Black Fathers' Parenting and

Young Children's Social-Emotional Development

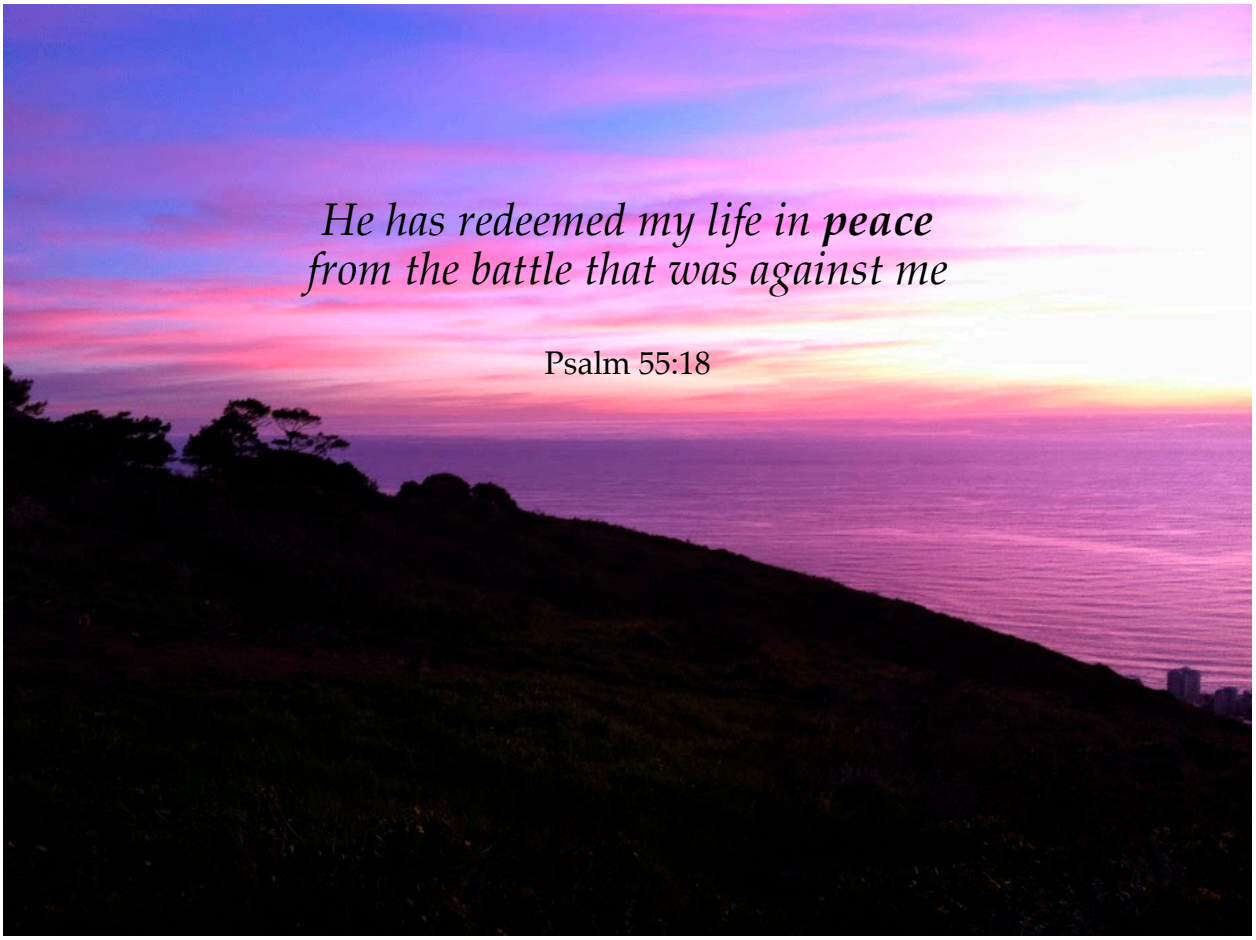
by

Tamarie A. Macon

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
(Education and Psychology)
in the University of Michigan
2015

Doctoral Committee:

Professor Tabbye M. Chavous, Chair
Professor Cleopatra H. Caldwell
Professor Sheryl L. Olson
Professor Brenda L. Volling


*He has redeemed my life in **peace***
from the battle that was against me
Psalm 55:18

Dedication

Dedicated to my own Black father,

and the future Black father of my children

Acknowledgements

I thank first the One Who is first in my life – Who has remained faithful even when I doubted, Who has generously given of His wisdom, Who has kept His promise to do exceeding abundantly above all that I can ask or imagine. To my heavenly Father, "that Father from Whom all fatherhood takes its title and derives its name", "for Whom every family in heaven and on earth is named", all praise, honor, and thanks to You. My El-Chen, the God Who favors me, thank You for making this narrow path plain to me, for going before me and preparing the Way. I am Yours.

I acknowledge You and thank You for directing my path.

To my dissertation committee, I appreciate you. To my chair and advisor from day one, Tabbye: I was told early on that your dissertation chair should be your advocate, and you have been that for me, and more. I have learned so many lessons from you, academically and otherwise. You always push me to think conceptually and not just empirically. You often explained your "method behind the madness." I had the great fortune to learn how intentional you are about every decision, and how much you really care about students – and people generally. Thank you for the multitude of ways you have shaped the kind of academic and mentor I hope to be.

Brenda, thank you for making time for me, supporting me, and giving me an opportunity to present my work. For being a positive presence and giving me a space where I felt comfortable. Thank you for believing in me. Cleo, I appreciate our strengths-based perspective of Black fathers and our similar personal history, which includes working on Capital Hill. Thank you also for giving me more food for thought regarding an academic career. Sherri, you have been so gracious to me. Thank you for being there as I struggled to figure out a dissertation topic, and for giving me concrete alternatives to try as I attempted to make sense of my results.

To my family, thank you. To my earthly father, thank you for training me according to my natural bent. I am grateful for how our relationship has grown even sweeter over the years. Your acts of service and providing abundantly for me since birth show your love. Thank you for learning to speak my love languages of quality time and affirming words. Mom, you love me with the ferociousness of a bear. No one can snatch me out of your hand. Thank you for boldly exhorting me: "You gotta believe!" Thank you for never doubting. Gabrielle, I wouldn't be here today (literally) if it wasn't for you. Thank you for allowing God to use you to encourage, reprove, and uplift me continually. You are the best big sister EVER!

To the faculty at the University of Michigan and beyond who have believed in me and nurtured my gifts – especially Drs. Jane Miller, Rob Jagers, and John Schulenberg – thank you immensely.

To my friends and fellow graduate students, thank you. CPEP cohort 2010, thank you for being the best cohort I could imagine. I hope we keep the connections we've made and continue to celebrate our accomplishments. To my lab mates, thank you for your compliments and confidence in me. Hoa, I enjoyed and drew strength from our conversations and your patience. To Ed, who counseled and reproved me to a new place. Thank you to the Ford Foundation, who funded this work (and myself!) for the majority of my graduate career.

To the children and families who have allowed me into their lives and hearts, I appreciate how you have taught me more about life, and life more abundantly.

To my chosen family (otherwise known as my friends), especially Esohe, Brandon, Diana, and CaVar, thank you for your prayers, encouragement, and allowing me to be all of myself with you. To all those who have prayed for me, sent positive thoughts and positive energy my way, and encouraged me with their words (and sometimes simply an understanding silence) – thank you.

To all who sacrificed to be physically present during my dissertation defense: Tommy Macon, Gloria Macon, Gabrielle Macon, and (in alphabetical order) Don Adams, Fred Adams, Nkemka Anyiwo, Josefina Banales, Brian Boardley, Erin Bogan, LaShonda Brenson, Diana Burnett, Yasmin Cole-Lewis, Sam Drotar, Cheryl Ervin, Johanna Evans, Asya Harrison, Herman Hawkins, Katie Hersberger, Chala House, Morgan Jerald, Natasha Johnson, Jonte Jones, Leanne Kang, Omari Keeles, Colleen Kuusinen, Seanna Leath, Isaac Lockhart, Desmond Martin, Channing Matthews, Lyonel Milton, Faheemah Mustafaa, Alicia Myers, Hurley Myers, Jennifer Myers, Noah Neidlinger, Marysa Nesmith, Sylvia Nesmith, Hoa Nguyen, Esohe Osai, Uwaifo Osaigbovo, Chuck Ransom, Latisha Ross, Caroline Saunders, Sharonda Simmons, Kelly Slay, Stevi Smith and Montez Junior, Landrea Stanfield, Alvin Thomas, Amber Williams, and Elia Wright.

Spirit lead me where my trust is without borders
Let me walk upon the waters
Wherever You would call me

Take me deeper than my feet could ever wander
And my faith will be made stronger
In the presence of my Savior

TABLE OF CONTENTS

List of Tables

List of Figures

Abstract

Amidst the narrative of an "epidemic of fatherlessness" in the Black community and negative stereotypes about African American fathers, historical and contemporary scholarship has continually supported that many Black fathers are quite involved with their children. Yet absent from the fatherhood literature are studies examining the heterogeneity of Black fatherhood among large samples, and how their parenting matters for their young children's development. In this three-study dissertation using a large, representative sample, I examined how much time Black fathers spent with their young children compared to fathers in other racial/ethnic groups (*N*=2676), then described patterns of Black fathers' parenting behaviors (*N*=1399), and lastly tested the implications of the parenting profiles on children's social-emotional adjustment, considering children's early temperament (*N*=1071).

Black, Latino, and White fathers spent similar amounts of overall time engaged with their three-year-old children, after controlling for differences in socioeconomic status and family structure. Small differences emerged according to activity type such that Black and White fathers interacted more in play and cognitive stimulation (e.g., reading); Latino fathers spent the most time caregiving; and Black and Latino fathers engaged in more social activities (e.g., visiting relatives).

Framed by the paternal involvement construct, I explored person-oriented patterns of Black fathers' engagement, warmth, and control using latent class analysis. Average

Involved fathers represented the largest group (41%), with all parenting behaviors close to the sample mean. The next largest cluster (25%), Low Involved-Disciplinarians, exhibited less father-child interaction with their young children, but slightly greater reports of spanking. The Highly Involved fathers (21%) spent more time with their children, especially in play and cognitive stimulation, and often expressed affection towards their child. The smallest subgroup of fathers (15%), Uninvolved, had the lowest involvement in each parenting domain.

Children whose fathers belonged to the different parenting groups did not differ with respect to any of the six social-emotional adjustment subscales. However, Parenting x Child Temperament interactions emerged for two outcomes (children's withdrawal and lack of guilt following misbehavior). Children with high emotionality had worse outcomes compared to their counterparts when their fathers were members of more involved parenting groups (Highly and Average Involved).

Chapter One:
Introduction

The Presence of Fathers in the United States

Over the past several centuries, the role of fathers has dramatically changed. From the earliest years of British colonization until the founding of the United States of America, fathers viewed their primary responsibility as moral teachers of their children (Lamb, 2000). Good fathering was evidenced by fathers who lived clean Christian lives and whose children knew the Scriptures. In the next era, financial provision became the defining feature of good fatherhood. Driven by industrialization in which society changed from agrarian living to manufacturing work outside the home, men and women had more clearly defined (and separate) responsibilities in the division of household labor. Whereas mothers took care of the home, fathers were the breadwinners of the family.

Beginning in the 1930s, the predominant role of fathers shifted again, perhaps due to the dramatic changes in society with the Great Depression, the New Deal, and World War II in swift succession. At that time, the primary function of fathers was to model strong sex-roles for their children, particularly their sons. Popular culture reflected society's belief that fathers' inadequacy as sex-role models led to youth rebellion, such as in the movie Rebel Without a Cause.

The 1970s ushered in the era of the "new nurturant father." With the gender revolution and more women entering the workforce outside the home, fathers were now expected to be more involved in their children's daily care.

In contemporary culture, fatherhood has come full circle. With the continued convergence of gender roles and changing family structures that include dramatic rises in cohabiting couples and single-parent households, the "new father" fulfills many of the roles highlighted across the centuries. In this epoch, good fathers are those who interact often with their children, providing emotional support and moral guidance. They are equal partners in household work, and also provide financially for their families. According to a nationally representative survey conducted by the Pew Research Center in 2013, most U.S. adults believe in the critical significance of fathers' multifaceted roles (Taylor, Parker, Morin, Cohn, & Wang, 2013). Of the four paternal functions that were asked in the survey, adults reported that it was "extremely important" that fathers impart moral values to their children (58%), followed by emotionally supporting their children (52%) and disciplining them (47%), with the provision of finances ranked last (41%). In sum, modern American society believes that fathers should be providers, but not just financially. Fathers are to be "providers" of values, encouragement, discipline, and income for their children.

As fathers' roles have shifted and transformed over time, there has been a marked increase in fatherhood scholarship, programs, funding, and media coverage. From academic researchers to government agencies to private entities to philanthropic organizations to the media, many are recognizing and encouraging the important role of fathers. The academic community has taken up fathering research much more often over the past forty years, with a striking surge since the turn of the 21st century. Evidence of increased interest in academia includes a special issue in *Marriage and Family Review* in 2000, the creation of a peer-reviewed journal devoted to the topic a few years later

(*Fathering*), and several edited volumes with multiple editions (e.g., The Role of the Father in Child Development, 5th edition in 2010; Handbook of Father Involvement, 2nd edition in 2012). Furthermore, many scholars have continued the call for the inclusion of fathers in research and programs to promote the positive development of children and youth (Caldwell et al., 2013; Kerr, Lunkenheimer, & Olson, 2007; Volling, Kolak, & Blandon, 2009).

Twenty years ago evidenced a dramatic rise in fatherhood initiatives and programs, from the creation of the federal Fatherhood Initiative under the U.S. Department of Health and Human Services (HHS) in 1994 to the funding of father researcher and practitioner networks by the Annie E. Casey Foundation around the same time. The Administration of Children and Families under HHS developed the Healthy Marriage & Responsible Fatherhood Initiative to improve the lives of families. Under the current administration of President Barack Obama, a number of policies and initiatives were established under the theme of promoting fatherhood, such as the Responsible Fatherhood Working Group and the Fatherhood and Mentoring Initiative (*Promoting Responsible Fatherhood*, 2012).

Similarly, media campaigns around fatherhood are on the rise. For example, the soap brand Dove sponsored a "Men + Care" campaign to promote real examples of fathers interacting with their children, soliciting pictures and videos from fathers across the country to share via social media outlets. Matt Lauer, the longtime host of NBC's morning show, participated in a public service announcement regarding father involvement. The National Fatherhood Initiative sponsored a television commercial

featuring a Black[1] father practicing cheerleading moves with his preteen daughter, highlighting the importance of fathers spending time with their children.

Furthermore, fathers are quite involved in their children's daily lives, perhaps more than ever before. Data from the most recent National Survey of Family Growth revealed that fathers of all races were somewhat more involved with their children than in the previous data collection in 2002 (Jones & Mosher, 2013). A comparison covering a longer time span concluded that fathers who live with their children were more involved than fathers in previous generations (Bianchi, Robinson, & Milkie, 2006). For instance, in 1965 married fathers spent an average of 1.3 hours a week with their children in activities such as teaching and playing, whereas in 2000, fathers spent 2.4 hours a week – almost double the amount 35 years earlier. In summary, fathers are more present – in research, in funding initiatives and programs, in the media, and in the lives of their children – than ever before. Even with the rising interest in fathers, the academic literature is still woefully underdeveloped, particularly compared to the wealth of research on mothers. Put simply, the study of fathers is in its infancy compared to that of mothers in the parenting literature.

In the midst of a growing interest in fathers and support for a new "nurturant fatherhood" (Lamb, 2000), negative stereotypes abound about Black fathers. The media has portrayed an "epidemic of fatherlessness" in the Black community, with major public figures such as Oprah hosting television shows to discuss the issue ("Fatherless Sons; Daddyless Daughters; Fatherless America," 2013), as well as film documentaries

[1] Throughout this dissertation, I use the terms "African American" and "Black" interchangeably. Although there are distinctions between these two descriptors, I am interested in Black fathers generally, regardless of ethnicity. Furthermore, the data did not allow me to distinguish between African American and Black.

highlighting the "crisis" of father absence (e.g., Brown, 2011; Grady, 2009; Hunt, 2011). Some have responded to the sensationalism about Black fatherlessness through counter-narratives, presenting true stories about involved African American fathers in books and film (Gordon & Middlebrooks, 2013; Lee, 2014; Naasel, 2013; Thierry, 2013).

It is the case that 72 percent of Black children are born out of wedlock (Martin et al., 2012), but single-mother households do not necessarily presume absent fathers. For instance, the National Center for Health Statistics reported that Black nonresidential fathers reported greater daily engagement with their young children in caregiving, play, and shared reading activities than White or Latino nonresidential fathers (Jones & Mosher, 2013). Furthermore, nonresidential fathers are not the majority in this population. More Black fathers live with their children than not – 2.5 million and 1.7 million, respectively (Levs, 2015). Also, the percentage of single-parent households headed by men has nearly doubled since 1980 (Vespa, Lewis, & Kreider, 2013). Of single fathers, African American men represent the largest proportion of any racial/ethnic group, totaling 324,000 Black single fathers in 2012 (Livingston, 2013).

That said, why should we study father involvement when their children are young? First, paternal engagement is more salient and frequent during the early childhood period (Lamb, 2010b; Lamb & Lewis, 2010; Leavell, Tamis-LeMonda, Ruble, Zosuls, & Cabrera, 2012; Yeung, Sandberg, Davis-Kean, & Hofferth, 2001). Second, fathers play a unique role in exposing children to the social world around them, providing contact and experiences extending beyond the home (Paquette, 2004). When children are around three years old, they may be entering day care or preschool for the first time, representing their initial entry into an environment outside of the home. The confluence

of school entry with fathers' role in facilitating their children's openness to the world makes early childhood especially important to study. Finally, the early childhood period is relatively understudied within the literature on fathers' effects (Ramchandani, van Ijzendoorn, & Bakermans-Kranenburg, 2010), and among African American families as well (Roopnarine & Hossain, 2013).

