-dependent category and should be evaluated with consideration to the quantity of emotion displayed by the caregiver. This category may not be applicable to all children; if the caregiver does not show any emotional responses, the child would receive a '1' on this item.

5. Child **constantly** shows emotional attunement. Child almost always (81% or more of the time) emulates and supports the caregiver's display of emotions through vocalizations and/or body movement.
4. Child **frequently** shows emotional attunement. Typically, child emulates and responds to the caregiver's display of emotions (61% - 80% of the time), only a few times when he/she is unresponsive to caregiver's emotional expressions.
3. Child **occasionally** shows emotional attunement. Half the time the child's emotions match the caregiver's expressions of enthusiasm (31% - 60% of the time) and half the time the child doesn't respond to caregiver's expressions or appears lackluster.
2. Child **rarely** shows emotional attunement. Although child typically doesn't show emotional response to caregiver's display of emotions, child may exhibit some attunement to caregiver's emotions (11% - 30% of the time).
1. Emotional attunement is largely **not observed**. Indicators of emotional attunement are observed for 0% - 10% of the interaction.

Indicators of Emotional Attunement

- Caregiver claps and says "Yay!" – Child claps, smiles or laughs in response
- Caregiver says, "What's that?" – Child looks at caregiver in surprise
- Caregiver stirs food in pot vigorously – Child energetically imitates with own pot and spoon
- Caregiver whispers – Child whispers in response or positions body to hear the caregiver better

C. Play/Communication

1. Toy Play

This item refers to the degree or the general amount in which the child is engaged with the toys throughout the interactions. Participation, interest and engagement with the toys are measured, and not the quality or sophistication of play.

A high score indicates that the child is constantly engaged and interested in the toys. A low score indicates that the child appears uninvolved, not initiating or responding to play activities.

5. Child **constantly** is involved in toy play. The child physically manipulates toys throughout the interaction. The child is involved in toy play for 81% - 100% of the interaction.
4. Child **frequently** is involved in toy play. The child typically manipulates toys presented; there are only a few instances when the child does not handle a toy. The child is involved in toy play for 61% - 80% of interaction.

3. Child **occasionally** is involved in toy play. Half the time the child is handling toys presented, and half the time no toy manipulation is observed. The child is involved in toy play for 31% - 60% of the interaction.
2. Child **rarely** is involved in toy play. Although the child almost never physically manipulates toys provided, a few instances are observed. The child is involved in toy play for 11% - 30% of the interaction.
1. Toy play is largely **not observed**. Indicators of toy play are observed for 0% - 10% of the interaction.

2. Task Persistence

This item reflects the degree to which the child actively explores objects or the environment in a focused manner. This item indicates the child's visual, auditory, and tactile exploration. It evaluates how well the child remains focused, attentive, and persistent during exploration and task completion. A high score indicates the child showing perseverance in a difficult task, while a low score indicates the child moving quickly from one toy to another.

5. Child **constantly** attends to tasks, is persistent and stays focused. The child is extremely focused and persistent when exploring activities throughout the interaction. The child is persistent for 80% or more of the interaction.
4. Child **frequently** attends to tasks, is persistent and stays focused. The child is typically focused and attentive to toys presented (even activities that are challenging), although he/she displays a few instances of off-task behavior. The child is persistent with tasks for 61% - 80% of the interaction.
3. Child **occasionally** attends to tasks, is persistent and stays focused. The child displays persistent and focused engagement with activities during half the interaction and displays off-task behaviors (e.g., flittering between activities, giving up on difficult tasks, playing with toy while looking in another direction) during half the interaction. The child is persistent with tasks for 31%-60% of the interaction.
2. Child **rarely** attends to tasks, is persistent and stays focused. Prolonged periods of off-task behaviors are evident during the majority of the interaction, with only 11% - 30% of any focused persistence on tasks.
1. Task persistence is largely **not observed**. Indicators of task persistence are observed for 0% - 10% of the interaction.

Indicators of Task Persistence

- Playing a significant amount of time with one toy such as a phone
- Playing with toys even though he/she may have distractions such as intrusive caregiver
- Continuing with a task such as moving animal figures up a ramp even if it appears difficult for him/her

3. Play Sophistication

This item refers to the amount of symbolic play the child exhibits when engaging with toys. It indicates the child's symbolic and/or creative play as opposed to exploratory, functional non-symbolic play such as pressing buttons on a phone or banging objects. *Symbolic* play processes are characterized by the child's re-enactment of activities performed by self, others, and objects in simple pretense scenarios. Symbolic play activities include pretending to drink from a cup, feeding a doll and pretending to cook. *Creative* play processes are characterized by the child's willingness to play with toys in a different and unique manner, through novel scenarios or uses of a toy that are not typical.

For play to be coded as highly sophisticated, child must show evidence of symbolic and/or creative behavior in every set of toys (or scenario). Note: Solely putting phone to ear or manipulating pizza is not counted as sophisticated play. Sophisticated play must include an element of pretense or imagination.