How Much Time Do Fathers Spend with Their Children?

The amount of time a father spends with his child, or paternal engagement, is an important dimension of fathering. Paternal engagement focuses specifically on fathers' direct interaction with their children, thus extending beyond mere presence or absence, or even total time spent with the child, as in the earliest studies on fathers (Lamb, 2000). Spending time with children provides opportunities for fathers to engage in high quality interactions that may promote their children's positive development through the give-and-take reciprocal exchanges that occur (e.g., Bronfenbrenner, 1994; Cabrera, Fitzgerald, Bradley, & Roggman, 2014; Pleck, 2010). The past three decades of research have largely supported that fathers' engagement is linked to adaptive social, emotional, and cognitive outcomes for children (Cowan, Cowan, Pruett, Pruett, & Wong, 2009).

Within the relatively nascent field of fatherhood research, there is a shortage of studies of African American fathers. Early father involvement scholarship was largely concerned with Caucasian, middle-class men in married families (Downer, Campos, McWayne, & Gartner, 2008). In earlier work with African American families (e.g., Biller, 1968), what predominated was the "deadbeat" or "absent" Black father, a stereotype that continues to be sensationalized by the media and popular culture. Despite the prevailing negative stereotypes about Black fathers, many of them exhibit active

involvement with their children. Yet relatively scant research analyzes the variation in how these fathers engage with their children.

Theoretical frameworks and existing race-comparative studies support the notion that African American fathers greatly value the importance of multi-faceted involvement in their children's lives. In other words, the "new nurturant father" may not be a new phenomenon among Black men. Rather, African American fathers have historically fulfilled multiple functions in their families. Consistent with their cultural beliefs and commonly occurring family structures, Black fathers may be quite involved with their children (Barbarin, 1983). For instance, the prevalence of dual-earner households among Black two-parent families may promote more egalitarian gender roles, with greater involvement of fathers in childrearing. Also, African American fathers highly value caring for their children's needs, not just financially but also emotionally (Roopnarine & Hossain, 2013; Threlfall, Seay, & Kohl, 2013). In fact, Hamer (2001, p. 135) reported that Black fathers ranked the importance of their roles as caregiver, disciplinarian, teacher/guide, and economic provider – closely mirroring American society's sentiments as documented over a decade later (Taylor et al., 2013).

Empirical research supports the notion that Black fathers are highly involved, sometimes even more so than their racial/ethnic counterparts (e.g., Jones & Mosher, 2013; Leavell et al., 2012; McAdoo, 1988). One study found that Black fathers were more likely to take their young children to visit relatives and friends as compared to White fathers, perhaps due to a greater emphasis on extended kinship networks in raising children (Leavell et al., 2012). To summarize, this line of scholarship indicates that Black

fathers have historically valued parenting and been heavily involved in raising their offspring in ways that align with their cultural values.

Beyond the overall amount of time a father spends with his child, there is reason to believe that the *kinds* of father-child activities are important in different ways for children's development. Some empirical work employing a multidimensional perspective of father-child engagement has supported these differential effects. Mitchell and Cabrera (2009) found that only when fathers engaged in didactic activities with their child (singing songs together and playing with building toys) was there a positive effect on their toddler's social competence. Other types of activities, like taking the child to the doctor, playing chasing games, or putting the child to bed, were unrelated to children's social skills. Such findings highlight the importance of considering activity type when exploring how engagement can lead to children's social and emotional outcomes.

In sum, paternal engagement is one important dimension of fathering that matters for children's development. More scholarship is needed regarding the level of African American father involvement in the midst of negative narratives of irresponsible Black fatherhood. A comparative approach to my examination of a nationally representative sample of Black fathers may reveal aspects of involvement that are especially common (or infrequent) among African Americans, relative to fathers in other racial/ethnic groups. Also, a comparative approach will indicate whether racial/ethnic differences suggested by research literature and the popular media exist after considering fathers' background and structural characteristics.

What Patterns of Fathering Exist Among Black Fathers?

Although there is a substantial body of research regarding how and why fathers are significant influences in children's lives, most extant studies examine father behaviors in isolation – a useful but perhaps less veridical and thus potentially misleading lens to describe how parenting behaviors promote child development. By taking a within-group approach to studying African American fathers, I am able to better describe how they embody multiple parenting behaviors simultaneously. Understanding what qualitatively different types of Black fathers exist provides a nice complement to research comparing overall levels of separate parenting activities. In addition to more closely depicting the reality of parenting as it is enacted in everyday life, such an approach would reveal the heterogeneity within African American fatherhood.

For example, fathers demonstrate love and affection to their children with varying frequencies. Among fathers who exhibit great warmth, some of them also may spank their children often, whereas other warm fathers may rarely engage in spanking. One of the most ubiquitous conceptualizations of parenting, the parenting styles framework (Baumrind, 1967), theoretically integrates these two dimensions of warmth and control. However, most empirical research considers parental warmth and control separately, or analyzes the interactive effect of these dimensions on child outcomes, rather than utilizing methodologies that consider how multiple aspects of parenting occur simultaneously within individuals.

We know little about how African American fathers (or fathers generally) parent their children in an integrative, holistic way. Among the limited extant empirical research on patterns of fathers' parenting, a few common profiles have emerged, as well as some

novel groups. Generally, scholars find a highly involved pattern of fathers (Goodman, Crouter, Lanza, Cox, & Vernon-Feagans, 2011; Jain, Belsky, & Crnic, 1996; Paquette, Bolté, Turcotte, Dubeau, & Bouchard, 2000), which includes fathers who spend time in particular activities with their children, such as caregiving (Jain et al., 1996), or fathers who engage with their child in an exceptionally responsive, warm manner (Goodman et al., 2011). Conversely, there are subgroups of fathers who are largely unengaged in parenting (Jain et al., 1996), or may have a negative or hostile relationship with their child (Goodman et al., 2011).

Beyond these fathers on the extreme ends of the continuum, scholars have uncovered other distinctive fathering groups. For example, "stimulative" fathers invite their children to explore the world around them, while also providing high levels of both emotional support and discipline (Paquette et al., 2000). These fathers often think of their children and talk positively about them to others.

What characteristics are associated with fathers who engage in particular sets of behaviors? Generally, fathers with more resources – psychological, financial, and social – are found in parenting profiles that are generally better for children's development, such as being sensitive and involved. At the same time, some contextual features, including the quality of the relationship between parents and gender of the child, have not differentiated father groups, although these findings were often limited to single studies. Put simply, much more work is needed to better describe holistically both what fathers do, and what characteristics may influence how they parent.

What Effects Do Fathers Have on Their Young Children's Social-Emotional Development?

After determining patterns of fathers' parenting practices, a logical next question is: Does that matter for their children's development? Given the rapid increase in policies and programs aimed at bolstering paternal involvement, it is incumbent upon researchers to systematically study father effects to determine best practices and inform program and policy efforts. The popular message to fathers to "get involved" has been supported by a solid research base, but that scholarship often examines different behaviors in isolation. We should work to determine what combinations of behaviors fathers can adopt and adapt to their particular circumstances, and how such ways of interacting are related to their children's development.

I am specifically interested in young children's social and emotional development, which is a broad area that includes functioning in emotional awareness, expression, and regulation, as well as efficacy in social interactions (Saarni, 1999). First, social-emotional competence is related to numerous and varied developmental domains. Socially and emotionally competent children have better peer relationships (Bierman, Torres, & Schofield, 2010) and are less likely to exhibit psychopathology (e.g., Cole & Hall, 2008). Children with adaptive social-emotional skills learn better (e.g., Denham, Bassett, & Zinsser, 2012) and are more successful academically (e.g., Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Jones & Bouffard, 2012).

Second, the limited literature on paternal effects suggests fathers may have a unique influence on children compared to mothers, particularly in the realm of social-emotional skills. Conceptually, this differential function of fathers may be a result of

fathers playing a larger role than mothers in the socialization of children's emotions, especially in anger regulation (Parke et al., 2002). Also, father-child interaction tends to be more spontaneous, exciting, and unpredictable compared to mothers, which may provide a context for developing emotion regulatory abilities and learning social norms (Paquette, 2004).

Regarding the development of social-emotional competence, timing is critical. Decades of research confirm the importance of early childhood in the development of social-emotional competence. Early strengths in social skills frequently prelude positive development in the future. The reverse may be true as well. For example, early peer aggression often sets the stage for later aggression (Olson, Lopez-Duran, Lunkenheimer, Chang, & Sameroff, 2011), and other work has complemented these findings regarding the continuation of both internalizing and externalizing problems that began early in life (e.g., Spinrad et al., 2007).

Developmental changes also heighten the significance of social competence in early childhood. During the first five years of life, children rapidly acquire cognitive as well as social and emotional skills (Baker, 2013). The emotional development literature suggests that by the age of 3 children experience the full repertoire of emotions (Suveg & Zeman, 2004). Just a few years later, more advanced coping strategies emerge, such as self-reliance in regulating strong emotions, e.g., accepting personal responsibility for problem-solving as opposed to depending on parents (Zimmer-Gembeck & Skinner, 2011). However, a shift from behavioral coping strategies (e.g., moving away from the source of stress to another location) to cognitive strategies (e.g., thinking positive thoughts) does not emerge until around age 10 (Stegge & Terwogt, 2007). In sum, early

childhood represents a time period in which children have experienced a broad range of feelings, yet are still developing their skills in identifying and controlling their emotions.

Regarding the converse of prosocial development, the normative trajectory of aggressive behavior is important to consider because it can signal when social difficulties may be more indicative of serious problems. Childhood aggression peaks around age 2 or 3 (Olson et al., 2011), and then typically declines afterward (Bierman et al., 2010). Thus, five-year-old children who behave aggressively and exhibit poor interpersonal skills may be more at risk for continued problem behavior, and prompt concerned adults to seek intervention, as compared to younger children who behave similarly.

In addition to these developmental milestones, social changes require young children to possess social and emotional competence. Typically, most children enter school by age five, whether for the first time or following preschool or daycare. As children move into the world of peers at school, the demands of the social environment and desire for friends compel children to learn social skills (Denham, 1998).

Yet qualities of the child may affect how (or whether) fathers' involvement leads to positive child development. Theoretically, several scholars have posited that individuals may be more or less affected by their environment, i.e., differential susceptibility theory (e.g., Belsky, 2005; Ellis, Boyce, Belsky, Bakermans-Kranenburg, & Van Ijzendoorn, 2011). The most-studied child characteristic is negative temperament, which describes infants who were difficult to soothe, irritable, and fussy early in life (Rothbart & Bates, 2007). A growing body of studies affirms that children who were high in negative temperament had heightened sensitivity to parental influence (e.g., Belsky & Pluess, 2009; Mitchell et al., 2014). However, little research has been conducted

regarding children's sensitivity to parenting by fathers. It may be that emotional characteristics of children affect whether paternal involvement promotes their acquisition of social skills and prevents their development of emotional problems.

Dissertation Goals

The purpose of this dissertation is to examine the levels of father-child engagement among African American fathers of three-year-olds, compared to other racial groups, as well as to understand the varied ways in which Black fathers parent their young children, including the correlates and consequences of parenting patterns. In my dissertation studies, I use the paternal involvement construct (Pleck, 2010), originally put forward by Lamb and Pleck and colleagues thirty years ago (Lamb, Pleck, Charnov, & Levine, 1985; Lamb, Pleck, & Levine, 1985). Pleck defines paternal involvement as a multidimensional construct including the five domains of positive engagement activities; warmth and responsiveness; control; indirect care; and process responsibility. Although the terms *involvement* and *engagement* have been used interchangeably in previous literature (perhaps not surprisingly given that they are near synonyms in everyday language), I adhere to the conceptual distinction provided by Lamb and others. Engagement refers to direct interaction with the child, whereas involvement refers to an overarching construct that includes multiple dimensions, one of which is engagement.

My dissertation had three specific aims corresponding to three empirical studies. My first dissertation aim was to examine Black fathers' paternal engagement with their three-year-old children around a range of behaviors, as compared to Latino and White fathers. Importantly, I considered the role of demographic and structural affordances and constraints, such as age of the father and socioeconomic status.

My second dissertation aim was to examine variation among Black fathers' in their patterns across multiple parenting behaviors. Utilizing a multidimensional conceptualization of paternal involvement (Pleck, 2010), I examined the person-centered fathering clusters that emerged among a constellation of behaviors covering positive engagement activities (time spent with the child), warmth (showing affection towards the child), and control (disciplining the child). Additionally, I determined possible sociodemographic correlates of different fathering groups, such as fathers' education, quality of relationship with the mother, and gender of the child.

My third dissertation aim was to examine how Black fathers' parenting related to their children's social-emotional development. Specifically, I considered how the African American fathering profiles that emerged related to children's anxiety, withdrawal, aggression, lack of guilt following misbehavior, attention, and social problems. I drew on the expanded model of paternal influences (Cabrera et al., 2014), which emphasizes indirect pathways from father involvement to child development. Thus, I also examined whether the associations between fathering and child outcomes were stronger for children who exhibited high emotionality as infants.

Contributions

In my dissertation project, I sought to deepen our understanding of Black fathers by first comparing their engagement levels with their young children to fathers in other racial/ethnic groups, and then developing a more nuanced picture of their fathering behaviors and how those ways of fathering influenced their children's adjustment. This project contributed to the literature in multiple ways. My first study contributed to the fathering literature that historically included White married men by comparing paternal

engagement among a racially and structurally diverse sample of fathers. I compared fathers on overall interaction as well as in different types of activities. Also, I statistically controlled for sociodemographic and structural factors that may be associated with interaction frequency, and used father-reported engagement, as opposed to mothers' ratings that are prevalent in previous scholarship.

In my second study that described how fathers parent their three-year-olds, I utilized a person-centered conceptual and analytic approach, rather than considering involvement behaviors separately. It is the first study to examine the paternal involvement construct holistically by determining patterns of fathers' levels across the dimensions of engagement, warmth, and discipline. Also, the limited work on profiles of paternal parenting has yet to examine the heterogeneity among African American fathers, nor have fathers who do not live with their child been studied.

Third, literature on African American fathers' role in their children's development tends to focus on older children and adolescents (Ramchandani et al., 2010). This may be developmentally appropriate, depending on the outcomes of interest (e.g., Caldwell et al., 2013). Given that research supports how developing social-emotional competence is especially important during early childhood, my third study explored Black fathers' patterns of involvement when their children were three years old, and the subsequent social-emotional implications for their children at age five. This is the first study to test the influence of father involvement using person-oriented patterns of fathering, as opposed to examining individual parenting behaviors in isolation. Studying these relations between fathering and children's social-emotional development longitudinally added to the predominantly concurrent associations found in the literature, and

conceptually provided support for the direction of association of father effects. Lastly, my third study built on the growing body of scholarship exploring child characteristics that predict differences in response to environmental contexts (i.e., differential susceptibility). Yet much of this work, as is the case in parenting literature more generally, focuses on mothers as parents. Moreover, the scant research with fathers has primarily included only White residential fathers. Thus, my dissertation broadened the scholarship on children's sensitivity to paternal influences by studying a large sample of Black fathers in diverse family structures.

Chapter Two:
Paternal Engagement in Early Childhood: How Does Race/Ethnicity, Socioeconomic Status, Family Structure, and Activity Type Matter?

Introduction

Historically, fathers are spending more time with their children than ever before (Bianchi et al., 2006), which may be particularly promising for children's development given the growing corpus of research establishing the positive effects of father-child interaction (e.g., McWayne, Downer, Campos, & Harris, 2013). At the same time, much of the fatherhood research is still dominated by studies of White, middle-class men (Downer et al., 2008), despite the growing number of minority children in the United States (Colby & Ortman, 2015). Unfortunately, negative stereotypes about minority and low-income fathers still pervade public opinion, with a common misperception that these fathers are not involved with their children, or "deadbeat dads." Notwithstanding the myth of the absent Black father, scholars have documented the historical (e.g., McAdoo, 1979) and contemporary (e.g., Jones & Mosher, 2013) roles of African American fathers in child rearing. Yet relatively little research empirically examines how these fathers engage with their children in a variety of behaviors. Parents' engagement also likely reflects the socioeconomic and structural affordances available to them (Belsky, 1984; Cabrera et al., 2014). Thus, research is needed with representative samples that take into

account important structural differences that may drive disparities in father-child engagement, such as socioeconomic status and family structure.

A small body of work has examined paternal engagement with diverse fathers (e.g., Cabrera, Hofferth, & Chae, 2011; Hofferth, 2003; Leavell et al., 2012). Yet much of this research has focused on infants or much older children (Cabrera, Tamis-LeMonda, Bradley, Hofferth, & Lamb, 2000). Fathers' engagement in early childhood is particularly critical given that paternal involvement is generally greater and more salient during this time (Lamb, 2010; Lamb & Lewis, 2010; Leavell et al., 2012; Yeung, Sandberg, Davis-Kean, & Hofferth, 2001). Second, fathers are theorized to play a unique role in exposing children to the social world around them, providing contact and experiences extending beyond the home (Paquette, 2004). As children may be entering day care or preschool for the first time, representing their initial entry into an environment outside of the family unit, a father's role in facilitating his child's openness to the world makes the early childhood period of particular import. Additionally, early involvement is associated with later involvement (e.g., Cabrera et al., 2008), thus it is critical to understand how father-child interaction may vary early in children's lives.

The current study used the Fragile Families and Child Wellbeing Study (FFCWS), a large, representative sample of three-year-olds and their fathers. This study adds to the fathering literature that largely focuses on Caucasian, middle-class men in two-parent families by examining engagement among a racially and structurally diverse sample of fathers, considering multiple types of activities rather than solely overall engagement. Importantly, I considered several structural and individual factors that may be associated with frequency of father-child interaction in order to make more balanced comparisons

across racial/ethnic groups, and focused on paternal engagement during the early childhood period. Furthermore, the present study used reports of engagement from fathers, as opposed to the exclusive reliance on mother-ratings of paternal involvement common in the literature.

Paternal Engagement in Different Activities

As U.S. society shifted from viewing fathers as primarily breadwinners to acknowledging their roles as nurturing, involved parents, scholarship shifted as well. Earlier studies focused on paternal absence/presence or financial contributions to assessing actual time fathers spent with their children (Lamb, 2000). Today, fathers' engagement, or quantitatively how often fathers spend time with their children, is the most studied component of paternal involvement (Pleck, 2010).

Originally, paternal engagement was conceptualized as the total amount of time a father spent with his child, regardless of what they did together (Lamb, Pleck, Charnov, et al., 1985). The reliance on total engagement time may have been methodological: Early studies of father-child engagement relied on primarily time diary methods, which were prevalent at the time. Time diaries allowed for comprehensive catalogues of father-child activities throughout the day. Yet numerous early fathering studies found no effect of total engagement time on children's outcomes (Cabrera et al., 2000).

Paternal engagement has been reconceptualized from total father-child time to fathers' time in directly interactive activities (Pleck, 2010). Conceptually, it is likely that more interactive activities allow for positive child development, e.g., through proximal process, rather than fathers' mere presence with their children (Pleck, 1997). Pragmatically, data collection shifted away from diary methods to asking fathers about

specific activities with children due to the high cost and burden of collecting time diary data (Pleck, 2010).

Initially, time diary studies typically divided fathers' time into "basic child care" (i.e., caregiving) and "other child care" (e.g., teaching, reading, playing), perhaps driven by Lamb and colleagues' conceptual definition of engagement as interaction "through caretaking and shared activities" (1985, p. 884). Eventually, other researchers distinguished the disparate activities included within the "other child care" category (e.g., Bianchi et al., 2006; Yeung et al., 2001). Recent scholarship has identified several conceptually similar groupings of activities using factor analysis (e.g., Leavell et al., 2012; Mitchell & Cabrera, 2009; Shears, 2007). Four categories are common across much of the research in recent decades on father-child engagement: play, caregiving, social, and cognitive. *Play* refers to playing with the child for fun, which may be more physical in nature (e.g., playing chase) or not (e.g., playing with blocks). Second, *caregiving* encompasses tending to the child's needs, such as bathing, feeding, and dressing. *Social* types of activities facilitate children's connection with the outside world. For example, taking the child out to eat at a restaurant or visiting with family and friends would be included in this category. Last, engaging in *cognitive* activities involves those that promote reading, writing, and language skills, such as singing songs with the child or reading together.

These categories of play, caregiving, social, and cognitive engagement were based on the specific behaviors shared between fathers and their children, rather than fathers' intention around the activity or the underlying purpose(s) the activity may serve. For example, there may be instances when fathers play games with their child that have a

strong cognitive component (e.g., explaining the rules), which could be captured under the conceptual category of cognitive engagement. Or, fathers could engage in more routine child care activities in a playful way, such as making a game out of mealtime, and thus blurring the lines between caregiving and play. In sum, although these activity types are distinguished based on the specific behaviors performed, they may not be completely distinct in their functions and the same activity could fulfill more than one conceptual category of behavior.

Of course, there are other conceptualizations of fathers' involvement and other activities as well (e.g., achievement-related activities, Yeung et al., 2001). For example, Palkovitz (1997) generated at least 15 categories of involvement, ranging from developing the child's interests to saving money for future events for the child. He described three overarching domains. The behavioral domain maps onto how engagement was examined in the present study. In addition to behavioral involvement, Palkovitz included the psychological presence of the child in the parents' thoughts (cognitive domain) and parents' emotional experiences and expressions that are related to their children (affective domain).

Undoubtedly, there is more to fathering than "ticks and clicks" (Hawkins & Palkovitz, 1999). However, the current study focused on specific engagement behaviors because of the salience of father-child interaction time (or the lack thereof) in public perceptions of good fathering. Also, the four activity types of play, caregiving, social, and cognitive are important for child outcomes (Palkovitz, 2002), with different types associated with particular facets of children's development (e.g., Mitchell & Cabrera, 2009). Conversely, fathers' engagement in particular tasks is differentially predicted by

certain factors (Ahmeduzzaman & Roopnarine, 1992). For instance, activities other than caregiving may be more sensitive to parental investment and other factors (Bianchi et al., 2006, p. 66). Although proportionally fathers spend the majority of their interaction time in play, fathers do more than just play with their children, despite early claims that they neglect routine child care tasks in favor of more pleasurable activities such as play (Bianchi et al., 2006, p. 66). Also, disaggregating engagement into different categories of interactions would allow a more nuanced detection of possible differences by fathers' racial/ethnic group. Lastly, these four activities have been frequently examined in previous work and thus will allow for comparison with existing studies.

Overall engagement

Theoretically, there is no rationale as to why there may be differences in overall father engagement due to race alone. Rather, scholars attribute individual differences in fathers' frequency of interaction with their children to personal qualities (e.g., paternal beliefs and attitudes; Toth & Xu, 1999) and structural factors (e.g., residential status; Castillo, Welch, & Sarver, 2011).

Empirically, comparisons of paternal engagement across racial/ethnic groups have yielded little or no differences among fathers. Two examinations using time diary data from a large, nationally representative sample of two-parent families of children from 0 to 12 years old reported no differences among fathers of different racial/ethnic groups (Hofferth, 2003; Yeung et al., 2001). Importantly, these researchers accounted for numerous father, family, and structural characteristics. For example, Hofferth (2003) initially reported a difference in overall father-child engagement favoring Whites, but that difference was eliminated after controlling for father's age and biological relationship to

the child, children's age, and family size. Because Black fathers in the sample were older, less likely to be biological fathers, had older children and larger families (all of which were related to less engagement), that highlights the importance of considering multiple individual and family characteristics when making cross-racial comparisons on paternal engagement.

Yet there was a difference in fathers' engagement favoring Latinos in a few studies (Toth & Xu, 1999; Yeung et al., 2001). Regarding results of fathers' time spent with children on weekends in particular, this ethnic difference was driven by Latino fathers spending more time in caregiving compared to other fathers (Yeung et al., 2001).

In addition, these studies examined fathers of children across multiple developmental periods (e.g., ages 0-12, ages 5-18). Leavell and colleagues' (2012) research on ethnically diverse fathers may be more relevant given the focus on early childhood as well as the items used. In their sample of African American, White, and Latino low-income fathers involved in the National Early Head Start Research and Evaluation Project, African American fathers were quite engaged with their children in all activities. On a four-point scale ranging from *rarely* (1) to *everyday* (4), African American fathers reported significantly higher levels of engagement overall than White fathers (M=2.64 and M=2.51, respectively; the precise statistical significance of this difference and descriptives for Latino fathers were not provided). At the same time, it is unclear whether controlling for sociodemographic factors might have attenuated those differences to non-significance.

Play

In general, fathers spend a greater proportion of time in play than mothers (McBride & Mills, 1993). Nationally representative data support the perception of fathers as playmates. According to the latest National Survey of Family Growth, 98% of residential fathers of children under five years old played with their child several times a week or more (Jones & Mosher, 2013). In a smaller study of low-income diverse fathers of young children, all reported heavily engaging in play (Leavell et al., 2012), a finding that has been consistently reported across a variety of samples (e.g., Perry & Bright, 2012; Schoppe-Sullivan, Kotila, Jia, Lang, & Bower, 2012).

Conceptually, there is little reason to suspect racial/ethnic differences in father-child play. Other demographic and structural factors, such as paternal age, work hours, and residential status, are more likely influencers of how often fathers spend time playing with their young children (such factors are discussed in the later section on sociodemographic influences).

Empirical findings regarding possible group differences in father-child play are mixed. Results representative of U.S. families with children under 12 showed no differences among fathers of different racial/ethnic groups in terms of time spent playing with children (Yeung et al., 2001). This parity among White, Black, Latino, and fathers in other racial groups remained after statistically controlling for multiple individual and structural characteristics. At the same time, other scholars have found slight differences in play favoring Blacks and Latinos. In Leavell and colleagues' study of low-income fathers of young children, African American and Latino fathers engaged in more physical play than White fathers (Leavell et al., 2012). Another study by Cabrera and colleagues

with fathers of infants yielded stronger empirical support to the notion that Latino and African American men spend more time in play than their White counterparts (Cabrera et al., 2011). In this study with a large, nationally representative sample, Black and Latino fathers played more with their infants, even after considering several characteristics of the fathers, such as work hours, paternal depression, and fathers' education.

One possible explanation of these mixed findings may be that both of the studies finding higher rates among Blacks and Latinos measured *physical* play, as their items tapped into high energy, rough-and-tumble type behaviors such as tickling children and blowing on their bellies (Cabrera et al., 2011) or playing chase (Leavell et al., 2012). Other work that reported similarity across fathers of different races assessed both active and passive play activities (Yeung et al., 2001).

Caregiving

African-American and Latino fathers may be more likely to participate in caregiving activities than fathers of other racial/ethnic groups. In Black families, more egalitarian gender role attitudes (e.g., Barbarin, 1983; McAdoo, 1997) may result in mothers and fathers sharing more equally in routine child care activities. Moreover, some research with Black fathers suggests fathers' high valuing of providing care to their young children. For example, in Coles' (2001) study, full-time Black fathers highlighted their roles as nurturers and providers.

Among Latino families, traditional cultural values may serve to encourage paternal caregiving. Familismo refers to the value of relational intimacy with family members and actively supporting the family's welfare (Cauce & Domenech-Rodriguez, 2002). As such, familismo may foster Latino fathers' greater involvement in routine

caregiving activities (Parke et al., 2004). Furthermore, the cultural value of machismo could translate into Latino fathers spending more time with their children. Machismo connotes traditional masculine ideals such as power, strength, and manhood. Although more associated with negative hypermasculine attitudes and sexism, machismo also includes a deep respect and responsibility towards family, including a caring, nurturing, and protective father role (Mayo, 1997).

Decades of prior research largely support the claim that African-American are heavily involved in caring for their child, as much as or more so than European-American fathers (e.g., McAdoo, 1986, 1988; McLoyd, Cauce, Takeuchi, & Leon, 2000; Roopnarine & Hossain, 2013). The most recent National Survey of Family Growth in 2010 concluded that among those who lived with their child, Black fathers fed or ate meals every day with their young children as often as White fathers (78 percent and 74 percent, respectively) (Jones & Mosher, 2013). In terms of helping their children with the daily functions of life (bathing, dressing, diapering, and helping use the toilet), 70 percent of African American fathers did so every day or several times a week, compared to 60 percent of White fathers.

With respect to Latino fathers, some research suggests that they are more involved in caregiving than other groups (Hofferth, 2003; Yeung et al., 2001), whereas other work finds no racial/ethnic differences at all on particular routine activities such as eating meals together (Hofferth, 2003), and still other work has reported that Latinos were less involved than other fathers (Jones & Mosher, 2013).

Studies that found Black fathers were more involved and Latino fathers less involved tended to use father-reported data and did not control for structural differences

(Jones & Mosher, 2013; Leavell et al., 2012). Additionally, differences across research findings may be due to particulars of the study design, such as examining fathers of a large age range of children (Hofferth, 2003; Yeung et al., 2001) and including a broader array of items to assess caregiving involvement (Hofferth, 2003).

Social activities

African American families often draw upon extended family support more so than White families (McAdoo, 2007; Taylor, Chatters, Tucker, & Lewis, 1990). Similarly, familismo among Latino families may result in prioritizing extended family for social support and resources (Almeida, Molnar, Kawachi, & Subramanian, 2009). Therefore, Black and Latino fathers may be more likely to take their children out into the social world (e.g., to visit relatives) than fathers in other racial/ethnic groups.

Leavell and colleagues' findings with low-income fathers of young children support this theoretical speculation. African American and Latino fathers were more involved in visiting activities (four-item scale including take child to visit relatives, have relatives visit, visit friends, and take child to play with other children) than White fathers. In contrast, there were no racial/ethnic differences in paternal engagement in social activities among a nationally representative sample of families with children under 12 (Yeung et al., 2001). However, in addition to studying fathers of children of a larger age range, the study's conceptualization of social involvement encapsulated a broad array of activities, such as helping others, attending religious services, having household conversations, and participation in other social events.

Cognitive activities

No rationale has been proposed for why there might be racial/ethnic differences in how often fathers read, tell stories, or sing songs to their young children. Instead, education level has been conjectured to be one of the greatest predictors of cognitively stimulating behavior among fathers (as discussed in more detail in the next section). African American, Latino, and White fathers of young children report similar levels of cognitive activities (Cabrera et al., 2011; Hofferth, 2003; Leavell et al., 2012) after controlling for several sociodemographic variables, including fathers' education. For instance, researchers studying low-income fathers initially found an "ethnic" difference in literacy engagement favoring Blacks and Whites over Latinos, but recognized through further analyses that paternal education eliminated the difference (Leavell et al., 2012).

Sociodemographic characteristics

As noted previously, the frequency with which a father engages in activities with his child likely is affected by a number of characteristics. In this study, I focused on paternal age, socioeconomic status, and family structure. Given that racial/ethnic groups differ in social and structural factors related to fathering, it is important to consider these determinants in order to understand (and perhaps account for) racial/ethnic differences in paternal engagement.

Fathers' age likely influences parenting given how energy, health status, and overall lifestyle varies across the life course (Elder, 1998). It may be that older fathers compared to younger fathers spend less time with their children, particularly in physically taxing activities such as play, which has some empirical support (Jones & Mosher, 2013). At the same time, older fathers may have more knowledge about raising children and

generally have a greater level of maturity and preparation to be a parent – financially, emotionally, etc. (Bianchi et al., 2006, p. 4) – and thus parent in ways that better support children's development. Consistent with that reasoning, a nationally representative study reported that older fathers were more likely to read to their children every day compared to younger fathers (Jones & Mosher, 2013).

With respect to socioeconomic status, higher income fathers are posited to be more invested in the care of their children through several pathways. First, having more income may be associated with more favorable attitudes and inclination towards greater paternal engagement (Ahmeduzzaman & Roopnarine, 1992). Additionally, fathers who can financially support their families may feel in a better position to invest in the social, emotional, and physical care of their children (Cabrera et al., 2011). Practically, fathers' economic contributions provide the resources to participate in certain activities, such as attending social events and going out to eat at restaurants. Conversely, it might also be the case that higher income fathers face opportunity costs in negotiating time spent at work and time spent with their children, resulting in a negative relation between income and engagement, as found in a large, diverse sample of fathers (Hofferth, 2003).

According to resource theory, more parental human capital (e.g., education) will result in greater parental investment in their children, particularly in verbally stimulating activities (Cabrera et al., 2011). Furthermore, better educated parents may be more concerned with their children's academic development and in general, more knowledgeable about the importance of positive parenting practices (Bailey, 1993). Thus, parental education should be associated with more engagement in literacy activities with

their children, such as book reading and singing songs (Tamis-LeMonda, Shannon, Cabrera, & Lamb, 2004).

Moving to family structure, clearly fathers who live with their children have greater access to them and would be more likely to engage with them, regardless of activity type (Castillo et al., 2011). Several studies confirm the positive role of residential status in supporting increased involvement (e.g., Jones & Mosher, 2013; Tamis-LeMonda, Kahana-Kalman, & Yoshikawa, 2009). Similarly, fathers who are married to the child's mother are likely to be more engaged than unwed fathers, given their expression of commitment to the family through marriage. Some researchers have found this to be true regarding particular types of activities, e.g., cognitive (Leavell et al., 2012) or play (Jones & Mosher, 2013). The lack of consistent findings across engagement overall may be a result of not considering the *nature* of the marital relationship, as better quality relationships have been associated with greater father engagement and sensitivity (e.g., Volling & Belsky, 1991). Considering differences in family structure across racial/ethnic groups (e.g., Black fathers are more likely than fathers of other races to live apart from their children, Jones & Mosher, 2013), it is particularly important to attend to family structure when making comparisons on the frequency of father-child engagement.

The Current Study

In the current study, I examined how paternal engagement (overall and by activity type) varied across a large, representative sample of Black, Latino, and White fathers of three-year-old children, controlling for the effect of demographic and contextual variables. I hypothesized that:

1. Fathers of all racial/ethnic groups would be highly involved with their three-year-olds. Given the paternal engagement literature, I expected that any differences in father-child interaction across Black, Latino, and White fathers would be accounted for by differences in sociodemographic characteristics (age, income, education level, and family structure).

2. Racial/ethnic differences were expected for certain types of activities. Although some prior research indicates racial/ethnic variation in frequency of play behavior by fathers (e.g., Cabrera et al., 2011; Leavell et al., 2012), a few of these studies did not consider socioeconomic status or family structure. Thus, I predicted that differences in father-child play would be attenuated after considering sociodemographic characteristics (hypothesis 2a). Given prior conceptual reasoning around how greater gender equality in the division of household labor in Black families (Barbarin, 1983) and adherence to cultural values among Latino families (Parke et al., 2004) may result in more paternal caregiving – which has been supported empirically as well (Cabrera et al., 2011; Hofferth, 2003) – I expected that African American and Latino fathers would engage in caregiving more than White fathers (hypothesis 2b). I anticipated that Blacks and Latinos would engage more often than White fathers in social activities (Leavell et al., 2012), due to greater reliance on extended kinship networks in minority families (hypothesis 2c). Last, I anticipated that any differences in how

often fathers spend time with their children in cognitively stimulating activities would be accounted for by sociodemographic factors, such as paternal education, consistent with prior work (hypothesis 2d; Cabrera et al., 2011; Leavell et al., 2012).