5. Child **constantly** shows sophisticated play. Child is continuously engaged in symbolic and/or creative play for 81% or more of the interaction.
4. Child **frequently** shows sophisticated play. Child typically plays symbolically and/or creatively with toys throughout much of the interaction, there are only a few instances of non-symbolic play or no involvement playing with toys. The child is involved in sophisticated play for 61% - 80% of interaction.
3. Child **occasionally** shows sophisticated play. Child equally incorporates symbolic/creative play and either non-symbolic or no play with toy materials. The child is involved in sophisticated play for 31% - 60% of the interaction.
2. Child **rarely** shows sophisticated play. Child typically does not play with toys or plays with toys in exploratory and functional non-symbolic ways (push buttons). There are 1 - 2 brief instances of symbolic/creative play observed. The child is involved in sophisticated play for 11% - 30% of the interaction.
1. Sophisticated play is largely **not observed**. Indicators of positive affect are observed for 0% - 10% of the interaction.

Indicators of Play Sophistication

- Pretending to cook for caregiver, stirring pots, moving oven knobs, and serving food
- Pretending to call family member and have a conversation with him/her over the phone
- Placing animal figure on plate and pretends to eat figure
- Using pot as a hat

3. Amount of Communication

This item reflects the amount of vocalizations/verbalizations provided by the child, irrespective of verbal content and style. A high score represents a child who is extremely vocal/verbal throughout the interaction.

Note: This rating is based on the general impression of the amount of vocalizations/verbalizations, NOT on counting instances of vocalization/verbalization.

5. Child **constantly** vocalizes/verbalizes. The child is extremely vocal/verbal throughout the interaction. The amount of vocalizations by child is evident for 81% or more of the interaction.
4. Child **frequently** vocalizes/verbalizes. The child is typically vocal/verbal during interaction, although there are brief periods of silence observed. The amount of vocalizations/verbalizations provided by the child is evident for 61% - 80% of the interaction.
3. Child **occasionally** vocalizes/verbalizes. The child is vocal/verbal for half the interaction and silent for about half the interaction. A period of silence might be evident for 31%-60% of the interaction.
2. Child **rarely** vocalizes/verbalizes. Prolonged silences are evident during the majority of the interaction, with only 11% - 30% of any vocalizations/verbalizations.
1. Vocalizations/Verbalizations are largely **not observed**. Indicators of vocalizations/verbalizations are observed for 0% - 10% of the interaction.

4. Quality of Communication

This item refers to the quality of communication provided by the child. Communication quality is based on the frequency and clarity of the child's vocalizations/verbalizations expected for 14-month-olds.

Fourteen-month-olds predominantly use communicative gestures (e.g., shakes head for no, opens and shuts hand for more) with a variety of single words. A low score reflects no vocalizations nor gestures to communicate.

5. Child **constantly** vocalizes. Child uses spontaneous language, variety of single words used, clear speech, uses language to make wants known throughout much of the interaction.
4. Child **frequently** vocalizes. Child uses 1 or 2 words clearly and referentially, mostly uses vocalizations and gestures to make wants known (e.g., arms up with grunts to be picked up).
3. Child **occasionally** vocalizes. Child uses half spontaneous, half imitation, and use gestures to clarify intent.
2. Child **rarely** vocalizes. Child uses imitative language, jabbering, mostly unclear language, only using gestures (e.g., points to object wanted without vocalizations).
1. Child **does not** vocalize. No vocalizations or babbling with no actual words or no communicative gestures are observed.

III. DYAD ITEMS

A. Mutuality

1. Mutual Enjoyment

Scores in mutual enjoyment are based on a general impression of the dyad, reflecting the shared pleasure between the dyad. Coders must observe the general amount of positive feelings expressed by the dyad, as to whether there is evidence of mutual enjoyment between the caregiver and child.

A high score reflects a positive interaction characterized by shared mutual affection and acknowledgement of each other's expressions of positive emotions (e.g., smiles, laughter). A low score reflects a negative interaction in which the caregiver or the child appears bored or frustrated during interactions with each other. It also may reflect an interaction in which neither caregiver nor child is engrossed in each other's emotional expressions.

5. The dyad is **constantly** in mutual enjoyment. Caregiver and child continuously display an open sharing of affection throughout 81% or more of the interaction.
4. The dyad is **frequently** in mutual enjoyment. Caregiver and/ child typically display an emotional connection, there are only a few times when one or both are not responding to the other partner's emotional expressions. Caregiver and child are in mutual enjoyment for 61% - 80% of the interaction.
3. The dyad is **occasionally** in mutual enjoyment. Caregiver and/or child exhibit a mixture of shared emotional expressions (31% -60%) and disconnected/disinterested emotional feelings with the each other.
2. The dyad is **rarely in** mutual enjoyment. Caregiver and/or child are usually unaware of or disinterested in the other's emotional expressions. They may share positive emotions for 11% - 30% of the interaction.
1. The dyad is largely **not in mutual enjoyment**. Indicators of mutual enjoyment are observed for 0% - 10% of the interaction.

Indicators of Mutual Enjoyment

- Playing intently with one another
- Smiling at each other and at interaction
- Interacting without boredom or frustration

2. Mutual Communication

Scores in mutual communication are based on a general impression of the dyad, reflecting the shared communication (verbally and behaviorally) between the dyad. Coders must observe the general cohesion of the dyad, as to whether or not there is evidence of mutual understanding between the caregiver and child.