3. Regarding sociodemographic characteristics, younger fathers would be more engaged with their children than older fathers (hypothesis 3a; Yeung et al., 2001). Given that having greater economic resources may be linked with more positive attitudes towards parenting (Hoff, Laursen, Tardif, & Bornstein, 2002) and increased capacity to invest in childrearing (McLanahan, 2009), as well as the resources to participate in certain activities (e.g., attending social events, going out to eat), higher income would predict more engagement in all four types of activities (hypothesis 3b). Fathers' education level would be related to more time spent in cognitively stimulating activities (hypothesis 3c; Tamis-LeMonda et al., 2004). With respect to family structure, resident and married fathers of all racial/ethnic groups would be more involved in each type of activity relative to non-residential and unwed fathers (hypothesis 3d; Jones & Mosher, 2013).

Method

Participants

Participants were fathers of three-year-old children in the Fragile Families and Child Wellbeing Study (FFCWS), a longitudinal United States birth cohort study.

FFCWS surveyed 4,898 births from a stratified random sample of all large U.S. cities (20 of 77 cities with populations of 200,000 or more). Baseline interviews were conducted between 1998-2000. Families in which the parents were not married were purposely oversampled such that approximately three-quarters of the children were born to unwed mothers (Reichman, Teitler, Garfinkel, & McLanahan, 2001).

The paternal engagement data come from parental surveys when children were age 3 (three-year follow-up, 2001-2003). Data collection consisted of interactions with both mothers and fathers, with questions covering a wide range of domains, such as parenting, relationships, economic status, physical and mental health, and demographics. The study had high retention rates, with 72% of fathers interviewed at the three-year follow-up from the baseline survey at the focal child's birth ("Fragile Families Scales Documentation and Question Sources for Three-Year Questionnaires," 2006).

Specifically, 3,165 fathers were interviewed when their children were three years old. For purposes of this study, biological fathers who self-identified as non-Latino Black, Latino, or non-Latino White and who provided complete data on paternal engagement and the background characteristics of interest in this study were included (N=2,676 fathers). The small number of fathers who selected "other" for their racial/ethnic group (n=136) were excluded from analyses. The final analytic sample included 1,287 Black, 746 Latino, and 643 White fathers of three-year-old children.

The 353 fathers with incomplete data differed in sociodemographic characteristics compared to the final study sample of fathers with complete data. On average, the fathers with missing data were about two years younger (M=29.4 compared to M=31.2; $F(1, 3002)=17.81$, $p<.001$), had over $15,000 less family income (M=$23,025 vs. M=$40,407;

$F(1, 3027)=44.37$, $p<.001$), were less educated ($M=1.82$ vs. $M=2.19$; $F(1, 2996)=39.86$, $p<.001$) and the mothers of their children were less educated ($M=1.84$ vs. $M=2.23$; $F(1, 3025)=46.43$, $p<.001$). Regarding family structure, a smaller proportion of fathers with incomplete data were married to the child's mother relative to those with complete data (10% and 43%, respectively; $F(1, 3023)=147.71$, $p<.001$) or reside with the focal child (18% and 77%, respectively; $F(1, 3027)=3618.73$, $p<.001$).

Procedure

The Columbia University and Princeton University Institutional Review Boards approved the recruitment procedures, which involved verbal and written consent from participants at each interview time point. Follow-up interviews were first attempted by telephone. If participants could not be reached via telephone, they were located by field interviewers. Field interviewers encouraged participants to call a toll-free number to complete the survey by phone, but were also trained to administer the survey instrument in person as needed. Participants were compensated $30 for completing the three-year interviews by telephone, and those requiring a field visit to complete the core survey were provided $50 ("Fragile Families Scales Documentation and Question Sources for Three-Year Questionnaires," 2006).

Measures

Fathers' engagement in activities with their three-year-old children was assessed using a series of questions developed for an Early Head Start Evaluation study (Mathematica Policy Research, 2002). The measure was constructed to assess the frequency of a variety of activities fathers engaged in with their children. The original scale used in the Early Head Start evaluation had a total of 33 items, 25 of which were

factor analyzed to produce four scales of physical play, caregiving, social, and cognitive activities. The data source for the current study included nine of these items, which conceptually align with each of the four dimensions, such as how often the father plays imaginary games with the child (play[2]), assists the child with eating (caregiving), takes the child to visit relatives (social), and reads stories to the child (cognitive). Fathers were asked how often they did each of the activities in a typical week on a scale from 0-7 days per week. These nine items were averaged such that higher scores indicate more frequent overall engagement with the child.

Other studies of paternal engagement using Fragile Families data have reported overall engagement only (e.g., Perry, Harmon, & Leeper, 2012). However, it is important to distinguish what fathers *do* with their young children. Not only will that allow the parsing out of what ways fathers of different racial/ethnic groups vary (if at all), but also because fathers' engagement in certain activities has been associated with different beneficial child outcomes (e.g., Mitchell & Cabrera, 2009).

Thus, considering conceptual reasoning, prior literature, and face validity, four measures were created based on activity type. The *Play* subscale included 2 items: "plays imaginary games" and "plays inside with toys such as blocks or legos" (r=.48). The 2 *Caregiving* items were "assist child with eating" and "put child to bed" (r=.29). *Social* activities included 2 items, "go to a restaurant or out to eat with the child" and "take child to visit relatives" (r=.40). Last, the *Cognitive* items consisted of 3 items: "read stories to

---

[2] I use the more conservative term "play" instead of "physical play" because the shortened scale in the present study included only two play items which are not explicitly physical: play imaginary games and play inside with toys such as blocks or legos. In the full scale, the "physical play" factor included both calm activities such as the father rolling a ball with the child or bouncing the child on his knee, as well as rough and tumble play such as chasing games or turning the child upside down.

child," "tell stories to child," and "sing songs or nursery rhymes with child" (α=.81). Again, fathers reported paternal engagement on a scale from 0-7 days per week. Items within each measure were averaged such that higher scores indicated more frequent engagement with the child.

Sociodemographic control variables included self-reported data from fathers (age, income, education level, residential status, and marital status). Mothers reported on their own education levels. Except for education (which was only asked during the baseline survey), all measures were taken from the same wave of data collection as fathers' engagement, namely when the child was three years old.

Analytic Strategy

I examined father-child engagement variables among fathers of different racial/ethnic groups. I began by testing whether overall paternal engagement scores varied as a result of racial/ethnic group after considering demographic and contextual variables (i.e., fathers' age, socioeconomic status, family structure) using Analysis of Covariance (ANCOVA). Covariates included fathers' age and socioeconomic status as operationalized via household income, fathers' education level, and mothers' education level. Family structure controls included dichotomous indicators for marital and residential status.

Next, I compared African American, Latino, and White fathers on paternal engagement in each of the four activity types using Multivariate Analysis of Covariance (MANCOVA), again controlling for the same sociodemographic and family structure characteristics as in the analysis for overall paternal engagement. I followed up with statistically significant omnibus main effects of race/ethnicity with ANCOVAs for each

activity type separately. Post-hoc tests (pairwise comparisons) were conducted using Tukey's HSD correction, with an overall alpha of .05.

Results

Descriptive Summary and Evaluation of Assumptions

Descriptive statistics for the total sample and by fathers' racial/ethnic group in terms of sociodemographic characteristics and paternal engagement (overall and by activity type) are presented in Table 1. The final analytic sample was 48% Black, 28% Hispanic, and 24% White. The majority of the Latino group identified as Mexican (58%). There were significant differences by race/ethnicity across all the demographic characteristics of interest in this study, as revealed by one-way ANOVAs ($p<.001$). Post-hoc tests using Bonferroni adjustments indicated that each of the three racial/ethnic groups differed from one another on every indicator, except as noted. Fathers in this sample were, on average, in their early thirties, with White fathers about three years older than Black fathers, and Latino fathers slightly younger than both groups ($F(2, 2673)=54.18$, $p<.001$). In terms of economic resources, Blacks and Latinos reported incomes of approximately $30,000, whereas White fathers reported higher incomes of about $72,000 ($F(2, 2673)=222.75$, $p<.001$). There also were differences in education levels of fathers and mothers, with Latinos reporting the lowest, followed by Blacks, and then Whites (for fathers' education, $F(2, 2673)=247.28$, $p<.001$, and for mothers' education, $F(2, 2673)=253.56$, $p<.001$). With respect to family structure, a little over a quarter of Black fathers reported being married to the target child's mother (27%), compared to almost half of Latino fathers (46%), and a majority of White fathers (71%).

The proportion of residential fathers was similar between Latino and White fathers (approximately 85%); about two-thirds of Black fathers lived with their child.

With respect to paternal engagement, the sample overall reported spending time with their young children an average of 3.56 days per week. The most frequently reported activity was play (M=4.54, SD=2.04), followed by caregiving (M=3.93, SD=2.17), cognitive activities (M=3.52, SD=2.02), and social engagement (M=2.28, SD=1.55). A comparison of these three groups of fathers on the unadjusted means of father-child interaction revealed differences on overall engagement (F(2, 2673)=4.93, p=.007) and by activity type (play: F(2, 2673=7.09, p=.001; caregiving: F(2, 2673)=23.83, p<.001; social: F(2, 2673)=57.86, p<.001; and cognitive activities: F(2,2673)=16.72, p<.001). Post-hoc tests with a Bonferroni adjustment for multiple tests showed that – without considering any sociodemographic characteristics – Latino and White fathers reported greater overall engagement than Black fathers. White fathers played with their children more often than Black and Latino fathers. On the other hand, Black fathers reported more caregiving than White and Latino fathers. Black and Latino fathers reported more social activity engagement than White fathers, whereas White fathers reported more cognitive stimulation than Black and Latino fathers.

In terms of the paternal engagement measures, there were no extreme deviations from normality, skewness, or kurtosis among the three groups. Skewness and kurtosis values were all around absolute value 1 or less, except for social engagement among White fathers (skewness=1.22, kurtosis=1.51). However, because these values were still reasonable (less than absolute value of 2; George & Mallery, 2010), and did not occur for any other outcomes, no data transformations were performed.

ANOVA has three main assumptions: independent samples, normally distributed outcomes, and homogeneity of variances across groups (Tabachnick & Fidell, 2007). The first two assumptions were met. In terms of the third assumption, for certain paternal engagement measures the variances were not equal across Black, Latino, and White fathers. However, ANOVA is robust against violations of homogeneity of variance when there is a balanced design and larger variances are associated with larger groups. In these analyses, the sample sizes in each cell were relatively balanced, with a ratio of sample sizes about 2:1, much more balanced than the recommended 4:1 (Tabachnick & Fidell, 2007). Furthermore, the largest group in the sample (N=1287; Blacks) had the largest variances and the smallest group (N=643; Whites) had the smallest variances in all analyses, which resulted in more conservative tests. In addition, the variance ratios of the largest cell variance to the smallest cell variance were all less than ten as recommended (Tabachnick & Fidell, 2007). Regarding the ANCOVA test for overall paternal engagement, Levene's test of equality of error variances was statistically significant (F(2, 2673)=4.29, p=.01), indicating that error variances of fathers' engagement were unequal across groups. The homogeneity assumption also was violated for some of the activity types (play [(F(2, 2673)=4.06, p=.02] and social activities [F(2, 2673)=33.82, p<.001]), but not for other activities (caregiving [F(2, 2673)=1.50, p=.22] and cognitive activities [F(2, 2673)=0.15, p=.86]).

Overall Engagement Levels by Racial/Ethnic Group (Hypothesis 1)

To test whether fathers of different racial/ethnic groups differed in the amount of overall time they spent with their three-year-old children, I conducted an ANCOVA, controlling for socioeconomic status and family structure. As expected, accounting for

sociodemographic factors resulted in no significant racial/ethnic differences in fathers' overall engagement with their three-year-old children ($F(2, 2667)=0.51$, $p=.60$; see Table 2). Examination of the marginal means (which were adjusted for all the sociodemographic covariates in the model) supported that fathers of all racial/ethnic groups spent a similar amount of time with their young children (Table 9). On average, all fathers spent about 3.5 days a week engaged with their children in playing, caregiving, social activities, and cognitive stimulation. Pairwise comparisons of overall paternal engagement confirmed no difference between Black and White fathers ($p=.71$), Black and Latino fathers ($p=.31$), and Latino and White fathers ($p=.64$).

Engagement Levels by Activity Type (Hypothesis 2)

I conducted a MANCOVA test to examine possible racial/ethnic differences in paternal engagement by activity type (hypothesis 2; Table 3). The assumption of homogeneity of variance-covariance matrices was violated (Box's M=88.20, $p<.001$). Analyses are robust to violations of this assumption given a balanced design, which was the case in this study (again, the cell sizes of fathers of the three racial/ethnic groups in each of the four types of activities were approximately similar and well within the 4:1 ratio of sample sizes as criterion for gauging an approximately balanced design) (Tabachnick & Fidell, 2007). Even so, variances for each group were compared to determine whether groups with larger samples produced larger variances, which was the case. Also, a more conservative criterion was considered to evaluate multivariate significance, i.e., Pillai's Trace (Olson, 1979). In this instance, all available criteria (Pillai's Trace, Wilks' Lambda, Hotelling's Trace, and Roy's Largest Root) produced similar F statistics, the same significance values, and the same effect sizes.

The multivariate main effect of race-ethnicity was statistically significant (Hotelling's Trace=.033, $F(8, 5326)=11.09$, $p<.001$, partial $\eta^2=.02$). Additionally, the main effect of race/ethnicity was significant for each activity type (Table 4): play ($F(2, 2667)=5.79$, $p=.003$), caregiving ($F(2, 2667)=5.97$, $p=.003$), social ($F(2, 2667)=17.79$, $p<.001$), and cognitive activities ($F(2, 2667)=4.86$, $p=.008$).

Follow-up ANCOVAs for the four activity types revealed which groups of fathers differed from one another in how often they interacted with their children. In particular, the main effect of fathers' race/ethnicity on levels of play was statistically significant ($F(2, 2667)=5.79$, $p=.003$; Table 5). After accounting for sociodemographic factors and family structure, significant differences in pairwise comparisons revealed that Blacks (adjusted $M=4.58$) and Whites (adjusted $M=4.69$) reported playing with their children at similar frequencies ($p=.28$), whereas Latino fathers (adjusted $M=4.33$) played with their children less than both Blacks ($p=.006$) and Whites ($p=.002$). Overall, fathers' race, age, income, education, marital status, residential status, and mothers' education accounted for 11 percent of the variance in father-child play.

The model of paternal caregiving as a whole, including sociodemographic characteristics and family structure, accounted for 14 percent of the variance in how much time fathers reported in caregiving activities (Table 6). The main effect of race/ethnicity was statistically significant ($F(2, 2667)=5.97$, $p=.003$), suggesting overall differences by fathers' racial/ethnic group even after accounting for background factors. Pairwise comparisons revealed that Blacks (adjusted $M=3.83$) and Whites (adjusted $M=3.88$) spent similar amounts of time engaged in caregiving ($p=.68$), but Latino fathers

(adjusted *M*=4.16) interacted with their child more than the other two groups (compared to Blacks, *p*=.001 and compared to Whites, *p*=.020).

Regarding social activities, the overall model accounted for 8 percent of the variance in how often fathers engaged in social activities (Table 7). Again, there was an overall effect of fathers' racial/ethnic group on social engagement ($F(2, 2667)=17.79$, $p<.001$). In this case, Black and Latino fathers were at similar levels (adjusted *M*=2.40 and adjusted *M*=2.36, respectively; *p*=.60), with White fathers engaging in social activities (adjusted *M*=1.93) significantly less often than either Black fathers ($p<.001$) or Latino fathers ($p<.001$).

Last, there were racial/ethnic differences in how often fathers spent time in cognitive activities with their children (Table 8). The model including fathers' race, age, socioeconomic status, and family structure accounted for 9 percent of the variance in father-child cognitive interaction. As with the other three activity types, the main effect of race/ethnicity was statistically significant ($F(2, 2667)=4.86$, $p=.008$). Pairwise comparisons revealed that Black fathers (adjusted *M*=3.56) and White fathers (adjusted *M*=3.68) reported similar amounts of time in cognitive activities with their young children (*p*=.24), and Latino fathers (adjusted *M*=3.34) interacted in cognitive activities less than either Black fathers (*p*=.018) or White fathers (*p*=.003).

Sociodemographic Factors and Family Structure (Hypothesis 3)

Fathers' characteristics were related to how much they interacted with their children, overall and by activity type. In terms of overall engagement, younger fathers (B=-0.01, $t=-2.17$, $p=.03$) and residential fathers (B=1.33, $t=19.22$, $p<.001$) engaged more with their children, providing support for hypothesis 3a and partial support for hypothesis

3d. Contrary to expectations, there was no main effect of resources, educational attainment, or marital status on total paternal engagement.

With respect to activity types, younger fathers (B=-0.01, t=-1.90, p=.05) and residential fathers (B=1.73, t=17.49, p<.001) played more with their young children. For caregiving, the single factor significantly related to frequency of engagement was residential status (B=1.87, t=18.07, p<.001). With regard to social activities, several sociodemographic factors were related. Younger fathers (B=-0.03, t=-6.64, p<.001) and residential fathers (B=0.44, t=5.69, p<.001) spent more time with their children by going out to eat and visiting relatives. In addition, less-educated fathers (B=-0.10, t=-2.49, p=.01) and unwed fathers (B=-0.26, t=-3.61, p<.001) engaged in social activities more often than their more-educated and married counterparts. Last, results for fathers' engagement in cognitive activities were similar to caregiving. Only residential status was significantly related to more cognitive interaction (B=1.30, t=13.03, p<.001).

Discussion

The purpose of this study was to examine possible racial/ethnic differences in the quantity of father-child interaction – overall and according to multiple types of activities – controlling for socioeconomic and family structure differences. Overall, fathers in the three racial/ethnic groups reported similar levels of paternal engagement, although some small but statistically significant differences emerged across all four activity types.

Overall Paternal Engagement

Black, Latino, and White fathers in this sample reported similar levels of overall engagement with their three-year-old children, after taking into account demographics, socioeconomic resources, and family structure. On average, fathers reported spending

time with their children in different activities approximately three-and-a-half days a week (*M*s ranging from 3.52 to 3.59).

The equality of overall father-child interaction frequency across multiple racial/ethnic groups after accounting for father and family characteristics was consistent with other studies, including nationally representative samples (Yeung et al., 2001) and considering total hours of father engagement using time diary data (Hofferth, 2003). On the other hand, a handful of studies reported group differences in father engagement, but in one study, a broader range of children's ages were included (Yeung et al., 2001). In another study focusing on early childhood, it is unclear whether controlling for sociodemographic factors might have attenuated racial/ethnic differences to non-significance (Leavell et al., 2012).

Paternal Engagement by Activity Type

Despite similar levels of overall paternal engagement, fathers from the three racial/ethnic groups varied in how much time they spent with their young children according to the type of activity. In most cases, differences emerged by ethnicity (Latino compared to both non-Latino Black and non-Latino White). Black and White fathers reported similar levels, and Latino fathers reported higher or lower frequencies depending on activity type. At the same time, the magnitude of group differences was small, with the largest pairwise difference representing only about half a day per week difference in frequency (which was the Latino-White difference in caregiving).

With respect to father-child play, Black fathers and White fathers reported significantly more engagement than Latino fathers. The extant literature is inconclusive on this, as some researchers report no differences (Yeung et al., 2001) and other findings

suggest that it is Black and Latino fathers who play with their children more often (Cabrera et al., 2011; Leavell et al., 2012). This incongruence could be a function of sampling and measurement considerations, as no conceptual basis has been proposed for the existence of racial/ethnic differences. Specifically, studies that found higher rates for fathers of color used measures of *physical* play. Thus, differences in those studies and the current study could relate – at least in part – to the type of play assessed. The current study's play measure included items asking how often fathers played inside with toys or played imaginary games with their child, which are not explicitly rough-and-tumble behavior. Perhaps Black fathers engage often in both physical and other types of play, which could explain why they have higher engagement when physical play was assessed, as well as in the current study. Conversely, Latino fathers may predominately choose physical types of play, which may align with their typically more traditional male gender ideologies (Abreu, Goodyear, Campos, & Newcomb, 2000). With respect to demographics, Latino fathers in the sample were younger than other fathers. Even though analyses statistically controlled for paternal age, this age difference may have factored into racial/ethnic differences in father engagement.

In terms of caregiving, I posited that Black and Latino fathers would report spending the most time, given theoretical rationale regarding how cultural values and household structures may support more caregiving among these fathers, as well as empirically higher rates of Latino and Black fathers' participation in child care (Cabrera et al., 2000; Hofferth, 2003; Livingston & McAdoo, 2007). In this sample, Latino fathers reported the highest level of caregiving, and White fathers and Black fathers reported similar levels. The findings are consistent with some previous empirical findings using a

nationally representative sample (Hofferth, 2003; Yeung et al., 2001). In Hofferth's (2003) study in particular, Latino fathers spent significantly more time in caregiving, even after taking into account a number of cultural, contextual, and economic characteristics. Yet some factors did reduce the gap between Latinos and other fathers. For example, Latino fathers in the sample were more likely to have an involved father as a child growing up, a positive attitude toward parenting, and more gender-equitable beliefs, all of which were associated with greater responsibility. It could be that the fathers in the present sample differed on these (and other) unmeasured factors, which could explain Latino's higher engagement in caregiving.

However, the current study's results are in contrast to some other findings, such as those obtained from residential fathers (Jones & Mosher, 2013), which suggested Black fathers have the highest rates of caregiving. Perhaps the substantially lower proportion of Black fathers who lived with their child compared to the other groups in this sample could explain why rates of caregiving were not higher for African Americans. Although the current study included residential status as a covariate, this finding may still reflect underlying constraints associated with living apart from the child that are not fully explained by paternal residence alone (Cabrera, Ryan, Mitchell, Shannon, & Tamis-LeMonda, 2008), such as father-mother relationship quality. In general, non-resident fathers have less opportunity to engage in caregiving than fathers who live with their children, particularly the activities assessed in the present study that are often centered around the home (i.e., mealtime and bedtime). Additionally, other studies that have found high levels of caregiving among Black fathers included a broader array of activities than

in the current study, such as dressing, bathing, and helping the child go to the bathroom (Jones & Mosher, 2013; Leavell et al., 2012).

Results for social engagement were consistent with expectations and previous literature (Leavell et al., 2012). Both Black and Latino fathers reported more involvement in social activities than White fathers. Scholars have noted Latinos' and African Americans' value of extended family connections and kinship networks (Angel & Tienda, 1982; Barbarin, 1983). Thus, social activities such as visiting with relatives (included in this study's measure of social engagement) may be a particularly important aspect of family life and raising children for families of color.

It is important to remember that this study statistically controlled for several sociodemographic factors, including family structure. One may speculate that non-residential fathers may be more inclined to engage in activities with their child outside of the home, especially if there are structural or relational barriers to spending time with the child at home (e.g., conflict with the child's mother, court orders). In this sample, Black fathers were less likely to reside with their child than Latino and White fathers. However, even after considering these structural factors, Blacks and Latinos still reported more frequent social activity engagement, providing indirect support for the aforementioned explanations related to the influence of cultural values and practices on paternal involvement.

Regarding how much time fathers reported engaging in cognitively stimulating activities with their children, Black and White fathers reported higher frequencies than Latino fathers, even when taking into consideration fathers' age, education, resources, residential status, and marital status. This is in contrast to studies that have found no

differences among fathers of different racial/ethnic groups after controlling for paternal education and other variables (Hofferth, 2003; Leavell et al., 2012).

In the study of Head Start fathers in particular (Leavell et al., 2012), it is important to note that the operationalization of cognitive activities included the same items as the present study (read, sing songs, tell stories), with the addition of "take child to religious services." Attending religious services has been found to be particularly important to Latino fathers in developing the literacy skills of their children (Ortiz, 2004). The three items used in the present study do not represent all the possible ways a father can cognitively stimulate his child. Similar to the conceptual reasoning for differences in father-child play, perhaps Latino fathers in this sample engaged in other forms of learning activities not captured by the items in this study. In this case, it is possible that group differences in a cognitive engagement activity item not included in this study – taking children to religious services – may underlie the "ethnic" difference found. That said, the differences between the current study and prior research raise important measurement issues. For instance, the findings suggest the importance of researchers considering the ways that particular day-to-day parenting activities may be embedded in practices related to race/ethnicity and culture when attempting to examine parenting behaviors across racial/ethnic groups.

In conclusion, results largely matched expectations around racial/ethnic similarities and differences in reported frequency of interaction, with a few unanticipated differences. Findings on paternal play suggest that fathers may engage in different forms of play that could reflect their personal preferences, cultural values, and situational constraints. The current study's findings, along with existing literature, suggest Black

fathers may engage in physical as well as more imaginative play, whereas Latino fathers may emphasize rough-and-tumble play. In terms of caregiving, African American fathers did not report higher rates, contrary to expectations. This could be due to the nature of the specific activities assessed in the present study. Feeding and putting young children to bed may be more likely done at home with a caregiver who lives with the child, as opposed to other child care tasks that could be more feasible for nonresidential fathers included in other studies that found higher levels of caregiving for Black fathers (e.g., dressing, helping the child go to the bathroom). That Black and White fathers reported more cognitive engagement than Latino fathers, conflicting with another study that included more items, highlights the need to recognize how some types of engagement may be integral to certain cultural practices. There may be routine cultural activities that parents and children do together that are intellectually rich and stimulating, but that may not be captured by what is more intuitively considered cognitive engagement, such as reading books.

Of course, that is a general limitation to asking about involvement in a discrete set of activities, as opposed to time use diaries that describe all of respondents' activities during a particular period. Clearly, the specific activities referenced in the survey items determined the relative levels of paternal engagement in this study. Also, the frequency scale (days per week) perhaps allows for more precision than typical Likert-type scales used (e.g., *rarely, a few times a month, a few times a week, everyday*). Such factors should be taken into account when making comparisons across racial/ethnic groups, as well as across research studies.

Sociodemographic factors and family structure

Taking a life course perspective (Elder, 1998) that acknowledges older and younger fathers may have different energy levels, health statuses, life styles, and occupations that affect how often they interact with their children, I posited that younger fathers would report more frequent overall engagement. Results supported this hypothesis, although the effect was slight: For every ten years increase in age, engagement decreased by a tenth of a day. Furthermore, when considering type of activity, younger fathers reported more interaction in (arguably) the two most physically demanding activities: play and social engagement. It is also important to remember that "younger" and "older" may have different meanings for Black, Latino, and White fathers in the sample given the varying means and ranges for each group.

In terms of socioeconomic status, there was no effect of income or fathers' education, either for overall paternal engagement or most of the four activities. The lack of differences suggests that fathers' engagement was not necessarily circumscribed by financial resources. In other words, across income levels – and despite economic constraints – fathers may be similarly likely to spend time with their children regularly. The converse may be true as well: Fathers who do not engage with their children are located across the socioeconomic spectrum. Thus, being lower-income may not necessarily translate into greater likelihood of non-engagement for all fathers.

The literature on the association between paternal income and engagement is mixed. Some work suggests that greater income is related to more time with children due to a variety of reasons including economic security (Ahmeduzzaman & Roopnarine, 1992), and other research has found that more-resourced fathers are less engaged due to

the opportunity cost of working more hours, thereby decreasing fathers' availability to spend time with their children (Yeung et al., 2001). The median annual income of the present sample was $30,000, but there was great variability, with reports ranging from $0 to $999,999. It may be true that a substantial lack of financial resources may preclude fathers' efforts to spend time with their children, but perhaps most fathers in this sample were above that minimum threshold. Also, this sample may not have included many fathers whose higher incomes came at a substantial opportunity cost (e.g., work hours and circumstances) that limited fathers' time and energy for paternal engagement. Or, it could be that the two different effects of income on engagement (lower-income fathers less engaged due to limited financial resources, and higher-income fathers less engaged due to limited time) cancelled each other out, resulting in no effect of income.

Regarding fathers' education, the lack of association with father-child interaction could have been a function of measurement. The educational attainment item in the present study had four levels consisting of less than a high school diploma, high school diploma or equivalent, some college or technical/trade school, and college bachelor's degree or graduate school. Other studies finding effects of fathers' education on frequency of involvement used dichotomous indicators, e.g., having college experience (Cabrera et al., 2011) or a high school diploma (Leavell et al., 2012).

The one exception to the lack of socioeconomic differences in the present study was social engagement, with less educated fathers reporting that they went out to eat with their child and took their child to visit relatives more often. One possible explanation is that less educated fathers prioritized social engagement more than other fathers because they may feel less capable in other activities (e.g., cognitive). However, no significant

effects for fathers' education emerged for the other activity types, suggesting that there was not a compensatory shift towards social activities. Another possibility is that less educated fathers may perceive themselves as disadvantaged in some ways, and may value exposing their children to the social world more. It may be particularly important to these fathers that they provide their children with as much social capital as possible, such as expanded networks through extended family and friends. These fathers may rely more heavily on extended kinship networks for multiple kinds of support, including access to resources, connections to other people and information, and guidance in raising children.

Factors other than SES may influence father-child interaction, such as family structure. Residential fathers reported more paternal engagement overall and for each type of activity, as expected. Of the sociodemographic correlates, whether a father resided with his child was by far the strongest predictor of interaction frequency. Contrary to expectations, marital status was unrelated to any form of engagement, with the exception of social activities. Unwed fathers reported visiting relatives and going out to eat with their children more frequently than married fathers. At the same time, as with all other activities, residential fathers spent more time in social engagement than nonresidential fathers, but the effect was substantively small (partial η^2=.01). In fact, the residential effect for social engagement was smaller than the effect sizes of residential status for other activities (partial η^2s ranging from .06 to .11).

That unwed fathers engaged more often in social activities may reflect their greater preference to connect with their child outside of the home compared to married fathers. Perhaps fathers who were married in this sample were more focused on developing the nuclear family unit and desired to build relationships among immediate

family members by spending more time at home early in the child's life (e.g., family meals together). That is not to say that family structures with unmarried parents do not privilege family relationships or do not have strong commitments to each other, but the nuclear family may not be the focal point in the same way as in a married context. For example, unwed fathers may have other families (romantic partners and children) with whom they spend time. Or it may be that fathers who were not married sought more support from extended family, which was one of the two activities comprising social engagement. That said, it is important to note that although there was a strong association between residential status and marital status in the sample overall (χ^2=543.18, p<.001), nevertheless the majority of unmarried fathers were residential (60%).

In sum, family structure was more strongly related to father engagement than socioeconomic status, suggesting that barriers and supports to father-child interaction time may be more relational than financial. It may be that fathers who do not live with their children were more dependent on the mother to have access to the child. Maternal gatekeeping, which involves how mothers control fathers' interactions with the child (Schoppe-Sullivan, Brown, Cannon, Mangelsdorf, & Sokolowski, 2008), may compound the geographic barriers non-residential fathers face by living apart from the child.

Considerations, Strengths, and Future Directions

There were a limited number of items representing each paternal engagement activity grouping, which may have contributed to the emergence of (or lack of) differences among Black, Latino, and White fathers. Also, the correlations between items within an activity type were not large, but that would not necessarily be expected. Instead, the items represented distinct but interrelated behaviors that were classified

within the broader conceptual category (e.g., play). For example, the two items of putting the child to bed and feeding the child were proxies for the range of typical activities a father might do that could be categorized as caregiving. In this specific example, the distinctness of these two behaviors (e.g., helping feed the child could occur multiple times a day and bedding occurs at night) might even better capture the variety of caregiving activities.

Furthermore, the lower correlations found in this study do not rule out the possibility that with more items, a satisfactory alpha would be calculated for these activity subscales, consistent with other research using the more extensive set of paternal engagement items (Leavell et al., 2012). Thus, this study examined multiple types of activities, rather than only overall engagement, to provide a more nuanced picture of father-child interaction.

Even after including multiple demographic and structural factors, little variance was explained in how often fathers interacted with their young children, with adjusted R^2 values ranging from 8 to 14 percent. However, it is important to remember that the aim of the study was to assess whether racial/ethnic differences in paternal engagement existed after considering socioeconomic and family situations, not necessarily to identify all the factors that explain variability in the frequency of father-child interaction.

Future studies should consider additional family characteristics that may play a role in how frequently fathers interact with their children, such as number of children in the family, fathers' work hours, relationship quality between the parents, and child gender. Also, it may be useful to consider interactions between race/ethnicity and other variables, as that may provide insight into explaining the racial/ethnic differences found

across the four types of activities. For instance, perhaps the effect of certain sociodemographic factors on paternal engagement differs for Black, Latino, and White fathers. Understanding how contextual factors may contribute to father-child interaction for different fathers could shed light on ways to integrate the somewhat disparate findings in the paternal involvement literature.

Last, the data come from the Fragile Families and Child Wellbeing Study, a birth cohort study with participants who were recruited from large cities in the U.S. This sample is larger and more representative than most studies of fathers. Yet selectivity factors included the overrepresentation of unwed parents and the recruitment and interviewing of fathers in the hospital following the child's birth (Reichman et al., 2001). Because many of the fathers in the study showed some level of early involvement by visiting the hospital when the child was born, the sample may not be representative of the entire population of fathers in the U.S.

Replicate weights were provided to make the data representative of the population in large cities while protecting the identities of the participants. These results were from unweighted data, given that the software program used could not handle replicate weights (in fact, the author is aware of only one software program capable of handling replicate weights). Missing data could have affected the results as well, and future work should consider other ways of dealing with missingness, such as imputation methods (Little & Rubin, 2014).

Strengths of the study include father-reported paternal engagement, which addresses a shortcoming in the fathering literature, namely reliance on mothers' ratings of father involvement (Downer et al., 2008). Fathers may have more complete knowledge of

their time engaged with their child, as mothers may not be present at the time. This could be particularly salient for fathers who do not live with the child, or who have conflictual interactions with the mother, or for depressed mothers, as research suggests that mothers' reports of father engagement may be affected by these factors (e.g., Raskin, Fosse, & Easterbrooks, 2015).

Also, the large and diverse sample provided the power to consider multiple father and family characteristics that may have contributed to inaccurate attributions of racial/ethnic differences in the past, both in the literature and in popular discourse (Blow, 2015; Moynihan, 1965). Thus, this study compared Black, Latino, and White fathers, holding constant many indicators found to contribute to differences in paternal engagement. Also, fathers in different racial/ethnic groups vary on these sociodemographic indicators (e.g., age, income, education, residential status); therefore, it is important to take these factors into consideration.

The present study adds to the body of literature examining possible racial/ethnic differences in paternal engagement, finding that the small differences that existed in this sample were more a result of structural factors, namely residential status. Future research is needed to determine whether fathers exhibit different *patterns* of engagement across activity types. Some fathers may interact most often with their children in playful and cognitively stimulating activities, whereas other fathers may predominately engage in caregiving, for instance.