A high score reflects a positive interaction characterized by high levels of responding and understanding within the dyad. The dyad may use facial expressions, gestures or verbal

overtures in their communication. A low score reflects an unbalanced communication pattern within the dyad.

5. The dyad is **constantly** in mutual communication. Caregiver and child display a shared exchange of communication (verbally or through gestures) throughout 81% or more of the interaction.
4. The dyad is **frequently** in mutual communication. Caregiver and child typically display a shared exchange of communication, there are only a few times when one or both are not responding to the other partner's communicative attempts. Caregiver and child are in mutual communication for 61% - 80% of the interaction.
3. The dyad is **occasionally** in mutual communication. Caregiver and/or child exhibit a mixture of shared (31% - 60%) and disconnected or disjointed communicative attempts (e.g., either one or both display a lack of awareness or misunderstanding of the other partner's communicative efforts).
2. The dyad is **rarely** in mutual communication. Caregiver and/or child typically are unaware of or take no interest in their partner's communication efforts. They may express some mutual communication for 11% - 30% of the interaction.
1. The dyad is largely **not in mutual communication**. Indicators of mutual communication are observed for 0% - 10% of the interaction.

Indicators of Mutual Communication

- Turn taking in verbalizing/vocalizing
- Turn taking making expressions of happiness such as smiles
- Turn taking in pointing at pictures in a book; also caregiver may name a picture in a book and child may point at object

3. Reciprocal Interaction

Scores in reciprocal interaction are based on a general impression of the dyad, reflecting turn taking with toys. Coders must observe the general cohesion of the dyad, as to whether or not there is evidence of reciprocity of play between the caregiver and child.

A high score reflects a positive interaction characterized by turn taking, sharing, and mutual acknowledgement of each other's initiations during play. A low score reflects a negative interaction in which the caregiver or the child is uninterested in interacting or responding to the other's involvement with toys. It may reflect an interaction in which neither caregiver nor child is involved in each other's activity.

5. The dyad is **constantly** reciprocal in their interactions. Caregiver and child display continuous turn taking with play activities throughout 81% or more of the interaction.
4. The dyad is **frequently** reciprocal in their interactions. Caregiver and child typically display reciprocity during play, there are only a few times when one or both are not responding to the other partner's initiations with play materials. Caregiver and child are reciprocal in play for 61% - 80% of the interaction.
3. The dyad is **occasionally** reciprocal in their interactions. Caregiver and/or child

exhibit a mixture of shared interest and lack of interest or involvement with the other partner's play. Caregiver and child are reciprocal in play for 31% - 60% of the interaction.

2. The dyad is **rarely** reciprocal in their interactions. Caregiver and/or child typically are not reciprocal in their play. They may exchange some turn taking when playing with toys for 11% - 30% of the interaction.
1. The dyad is largely **not reciprocal**. Indicators of reciprocal interaction are observed for 0% - 10% of the interaction.

Indicators of Reciprocal Interaction

- Caregiver feeds child pizza – child eats pizza – child feeds caregiver pizza – caregiver pretends to eat pizza
- Child turns page of book – caregiver reads page – child turns page again – caregiver reads again
- Turn taking in placing animals in boat
- Turn taking in stirring pot in cooking set
- Turn taking talking on the phone

Name of Coder/Coder ID#:

ID#

Date of VP:

Tape #:

Child's DOB:

Caregiver's Relationship to Child:

Child's Age:

Child's Gender:

Type of Visit:

<i>CODING OF CAREGIVER</i>		NOTES
A. AFFECT		
1. Positive Affect		
2. Negative Affect		
3. Positive Touch		
4. Negative Touch		
5. Positive Verbal Statements		
6. Negative Verbal Statements		
7. Teasing		
B. SENSITIVITY/INSENSITIVITY		
1. Participation with Child		
2. Responsiveness to Non-verbal Non-distress		
3. Responsiveness to Verbal Non-distress		
4. Emotional Attunement		
5. Flexibility		
6. Intrusiveness		
C. DIDACTIC		
1. Structuring		
2. Achievement Orientation		
3. Toy Play		
4. Play Sophistication		
5. Amount of Language		
6. Quality of Language		

Name of Coder/Coder ID#:

ID#

Date of VP:

Tape #:

Child's DOB:

Caregiver's Relationship to Child:

Child Age:

<i>CODING OF CHILD</i>		
A. AFFECT		
1. Positive Affect		
2. Negative Affect		
3. Positive Touch		
4. Negative Touch		
5. Emotional Regulation		
B. SENSITIVITY		
1. Participation with Caregiver		
2. Responsiveness to Caregiver		
3. Emotional Attunement		
C. PLAY/COMMUNICATION		
1. Involvement with Toys		
2. Task Persistence		
3. Play Sophistication		
5. Amount of Communication		
6. Quality of Communication		
<i>CODING OF DYAD</i>		
1. Mutual Enjoyment		
2. Mutual Communication		
3. Reciprocal Interaction		

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