Fathering, as in parenting more generally, consists not only of the time a parent spends with his child, but also the *quality* of their interactional style. Future work should integrate the multiple dimensions of paternal involvement (Pleck, 2010) by considering

both quantity (engagement) and quality (e.g., warmth, responsiveness, control) of fathering behaviors.

The growing body of research predicting father involvement could benefit by utilizing a multidimensional perspective, considering how exactly fathers are spending time with their children, not solely how often. In addition to antecedents of paternal engagement, researchers should continue to consider *consequences* of fathers' involvement, particularly for children's cognitive, emotional, and social wellbeing.

Conclusions

In sum, results from this study suggest that when accounting for demographic and structural differences, Black, Latino, and White fathers spend similar amounts of time engaged with their three-year-old children. In this sample, family structure was more strongly related to father involvement than socioeconomic status, suggesting that fathers' engagement may be more responsive to relationship dynamics than financial resources. Yet there were some differences regarding which types of activities fathers prioritize when interacting with their young children that were not accounted for by socioeconomic status and family structure, suggesting the need to consider additional factors such as cultural ideologies around gender and family (Hofferth, 2003; Toth & Xu, 1999) and other features of the context. Going forward, we should carefully consider what fathers do as well as the quality of paternal involvement, and consider what constellations of fathering behaviors may be most beneficial for child development.

Tables and Figures

Table 1 Means (standard deviations) for sociodemographic characteristics and paternal engagement by racial/ethnic group

	Black ***n*=1287**	**Latino** ***n*=746**	**White** ***n*=643**	**Total Sample** ***N*=2676**
Father age (years)	$30.71\ (7.67)_a$	$29.86\ (6.50)_a$	$33.68\ (6.96)_b$	31.18 (7.33)
Family income ($)	$30{,}259.49_a$ (34,007.41)	$29{,}967.59_a$ (26,547.43)	$72{,}830.47_b$ (71,983.38)	40,407.24 (48,254.41)
Father education	$2.09\ (0.85)_a$	$1.79\ (0.90)_b$	$2.85\ (1.03)_c$	2.19 (0.99)
Mother education	$2.12\ (0.91)_a$	$1.82\ (0.91)_b$	$2.93\ (1.04)_c$	2.23 (1.03)
Marital status (%)	$26.81\ (44.31)_a$	$45.58\ (49.84)_b$	$71.07\ (45.38)_c$	42.68 (49.47)
Residential status (%)	$66.51\ (47.21)_a$	$84.58\ (36.13)_b$	$87.40\ (33.21)_c$	76.57 (42.36)
Engagement - total	$3.47\ (1.51)_a$	$3.63\ (1.44)_b$	$3.67\ (1.29)_b$	3.56 (1.44)
Engagement - play	$4.44\ (2.11)_a$	$4.47\ (2.04)_a$	$4.80\ (1.88)_b$	4.54 (2.04)
Engagement - caregiving	$3.64\ (2.20)_a$	$4.29\ (2.17)_b$	$4.10\ (2.02)_b$	3.93 (2.17)
Engagement - social	$2.43\ (1.59)_a$	$2.49\ (1.57)_a$	$1.72\ (1.29)_b$	2.28 (1.55)
Engagement - cognitive	$3.41\ (2.02)_a$	$3.38\ (2.01)_a$	$3.92\ (1.97)_b$	3.52 (2.02)

Note: Significant differences at the .05 level are denoted by differences in subscripts.

Table 2 ANCOVA results for total paternal engagement

	df	***F* statistic**	**Partial eta squared**	**B**
Intercept	1, 2667	454.68***	.146	2.75
Father race/ethnicity	2, 2667	0.51	.000	0.04 (White), 0.07 (Black)
Father age	1, 2667	4.71*	.002	-0.01
Family income	1, 2667	0.19	.000	< -0.001
Father education	1, 2667	0.44	.000	0.02
Mother education	1, 2667	0.10	.000	0.01
Marital status	1, 2667	2.47	.001	-0.10
Residential status	1, 2667	369.23***	.122	1.33
Overall model	8, 2667	53.38***	.138	--

Note: *p<.05, **p<.01, ***p<.001. Adjusted R^2 = .135

Table 3 MANCOVA results for multivariate tests on four paternal engagement subscales

	Hotelling's Trace	***df***	***F* statistic**	**Partial eta squared**
Intercept	.257	4, 2664	171.10***	.204
Fathers' race/ethnicity	.033	8, 5326	11.09***	.016
Fathers' age	.018	4, 2664	12.04***	.018
Family income	.000	4, 2664	0.26	.000
Fathers' education	.005	4, 2664	3.65**	.005
Mothers' education	.003	4, 2664	2.27^{+}	.003
Marital status	.006	4, 2664	4.17**	.006
Residential status	.176	4, 2664	117.37***	.150

Note: *p<.05, **p<.01, ***p<.001.

Table 4 MANCOVA results for four paternal engagement subscales

		***F* statistics**			
	df	**Play**	**Caregiving**	**Social**	**Cognitive**
Intercept	1, 2667	367.58***	162.06***	499.64***	130.25***
Fathers' race/ethnicity	2, 2667	5.79**	5.97**	17.79***	4.86**
Fathers' age	1, 2667	13.39*	0.82	90.99***	0.45
Family income	1, 2667	1.93	0.23	0.78	0.30
Fathers' education	1, 2667	0.06	13.74	13.59*	6.13
Mothers' education	1, 2667	0.39	2.57	2.48	3.20^{+}
Marital status	1, 2667	3.26	0.18	13.02***	0.004
Residential status	1, 2667	302.33***	326.61***	32.42***	169.74***
Adjusted R squared	--	.113	.142	.084	.088

Note: *p<.05, **p<.01, ***p<.001.

Table 5 ANCOVA results for paternal engagement subscale of play

	df	***F* statistic**	**Partial eta squared**	**B**
Intercept	1, 2667	367.58***	.121	3.38
Fathers' race/ethnicity	2, 2667	5.79**	.004	0.37 (White), 0.25 (Black)
Fathers' age	1, 2667	3.62*	.001	-0.01
Family income	1, 2667	0.52	.000	<0.001
Fathers' education	1, 2667	0.02	.000	0.01
Mothers' education	1, 2667	0.10	.000	0.02
Marital status	1, 2667	3.26	.001	-0.17
Residential status	1, 2667	303.33**	.102	1.73
Overall model	8, 2667	43.60***	.116	--

Note: *p<.05, **p<.01, ***p<.001. Adjusted R^2 = .113

Table 6 ANCOVA results for paternal engagement subscale of caregiving

	df	*F* statistic	Partial eta squared	B
Intercept	1, 2667	654.42***	.057	2.69
Fathers' race/ethnicity	2, 2667	5.97**	.004	-0.28 (White), -0.33 (Black)
Fathers' age	1, 2667	0.20	.000	-.003
Family income	1, 2667	0.06	.000	<.001
Fathers' education	1, 2667	3.40	.001	0.10
Mothers' education	1, 2667	0.64	.000	-0.04
Marital status	1, 2667	0.18	.000	-0.04
Residential status	1, 2667	326.61***	.109	1.87
Overall model	8, 2667	56.31***	.144	--

Note: *p<.05, **p<.01, ***p<.001. Adjusted R^2 = .142

Table 7 ANCOVA results for paternal engagement subscale of social activities

	df	*F* statistic	Partial eta squared	B
Intercept	1, 2667	31.73***	.158	3.35
Fathers' race/ethnicity	2, 2667	17.79***	.013	-0.43 (White), 0.04 (Black)
Fathers' age	1, 2667	41.42***	.016	-0.03
Family income	1, 2667	0.36	.000	<-.001
Fathers' education	1, 2667	6.19*	.002	-0.10
Mothers' education	1, 2667	2.48	.001	-0.06
Marital status	1, 2667	13.02***	.005	-0.26
Residential status	1, 2667	32.42***	.012	0.44
Overall model	8, 2667	31.73***	.087	--

Note: *p<.05, **p<.01, ***p<.001. Adjusted R^2 = .084

Table 8 ANCOVA results for paternal engagement subscale of cognitive activities

	df	*F* statistic	Partial eta squared	B
Intercept	1, 2667	130.25***	.047	1.95
Fathers' race/ethnicity	2, 2667	4.86**	.004	0.35 (White), 0.22 (Black)
Fathers' age	1, 2667	0.12	.000	0.002
Family income	1, 2667	0.08	.000	<-0.001
Fathers' education	1, 2667	1.65	.001	0.07
Mothers' education	1, 2667	3.20	.001	0.09
Marital status	1, 2667	0.004	.000	0.01
Residential status	1, 2667	169.74***	.060	1.30
Overall model	8, 2667	33.10***	.090	--

Note: *p<.05, **p<.01, ***p<.001. Adjusted R^2 = .088

Table 9 Estimated marginal means (standard errors) for paternal engagement by racial/ethnic group

Paternal Engagement	**Black**	**Latino**	**White**
Engagement - total	3.59 (.039)	3.52 (.051)	3.56 (.059)
Engagement - play	$4.58\ (.056)_{a}$	$4.33\ (.074)_{b}$	$4.69\ (.084)_{a}$
Engagement - caregiving	$3.83\ (.058)_{a}$	$4.16\ (.077)_{b}$	$3.88\ (.088)_{a}$
Engagement - social	$2.40\ (.043)_{a}$	$2.36\ (.057)_{a}$	$1.93\ (.065)_{b}$
Engagement - cognitive	$3.56\ (.056)_{a}$	$3.34\ (.074)_{b}$	$3.68\ (.084)_{a}$

Note: Means are based on a 0-7 scale of days per week, where 0 equals never engage in activity and 7 equals engagement in activity every day. Significant differences at the .05 level are denoted by differences in subscripts.

Chapter Three:
A Person-Oriented Approach to Black Fathers' Parenting: Paternal Involvement and Sociodemographic Influences

Introduction

Research on fathering has burgeoned in the last four decades, although social scientists have been interested in and writing about fatherhood since the early 1900s (Lamb, 2000). Fathers' roles have expanded dramatically during this same time period. Facilitated by more women working outside the home (Cabrera et al., 2000) and increasingly flexible expectations for men, fathers were primarily viewed as breadwinners in the past, compared to current views of fathers fulfilling multiple parental functions, such as caregiving and emotional support (Lamb, 2000). Also, the literal presence of fathers in children's everyday lives has increased since systematic data collection began decades ago (Bianchi et al., 2006; Jones & Mosher, 2013; Yeung et al., 2001). Yet fathers are still understudied compared to mothers in the parenting literature.

Undergirded by fathers' increasingly multifaceted roles, there has been an increased recognition among scholars of the importance of conceptualizing and measuring father involvement as a multidimensional construct (Cabrera et al., 2000; Downer et al., 2008). Specifically, there has been an historical shift from examining father presence/absence dichotomies prior to the mid-1980s to considering multiple aspects of fathers' involvement (Pleck, 2010). Numerous studies confirm the impact of a

variety of fathers' parenting behaviors on young children's social, emotional, and cognitive development, including more frequent interaction with the child (Mitchell & Cabrera, 2009), fathers' sensitivity to children's needs (Cabrera, Shannon, & Tamis-LeMonda, 2007), and use of more inductive disciplinary practices (Kerr, Lopez, Olson, & Sameroff, 2004).

Although scholars acknowledge that qualities of fathers' interactional styles are important in addition to amount of involvement (Cabrera et al., 2000), and research confirms that both the quantity and quality of direct paternal involvement matter for children's development (McWayne et al., 2013), it is unclear how the amount of time fathers spend with their children combines with more qualitative dimensions of parenting. Measures of parenting quantity and quality are interrelated but distinct parenting dimensions (Pleck, 2010). For example, fathers who spend a lot of time with their children may or may not have warm and positive interactions with them. Similarly, fathers may be very affectionate and supportive when they do spend time with their children, but those opportunities may be relatively infrequent. Although some scholarship that tested the dimensionality of engagement, warmth, and control found that they load onto a single factor, suggesting that fathers who spend more time with their children have better quality interactions, this was not the case across all previous research (Pleck, 2010).

However, despite the increased recognition of multidimensional fathering frameworks (e.g., Palkovitz, 1997; Pleck, 2010), including the specific call to include qualitative aspects into definitions of involvement (Cabrera et al., 2000), less attention has been given to interrelations among multiple dimensions of fathering (Lamb, 2010a).

It is reasonable to assume that the impact of high-quality parenting on child outcomes could depend on how much time a parent spends with the child (Mills-Koonce et al., 2011). In fact, not considering quantity of father involvement may explain why some researchers have reported no effects of the quality of fathers' parenting on a variety of child outcomes (e.g., Tamis-LeMonda et al., 2004). Conversely, how much time fathers spend with their children matters, but how that time may influence child development likely depends on the quality of those interactions (Mitchell & Cabrera, 2009).

One notable exception was Brown and colleagues (2012) study of father involvement and sensitivity as they related to father-child attachment. The quantity and quality of fathering behavior interacted to predicted later attachment: Engagement was unrelated to attachment security when fathers were highly sensitive, but more engagement was associated with better attachment when fathers were less attuned to their child's needs. Their study points to the importance of how contextual features of the father-child interaction matter for their children's continuing development.

In sum, the preponderance of the fathering research – as with the parenting literature generally – focuses on particular parenting practices individually, rather than examining what fathers do in a holistic sense across a set of parenting behaviors. Person-oriented approaches provide a complement to examinations of separate parenting practices, allowing insight into what *patterns* of fathering exist. The handful of existing studies that considered holistic patterns of fathering found different subgroups of fathers with particular constellations of parenting behaviors, distinctions that would have been masked with a focus on individual parenting practices. Altogether, these studies highlight the diversity of fathering and the utility of examining multiple aspects of parenting

simultaneously. However, these studies were limited in the racial/ethnic diversity of their samples, including only residential and/or married fathers, and not providing a theoretical framework to guide their examination of particular parenting constructs.

The current study sought to expand upon previous fatherhood research that integrated multiple dimensions of parenting by exploring whether meaningful patterns of fathers' parenting could be identified in a large sample of African American fathers in diverse family structures. Consistent with the most recent conceptualization of paternal involvement (Pleck, 2010), this study assessed the three core dimensions of father-child quantity of engagement, and two qualitative dimensions of paternal warmth and control. The current study also examined whether a variety of father and family characteristics were associated with fathers' membership in the parenting subgroups, guided by the expanded model of paternal influences (Cabrera et al., 2014).

Paternal Involvement as a Multidimensional Fathering Construct

The current study's framework for father involvement as a multidimensional construct was informed by several parenting models (Baumrind, 1967; Maccoby & Martin, 1983; Pleck, 2010). A primary conceptualization governing the parenting behaviors assessed in the current study is the paternal involvement framework (Pleck, 2010). In what became one of the most influential models in fathering research, Lamb and Pleck and colleagues first described paternal involvement thirty years ago (Lamb, Pleck, Charnov, et al., 1985; Lamb, Pleck, & Levine, 1985). Paternal involvement originally was comprised of (1) engagement, or direct father-child interaction; (2) accessibility, or fathers' availability to their children (physically or psychologically); and (3) responsibility, or awareness of the child's needs and coordinating resources to meet

those needs. Before Lamb and colleagues' tripartite model, paternal involvement research was largely unidimensional (Palkovitz, 1997).

Pleck's (2010) current definition of paternal involvement refined the first dimension of engagement and expanded the construct to explicitly include other aspects of fathering. The revised conceptualization includes five domains of paternal involvement: positive engagement activities, warmth, control, indirect care, and process responsibility. The first three dimensions are the "core" dimensions that have been most commonly studied, which were the focus of the current study: engagement (time spent with the child in various activities), warmth (expressions of love and affection), and control (discipline). The latter two dimensions of indirect care (arranging resources for the child) and process responsibility (monitoring what the child needs) have been least studied in the fathering literature (Pleck, 2010). Focusing on the first three core dimensions is useful because of the ability to integrate the present findings with the volumes of existing parenting research on these constructs, and yet acknowledges that there is much more to learn about how these dimensions interplay in different groups of fathers (Pleck, 2010).

The first dimension of paternal engagement,[3] or quantitatively how much time fathers spend with their children, is the most studied dimension of paternal involvement. Originally conceptualized as the total amount of time a father spent with his child (regardless of what they did together), paternal engagement was redefined for a number

---

[3] Although the terms *involvement* and *engagement* have been used interchangeably in previous literature (perhaps not surprisingly given that they are near synonyms in everyday language), I adhere to the conceptual distinction clarified in Pleck (2010): engagement refers to quantity of direct interaction with the child specifically, whereas involvement refers to an overarching construct that includes multiple dimensions (one of which is engagement).

of conceptual, methodological, and practical reasons. Several studies found no effect of total engagement time on children's outcomes, which scholars hypothesized could be due to not focusing on time in the interactive activities that likely drive developmental change (Pleck, 1997). Additionally, there was a methodological shift from time use diaries in which respondents were asked to detail all their activities over a particular time period (e.g., one weekday and one weekend day) to asking fathers about specific activities with children in many national surveys. This shift was driven by pragmatic concerns to lower cost and participant burden. Thus, paternal engagement currently refers to fathers' time in directly interactive activities, such as playing and reading.

Paternal involvement also expanded with the inclusion of the two underlying dimensions in the parenting styles framework, warmth and control (Baumrind, 1966). Baumrind originally described three prototypical styles based on parental control in child rearing: authoritative, authoritarian, and permissive. Authoritative parents affirm their children, recognizing and appreciating their individuality. They exert firm influence over their children, but they also share their rationale behind the rules, encourage bidirectional communication, and are willing to listen to children's objections. Authoritative parents value independence as well as disciplined obedience in their children. In sum, authoritative parents are high on both warmth and control (Maccoby & Martin, 1983).

In contrast, authoritarian parents are stern and do not exhibit warmth or responsiveness toward their children. However, their strict disciplinary practices, including punitive punishment, are done in love and out of a desire to shape children's behavior and beliefs into a high moral ethic. The parents value order, obedience, and tradition, and believe that communication with children should be minimal, as their word

should be accepted as the authority with no response necessary. In sum, authoritarian parents would show high control and maturity demands, but they would exhibit less warmth, responsiveness, and effective parent-child communication (Maccoby & Martin, 1983).

Lastly, permissive parents allow their children to follow their own desires, serving as a resource for their children. These parents do not place restrictions or standards on their children, and instead permit them to regulate their own behavior. Thus, permissive parents tolerate misbehavior and engage in minimal socialization. In sum, permissive parents are conceptualized as high on warmth, but much lower on demandingness and control (Maccoby & Martin, 1983).

Thus these parenting styles originally included multiple dimensions beyond warmth and control, such as demands for maturity and clarity of parent-child communication. Research since this conceptualization has primarily focused on parental responsiveness/warmth and demandingness/control, largely due to Baumrind's (1991) synthesis which distilled the multiple aspects of parental styles through factor analysis into these two dimensions. Parental warmth and responsiveness describe behaviors that encourage children's self-regulation, individuality, and assertion, such as sensitivity and supportiveness. Parental demandingness and control delineate behaviors intended to help their children become a responsible member of the family and citizen in broader society, including monitoring, discipline, and having high maturity expectations.

The addition of the dimensions of warmth and control to the paternal involvement construct was spurred by examining how other scholars operationalized the original construct of paternal involvement. Fatherhood researchers expanded Lamb and

colleagues' description of engagement because of the availability of measures in national datasets in the 1990s. For instance, some father questionnaires combined engagement and paternal warmth. Simultaneously, parental style researchers integrated quantity of engagement in their studies of fathers' responsiveness and demandingness as well. Including qualitative aspects of warmth and control help to integrate paternal involvement with broader parenting literature, and broadening involvement in this way aligns well with other conceptualizations of fathering (e.g., Sarkadi, Kristiansson, Oberklaid, & Bremberg, 2008).

A strength of the parenting styles framework is its explicitly typological approach that identifies subgroups of parents according to their level on multiple characteristics (e.g., warmth/responsiveness, demandingness/control). Thus, parenting styles theory would be well suited to a person-oriented methodological approach that views individual parents across a combination of parenting behaviors. The earliest empirical studies (Baumrind, 1966; Baumrind, 1967; Baumrind & Black, 1967) on the effects of parenting styles on child development and some research since then have suggested that the authoritative style is optimal (e.g., Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994). Yet Baumrind (1966) acknowledged early on that there was a need for additional data to confirm whether the authoritative parenting style was best for all groups, and further research over the ensuing decades has supported the notion that culture and context play a role in which parenting style may be associated with the most adaptive child and adolescent outcomes (Baumrind, 1972; Deater-Deckard & Dodge, 1997).

Specifically regarding Black families, historical and contextual circumstances may encourage parents to exercise greater control with their children. Given the history

of racism in the United States, many Black parents socialize their children to prepare them to face a discriminatory world (Neblett, Chavous, Nguyên, & Sellers, 2009). A stricter parenting style may support Black parents' desire to rear their children to be able to successfully negotiate racism and discrimination (Julian, McKenry, & McKelvey, 1994). Such an authoritarian style, for Black parents, may include instilling the value of working hard, imparting to their children their inherent worth, and the importance of learning about and taking pride in Black history and culture (Bartz & Levine, 1978).

Furthermore, the lower socioeconomic status of Black families, on average, compared to White families, may affect Blacks' greater endorsement of authoritarian parenting. Parents who have less education are more likely to enact authoritarian behaviors (Querido, Warner, & Eyberg, 2002), aligned with early scholarship suggesting that parents in less prestigious occupations value conformity in their children (Kohn, 1959).

Last, some scholars have postulated that environmental risk may be an important factor influencing Black parents' behavior (Letiecq, 2007; Steinberg, Lamborn, Dornbusch, & Darling, 1992). African American families disproportionately live in under-resourced neighborhoods marked by violence, poverty, and crime (Services, 2000). In such dangerous contexts, more authoritarian parenting that emphasizes monitoring of children's activities and exerting control over their behavior may be protective.

According to a review by Livingston and McAdoo (2007), the literature on parenting styles suggests that Black parents are more authoritarian than White parents (e.g., Baumrind, 1972; Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987). Missing are more contemporary studies of Black fathers. Earlier work among married

African American fathers found that they were stern and not very emotionally expressive (Baumrind, 1972; McAdoo, 1979). Black fathers reported having high expectations for their children's behavior and obedience, and also were more intolerant of autonomous and self-governing actions (McAdoo, 1997).

It is important to note that the current study focus on paternal involvement as a multidimensional construct is not intended to represent a theoretical framework of specific "types" of fathers that are a priori more or less effective. In other words, the conceptualization does not presuppose particular constellations of behaviors (which is in contrast to other frameworks, such as parenting styles). Additionally, the paternal involvement conceptualization broadens the parenting styles framework by incorporating both qualities of the style of fathers' involvement (e.g., warmth) as well as types of activities in which fathers can be involved with their children (e.g., engagement), which may better explain how and why fathers influence child development.

None of the prior person-centered studies of fathering had an explicit organizing framework that guided which parenting behaviors would be examined, which unfortunately remains an issue in the fathering literature more broadly (Downer et al., 2008). Thus, this is the first study to empirically test using a person-oriented approach multiple dimensions of fathering to represent patterns of paternal involvement.

Rationale for Person-Oriented Approaches to Fathering

As previously mentioned, predominant in the literature on parenting – particularly in the relatively nascent field of fatherhood research – are studies that describe associations between individual parenting variables and other variables of interest, often child outcomes or predictors of parenting (McWayne et al., 2013). For

example, structural equation modeling and regression are two common variable-centered approaches that can test the relative strength of different parenting behaviors in predicting children's development. Such variable-centered approaches assume that the relationships between variables are the same for all individuals in the population (Masyn, 2013). Another perspective assumes that the population is composed of multiple groups that have different associations among the variables of interest, namely person-oriented perspectives. Person-oriented approaches identify underlying groups that exhibit similar patterns across a set of variables, such as parenting behaviors (Magnussen, 1998). Examples of person-oriented methodologies include latent class analysis and cluster analysis. Both person-centered and variable-centered approaches are complementary to each other, not antagonistic, in that each give different perspectives on the same sample (Masyn, 2013).

A number of parenting theories and constructs align conceptually with person-oriented approaches (Baumrind, 1966; Paquette, 2004; Pleck, 2010). For example, paternal involvement includes multiple domains in which fathers may exhibit varying levels simultaneously (Pleck, 2010). Furthermore, there is qualitative evidence that fathers – including the demographic of African American men comprising the present sample – espouse involvement in multiple domains of parenting concurrently (Edin & Nelson, 2013; Hamer, 2001; Roopnarine, 2004). Yet it is unclear how different patterns of behaviors uniquely combine in individual fathers because there is a dearth of person-oriented fathering research in general, and no studies of the paternal involvement construct in particular. By utilizing methodologies that identify subgroups of the sample

with shared sets of parenting qualities and behaviors, we may gain understanding around the complexity of fatherhood as it functions in real life.

Previous Patterns of Fathering

To date, there have been only four published father studies that used person-centered methodologies; I describe three of them, given the fourth study's exclusive examination of the control dimension of paternal involvement (Lee, Kim, Taylor, & Perron, 2011). The seminal article that described a typology of fathers examined parenting engagement behaviors (Jain et al., 1996). Jain and colleagues sought to identify different kinds of fathers based on their role(s) in the family. They conceptualized the roles of caretaker, playmate, teacher, and disciplinarian as possible paternal roles. Thus, fathers were observed in their homes and then rated on the extent to which they engaged in four activities: caretaking, play, teaching, and discipline. Using cluster analysis, Jain and colleagues identified four groups of fathers based on which activities they were principally involved in. "Caretaker" fathers engaged primarily in caregiving, such as feeding or comforting the child. "Playmates-Teachers" were predominantly involved in activities for fun (play) and efforts to help the child learn or understand something (teaching). Third, "disciplinarian" fathers were marked by encouraging appropriate behavior by their children and discouraging inappropriate behavior, including through punishment (discipline). The fourth cluster of fathers was labeled "disengaged," as they scored lowest in all four domains of engagement. In sum, this inaugural person-centered study of fathering underscored that in addition to levels of particular parenting variables, fathers were involved with their toddlers in different patterns of paternal engagement. Although no consequences of the parenting groups were tested (e.g., child outcomes), the

clusters were distinguished by several antecedents, including fathers' personality, daily hassles, and socioeconomic status. The authors speculated that men who were more self-confident and of higher social class may be more positively and sensitively engaged, whereas more neurotic and emotionally unstable men may overreact to their children's misbehavior and focus on discipline or disregard their children entirely.

Jain and colleagues' study utilized observations of paternal engagement in certain activities to determine styles of fathering. Paquette and colleagues (2000) built on this earlier work by including fathers' engagement as well as dimensions similar to warmth and control. Acknowledging parenting styles and paternal involvement frameworks that espoused multiple dimensions of parenting, the study included both quantitative (paternal engagement) and qualitative (attitudes regarding empathy and physical punishment) measures. The three core dimensions of paternal involvement were assessed in this study, although they were not labeled as such given that the conceptualization of the construct had not yet been developed (Pleck, 2010). Fathers reported how much time they spent with their child in play and caregiving activities (paternal engagement). In addition, constructs conceptually related to warmth included fathers' emotional support, evocations (e.g., sharing positive experiences the father had with the child to other people), and parental attitudes about empathy (e.g., how well fathers understand their child's feelings). Measures of paternal control were assessed through fathers' engagement in discipline and attitudes about physical punishment. Four groups of fathers emerged, three of which aligned with parenting styles theory (authoritarian, authoritative, and permissive parenting styles). There was one unique subgroup as well. These "stimulative" fathers

were constantly thinking of their children, were more emotionally supportive, and often introduced their children to new things.

A few of the patterns of fathering were similar between these first two studies. The most obvious overlap was a group of fathers who prioritized their roles as disciplinarians. In Paquette and colleagues' study, this group of fathers ("Authoritarian") were not very emotionally supportive and empathic, and engaged less in caregiving and play than the other groups of fathers, but were more favorable toward physical punishment.

Another similarity was related to the "playmate-teacher" fathers. Paquette and colleagues' "permissive" fathers had high mean scores on emotional support, play, and empathy, but lower discipline (both behaviorally and attitudinally), and as such mirror the playmate-teacher fathers' emphasis on play. At the same time, Paquette and colleagues' "stimulative" fathers, who provided the most emotional support to their children, introduced them to new things more often, and frequently talked positively about them outside the home, were reminiscent of playmate-teacher fathers in their interest in teaching the child new things.

Paquette and colleagues established the feasibility of defining types of fathers based on quantitative and qualitative aspects of fathering. Importantly, in addition to empirically discerning three parenting styles that had been theorized (Baumrind, 1967), their use of a person-oriented analytic technique allowed them to discover a new style of stimulative parenting.

The third study of person-centered fathering profiles examined fathers' quality of interaction during play and verbal stimulation during a picture book activity. Although

there was not an explicit theoretical framework to justify the consideration of fathers' social-affective and linguistic parenting behaviors together, all of the behaviors concerned the quality of father-child interactions. Some of the measures conceptually corresponded to the dimension of warmth. Fathers were rated on their level of responsiveness to their child's needs, how emotionally attached they were, and how much they expressed positive feelings toward their child. Five meaningful groups of fathers emerged. One parenting profile was near the mean in all dimensions (Average), two profiles were marked by negative parenting (Detached/Low Verbal and Intrusive/Negative), and two were positive parenting profiles (Sensitive/Engaged and Stimulating/High Verbal). In terms of the latter, the Sensitive/Engaged fathers were highly responsive, positive, animated, and stimulating during play. They provided moderate language input to their children. Stimulating/High Verbal fathers also stimulated their children during play, but were distinguished by how much they talked to their child during the picture book activity, vocalizing the greatest number of words and questions. Such a distinction illuminated a great strength of a person-oriented approach: Those who were the most warm and sensitive were distinct from fathers who provided the most verbal stimulation. Simply put, fathers who were rated highly in one positive dimension of parenting were not necessarily high in all positive aspects of parenting.

Although it is difficult to make comparisons across person-oriented studies given the conceptually different fathering behaviors examined, the two positive groups of Sensitive/Engaged and Stimulating/High Verbal fathers may be similar to the stimulative fathers found in Paquette and colleagues' study. That is, Sensitive/Engaged fathers share a high level of emotional supportiveness with stimulative fathers. Stimulating/High

Verbal fathers and stimulative fathers both value sharing new things with the child (e.g., words, activities).

In summary, each person-centered analysis found four or five groups of fathers based on a variety of parenting behaviors, and there were some parallels across studies in the patterns identified. All studies found groups of fathers who were very involved in multiple dimensions (e.g., playmates-teachers, Sensitive/Engaged). Additionally, most of these studies had subgroups of fathers were who were characterized by putatively negative interactions with their child. With labels such as disciplinarian (Paquette et al., 2000) and Intrusive/Negative (Goodman et al., 2011), these fathers physically punished and/or exhibited negative regard towards their child.

Additionally, most of the work on fathering profiles distinguished groups that were notable for extreme ratings on (one or two) particular parenting dimensions. This is noteworthy because person-centered techniques allowed these researchers to discover new and nuanced patterns of fathering. For instance, the emergence of stimulative fathers who especially supported and stimulated their children represented a novel group not explicitly represented in the parenting styles framework (Paquette et al., 2000).

These three empirical studies represent a useful starting place to build on the work in person-centered analyses of fathers' parenting. Yet there are a number of sample considerations relevant to expand our knowledge in this area. In addition to the lack of consistent conceptual framing of fathers' parenting behaviors, most of the samples of fathers studied in previous work were similar in terms of racial composition, family structure, and representativeness. Although one of the studies included African American fathers (Goodman et al., 2011), there has been no within-group work on this population

to date. All studies included only fathers who lived with the child and were married to the child's mother or cohabiting. Last, most prior studies had samples over 100 participants (statistically useful in these person-centered approaches), but had other restrictions on the sample that limited representativeness, e.g., rural employed fathers (Goodman et al., 2011) and working or middle-class fathers of sons (Jain et al., 1996).

Father, structural, and family characteristics

What factors may distinguish different patterns of fathering behavior? Cabrera and colleagues' (2014) expanded model of paternal influences provides a comprehensive theoretical framework to organize the multiple contextual influences on father involvement as well as how fathering dynamically relates to child development. The expanded model builds upon several earlier frameworks (Belsky, 1984; Bronfenbrenner, 1995; Cabrera, Fitzgerald, Bradley, & Roggman, 2007). First, Belsky's (1984) parenting process model identified three categories of determinants: parents' personal psychological resources (e.g., personality, mental health), contextual sources of support and stress (e.g., marital relations, work stress), and children's characteristics (e.g., gender, temperament). The expanded model of paternal influences integrates parental determinants from Belsky's process model with the multiple systems (e.g., microsystems, mesosystems) of Bronfenbrenner's (1995) bioecological model of human development. Thus, fathering is embedded in multiple dynamic systems that reciprocally influence each other over time.

Cabrera and colleagues' earlier (2007) Paternal Influences on Children Over the Life Course builds upon these two previous frameworks (Belsky, 1984; Bronfenbrenner, 1995) by focusing specifically on the context of fathers in families (as opposed to parents

or individuals more broadly) and highlighting which additional aspects of personal history and larger context that may be salient for influencing fathers' parenting. Lastly, Cabrera and colleagues improved upon their previous model by incorporating dynamic, bidirectional processes due to emerging research that highlighted the complex ways in which fathers influence children's outcomes across development. That important improvement was less salient in the current study because the framework was selected for its comprehensiveness in outlining antecedents of fathering. The model provides several categories of determinants of fathers' parenting behaviors, expanding the dimensions explicated in the process model of parenting. Potential influences on father involvement include paternal history, fathers' personal characteristics, work environment, household socioeconomic status, and family context.

Father characteristics.

Beginning with paternal rearing history, childhood experiences of fathering may influence fathers' involvement in the care of their own children through identification processes (Bronfenbrenner, 1960). Specifically, warm and engaged fathers likely raise sons who identify with them and model their later parenting after them. Conversely, sons of disengaged fathers may be unlikely to identify with their fathers, decreasing the odds of modeling their future parenting behavior after their less-involved fathers. Furthermore, learning theory states that motivation, interest, and competence in raising children may be learned through many mechanisms, including growing up with a very involved father (Lamb, Pleck, & Levine, 1985; Pleck, 1997). Thus, one may anticipate that men who had highly involved fathers growing up will be highly involved themselves, which has been supported empirically (Hofferth, 2003). On the other hand, those who did not have an

involved father in childhood may not identify with their biological father and instead choose to be very active in the lives of their children (Shannon, McFadden, & Jolley-Mitchell, 2012). However, there is diversity among men who did not grow up with their biological father. Whereas some engaged in a compensatory process by adopting an involved fathering role, others continued the trend of being uninvolved (Roy, 2006).

In terms of fathers' personal characteristics, several factors may be relevant to how fathers are involved with their three-year-old children: age, how he views his ability as a father, religiosity, depression, and parenting stress. Prior person-centered work with father involvement has found no differences in fathers' age across different parenting profiles (Goodman et al., 2011; Paquette et al., 2000), which is consistent with no age differences found among a nationally representative sample of fathers with young children on multiple engagement activities, i.e., caregiving, playing, feeding, and reading (Jones & Mosher, 2013). Yet parenting research generally suggests that older parents tend to raise children in ways associated with more positive development, including higher levels of engagement and sensitivity (e.g., Baker, 2013).

Paternal self-assessment, or how fathers perceive their ability to parent, has not been examined in relation to *patterns* of fathering behaviors. However, one study of predictors of father-child interaction found that married Black fathers who rated themselves more highly were more likely to spend time with their young children (Perry et al., 2012). Thus, it may be that more positive paternal self-assessment would be associated with more engaged patterns of fathering.

Supports and stressors are another area of potential determinants of father involvement. Religiosity may be a source of support and represent beliefs that may

encourage particular types of involvement. As reviewed by Wilcox and Barkowski (2005), religious observance has been linked to higher paternal engagement, warmth, and discipline in terms of corporal punishment. Depression may affect fathering behaviors as well, given that depressive symptoms likely disrupt positive parenting, e.g., depressed parents may be more withdrawn and/or display high negative affect (Smith, 2004). Fathers, and all parents generally, who experience higher depressive symptoms may be less likely to interact with their children (e.g., Lee, 2005), and when they do, those interactions may be affectively negative and include poor disciplinary practices (Wilson & Durbin, 2010). Lastly, parenting stress has been studied indirectly as a possible correlate of father profiles. Using a composite measure of parenting-specific stressors and everyday life hassles, Jain and colleagues (1996) found that fathers in more engaged clusters had fewer stressors. Specifically, patterns of fathering characterized by higher caretaking, play, and teaching had fewer daily hassles than disciplinarian and disengaged fathers. Among Black married fathers in particular, less parenting stress was associated with more father-child engagement (Perry et al., 2012).

Fathers' work situation can be another major influence on paternal involvement. Employment may lead to increased financial resources, but also may be a source of stress and restrict fathers' availability to their child. In addition, a father's workplace may provide human and social capital (e.g., social networks, access to information) that may affect his parenting behavior. Decades of research document the effect of fathers' work environment on how often and in what manner fathers interact with their children (e.g., Kohn, 1959). One person-oriented study of father parenting examined the work environment in particular (Goodman et al., 2011). Among this low-income sample of

rural White and African American fathers, a more supportive work environment was associated with more sensitive and verbally stimulating parenting (Goodman et al., 2011). On the other hand, the number of weekly work hours was not related to membership in the parenting profiles. More generally, fathering research on the association between fathers' work hours and how much time they spend with their young children is inconclusive (McGill, 2014), with some studies supporting the notion that fathers who work more spend less time with their children (Hofferth, 2003; Yeung et al., 2001), and other studies finding no relation between work hours and paternal engagement (Pleck & Masciadrelli, 2004).

Structural characteristics.

In terms of structural factors, household socioeconomic status (SES) may influence parenting behaviors, as financial resources (or lack thereof) can influence parents' psychological distress (McLoyd, 1990), in addition to shaping the available opportunities for father-child interaction frequency and quality. SES has a complex relationship with profiles of fathering, as the associations vary depending on which indicators were examined. For instance, fathers' income was unrelated to any particular parenting group across all prior studies of person-centered fathering that examined this dimension of SES (Goodman et al., 2011; Jain et al., 1996; Paquette et al., 2000). On the other hand, more educated fathers were more likely to belong to more engaged, sensitive, and warm fathering clusters (Goodman et al., 2011; Jain et al., 1996; Paquette et al., 2000). Additionally, mothers' socioeconomic resources played a role as well: Fathers engaged in more authoritative, sensitive parenting behaviors when the *mothers* of their

children had higher education and more income (Paquette et al., 2000), or were not employed part-time (Goodman et al., 2011).

Given this study's within group focus on Black fathers, it is important to consider theory and research specific to this population. McAdoo and others posit that fathers who are more financially secure are more likely to spend time with their children (e.g., Livingston & McAdoo, 2007), which has been supported empirically regarding paternal income and education among Black fathers (Ahmeduzzaman & Roopnarine, 1992; Black, Dubowitz, & Starr, 1999). In addition to time involvement, socioeconomic resources may influence *how* Black fathers parent, as one study reported that poor fathers were three times more likely to be uninvolved in terms of warmth and control than fathers who were not poor (Bulanda, 2010). Another study including African American fathers found that more educated parents were more sensitive and less intrusive in interactions with their young children (Tamis-LeMonda et al., 2004).

Family characteristics.

Moving to the broader context of family relationships, family structure may influence fathers' involvement with their children. Of course, fathers who live with their child have more opportunity to spend time with them compared to non-residential fathers, and, on average, they do (Jones & Mosher, 2013). Yet it is unclear how residential status may be related to *patterns* of parenting behavior, given that all prior person-oriented studies of fathering used samples of fathers who were cohabiting or married to the mother. With regard to marital status, there was no difference across the parenting groups for the single study that included both married and cohabiting fathers (Goodman et al., 2011).

In addition to family structure, parenting context variables such as partner harmony may relate to the affective valence of father-child interactions, as well as indirectly affect parenting through fathers' psychological wellbeing (Belsky, 1984). Although a better relationship with the child's mother is supportive of more involvement by fathers generally (e.g., Coley & Chase-Lansdale, 1999), father-mother relationship quality was unrelated to fathers' membership in parenting profiles in all three person-oriented studies (Goodman et al., 2011; Jain et al., 1996; Paquette et al., 2000). Perhaps the null findings were due to lack of variation in relationship quality, as studies examined only cohabiting parents. For example, paternal involvement was dependent on fathers' relationship status with the child's mother in work with unwed, nonresidential fathers (Tach, Mincy, & Edin, 2010). Furthermore, research on Black families supports more egalitarian relationships between parents, with less prescriptively defined gender roles (Barbarin, 1983). Thus, among Black fathers, there may be greater implications for having a less cooperative and understanding relationship with the mother on their frequency and quality of involvement with their children.

It may be that a more proximal measure of relationship quality – one that has to do with how the parents work together to raise the child, namely coparenting – would better distinguish fathering clusters (Paquette et al., 2000). For example, related work on maternal gatekeeping suggests that mothers may regulate how fathers are involved with their children (Schoppe-Sullivan et al., 2008). A more cooperative and supportive coparenting relationship has been positively linked to greater father-child engagement (e.g., Bouchard & Lee, 2000), although no studies have examined the association between coparenting and fathering groups.

In terms of total number of children, authoritarian fathers who had more favorable views of physical punishment were more likely to have larger families compared to other fathers (Paquette et al., 2000), consistent with other work confirming that the number of children in the family affects fathering behaviors (e.g., Amato & Rivera, 1999; Baker, 2014). Multiple partner fertility may relate to less investment of fathers in the focal child given other parenting roles and responsibilities. At the same time, qualitative interviews with minority fathers revealed strong norms of involvement, despite having multiple partners and children (Edin, Tach, & Mincy, 2009). One quantitative study of residential Black fathers found that having children with someone other than the focal child's mother was associated with less time spent with the child, but only among those who were married rather than cohabiting (Perry et al., 2012).

Last, child characteristics may relate to which pattern of parenting behaviors fathers belong. No effect was found for child gender (Goodman et al., 2011) with respect to fathering group membership. However, fathering research generally supports the notion that fathers spend more time with their male children. For instance, one study found that African American fathers of young children spent more time with sons compared to daughters (Leavell et al., 2012).

The most studied child characteristic in relation to parenting is temperament (Belsky & Pluess, 2009), yet there are inconsistent findings across studies. The single person-oriented fathering study that considered infant temperament found no relation to the clusters of fathers, which they postulated could be due to the inclusion of only fathers of first-born sons (Paquette et al., 2000). That speculation may be supported by another study that reported associations between fathering and child temperament were

moderated by child gender such that fathers were less involved with less sociable girls (McBride, Schoppe, & Rane, 2002).

Some research including African American fathers has found that they spend more time with temperamentally difficult children (Brown, McBride, Bost, & Shin, 2011; Downer & Mendez, 2005), whereas other research reported that fathers were *less* affectionate and responsive when their infants were more difficult (e.g., Volling & Belsky, 1991). These mixed findings were mirrored in a meta-analysis of associations between negative emotionality and mothering, which ascertained a small overall effect size that varied according to several sample and measurement characteristics (Paulussen-Hoogeboom, Stams, Hermanns, & Peetsma, 2007).

The Current Study

The primary aim of this study was to determine what patterns of fathering of young children emerged when considering multiple paternal involvement dimensions, in addition to assessing what were sociodemographic correlates of different fathering groups. Using a large sample of African American fathers from the Fragile Families and Child Wellbeing Study, the current study represents the first to examine within-group parenting profiles among African American fathers, and the only person-oriented study in the fatherhood literature to include nonresidential fathers. Furthermore, it is the first person-centered examination that utilized the paternal involvement framework to determine the inclusion of particular parenting behaviors. Drawing on the most comprehensive conceptualization of paternal involvement (Pleck, 2010), I operationalized the three core dimensions through fathers' positive engagement (in play,

caregiving, social, and cognitive activities), paternal warmth, and spanking (an indicator of disciplinary control).

A principal research question was: What patterns of paternal involvement would emerge across dimensions of fathers' quantity of engagement in positive activities, expressions of warmth, and use of physical punishment? In general, I anticipated parenting profiles that varied in how much time fathers spent with their children (and in what types of activities), how often they expressed care and affection, and how often they corporally disciplined their children. As one example, such a person-oriented approach may distinguish between groups of fathers who were very engaged in a variety of activities, showed high levels of warmth, and also were more likely to use physical punishment (high engagement, high warmth, high control), from fathers who spent little time with their children, but were very affectionate and not strict disciplinarians (low engagement, high warmth, low control). To add further complexity, the dimension of paternal engagement includes different types of activities as contexts for father-child interaction. Thus, there may be unique fathering groups that were distinguished by fathers who invest more time in particular activities. For example, the one study of father clusters using multiple engagement activities found that some fathers were primarily caretakers or primarily playmate-teachers with their children (Jain et al., 1996).

Although no prior work has integrated quantitative (frequency of engagement) and qualitative (warmth and control) fathering in this way, groups identified in previous studies using similar measures informed my hypotheses regarding what kinds of profiles may emerge. Across the small body of person-oriented studies, there has been both a highly engaged pattern as well as a more disengaged pattern; thus, I expected to find a

fathering profile that was well above the sample mean on all parenting dimensions, and a fathering profile that was well below the sample mean on all dimensions. Additionally, given the literature suggesting that the authoritarian parenting style was more common among African American fathers than fathers of other groups (Dornbusch et al., 1987), I expected a group of fathers to exhibit lower warmth but higher control. It was unclear how fathers' frequency of engagement in different activities may interact with warmth and control given the lacunae in the literature; thus no precise hypotheses were generated.

Although there is limited empirical work around what factors may be associated with particular *patterns* of fathering, I also drew from the larger literature on predictors of father involvement to hypothesize anticipated associations. I expected there to be little correlation between childhood experiences of fathers and cluster membership, given that men whose fathers were very involved in their lives, as well as men whose fathers were not present both may display engaged, warm, and disciplinary parenting behaviors. In general, I predicted that fathers with more psychological (better paternal self-assessment, lower depression), social (religiosity), and economic resources (SES), and fewer stressors (paternal stress, work situations) would be members of clusters marked by high engagement, warmth, and discipline. With respect to family influences on paternal involvement, I hypothesized that more stable and committed family structures (married, residential fathers, more children, less multiple partner fertility) and more positive relationships with the mother (father-mother relationship quality, coparenting) would be associated with parenting profiles that were warm and involved, especially given the greater variability in family structures among fathers in this sample. In terms of children's characteristics, I expected that African American fathers of sons (compared to

fathers of daughters) would be in parenting clusters marked by greater engagement, given research supporting fathers' increased involvement with boys. Given the contradictory findings regarding child temperament and father involvement, it was unclear whether or how children's early emotionality may relate to paternal parenting behaviors among fathers in this sample.

Method

Participants

This study uses data from participants in the Fragile Families and Child Wellbeing Study (FFCWS), a longitudinal United States birth cohort study. FFCWS surveyed 4,898 births from a stratified random sample of all large U.S. cities (20 of 77 cities with populations of 200,000 or more). Baseline interviews were conducted between 1998-2000. Families in which the parents were not married were purposely oversampled such that approximately three-quarters of the children were born to unwed mothers (Reichman et al., 2001).

The data come from parental surveys at two time points: when children were age 1 (one-year follow-up from birth baseline, 1999-2002) and age 3 (three-year follow-up, 2001-2003). Each wave of data collection consisted of interactions with both mothers and fathers, with questions covering a wide range of domains, such as parenting, relationships, economic status, physical and mental health, and demographics. The study had high response and retention rates, with 86% of mothers and 78% of fathers completing the baseline survey, and similarly high rates for the one-year and three-year follow up interviews for fathers (74% and 72%, respectively) and mothers (91% and

88%, respectively) ("Fragile Families Scales Documentation and Question Sources for Three-Year Questionnaires," 2006). Nearly half of the fathers at baseline were identified as non-Hispanic Black (47%), according to mother reports (McLanahan & Garfinkel, 2003).

From the 3,225 fathers interviewed when the child was three years old, 1,604 of them were Black fathers (50%). The current study includes a subsample of all Black fathers with complete data on paternal involvement when the index child was three years old (N=1399). Compared to the final sample of fathers, the 205 fathers with incomplete parenting data were at greater sociodemographic risk (all statistically significant p values < .001). On average, the fathers with missing data were about two years younger (M=28.4 compared to M=30.9; $F(1, 1583)=17.60$), had about $10,000 less family income (M=$18,591 vs. M=$30,111; $F(1, 1531)=21.50$), were less educated (M=1.77 vs. M=2.09; $F(1, 1579)=25.64$) and the mothers of their children were less educated (M=1.76 vs. M=2.10; $F(1, 1601)=25.29$). In terms of family structure, the fathers with missing data were much less likely to be married to the child's mother (3% vs. 26%; $F(1, 1600)=55.98$) or reside with the focal child (1% vs. 66%; $F(1, 1602)=386.66$).

Procedure

The Institutional Review Boards (IRB) at Columbia University and Princeton University approved the recruitment procedures, which involved verbal and written consent from participants at each interview. All follow-up interviews were first attempted by telephone, but if participants could not be reached field interviewers were assigned to locate participants. Field interviewers encouraged participants to call a toll-free number to complete the survey by phone, but were also trained to administer the survey

instrument in person if needed. Participants completing the three-year interviews by telephone were compensated $30 for their involvement, and those requiring a field visit to complete the core survey were provided $50 in incentives ("Fragile Families Scales Documentation and Question Sources for Three-Year Questionnaires," 2006).

Measures

The items used in the current study are described below, beginning with the father parenting measures and followed by potential correlates of father clusters.

Paternal Involvement

Paternal engagement.

The Fragile Families items describing paternal engagement were originally developed by Mathematica Policy Research for an Early Head Start Evaluation study (2002). The items were developed to measure how often fathers engaged with their children in a variety of activities. Of the original 33 items in the Early Head Start evaluation, analysis of 25 items produced four dimensions of physical play, caregiving, social, and cognitive activities. Fragile Families included nine of these items that conceptually align with the four subscales.

Published studies of paternal engagement using Fragile Families data have reported overall engagement only, rather than by type of activity (e.g., Perry et al., 2012). However, it is important to distinguish different activities because considering only overall engagement could obscure differences between fathers in relative frequency of particular activity types. For example, some fathers may interact with their child primarily in social outings, whereas other fathers may focus on caregiving tasks.

Therefore, four engagement subscales were created based on type of activity. *Play* was composed of 2 items including "plays imaginary games" and "plays inside with toys such as blocks or legos" (r=.48). The *Caregiving* subscale combined 2 items of "assist child with eating" and "put child to bed" (r=.29). In terms of *Social* activities, 2 items asked fathers how often they "go to a restaurant or out to eat with the child" and "take the child to visit relatives" (r=.40). The *Cognitive* subscale had 3 items related to fathers' cognitive and verbal stimulation of their child: "read stories to child," "tell stories to child," and "sing songs or nursery rhymes with child" (α=.81). Fathers reported paternal engagement frequency on a scale from 0-7 days per week. Items within each subscale were summed such that higher scores indicate more frequent engagement with the child.

Due to distributional properties as well as issues with model fit when treating indicators as continuous, I restricted the range to a three-point scale for the engagement indicators. The play, caregiving, and social engagement scales originally ranged from 0 to 14, as each scale represented the sum of two items, whereas the cognitive scale, which summed three items, ranged from 0 to 21. Thus, response options for each engagement indicator were collapsed to produce three categories of low, medium, and high frequencies of father-child interaction.

Other options for restricting the range of the paternal engagement indicators were assessed to determine the appropriate balance between producing well-fitting models (or even model convergence at all) and preserving as much of the original variance in the data as possible. For example, when the scale for engagement indicators was reduced to a high/low range (two-point scale), model iteration problems arose such that there were

negative degrees of freedom indicating that the number of parameters to be estimated was greater than the number of independent cells.

Paternal warmth.

To assess the love and affection fathers express to their children, three items were available from the six-item parental warmth scale developed by Child Trends to measure the warmth of the parent-child relationship (Hofferth, 2003). Specifically, fathers were asked how often they hug or show physical affection to their child, how often they tell the child that they love him/her, and how often they tell the child that they appreciated something the child did. They were on the same frequency scale as the paternal engagement items from 0-7 days per week. These three items were summed to represent paternal warmth, with higher scores representing more warmth (α=.82). Similar to the paternal engagement indicators, the warmth scale was trichotomized to handle the distributional properties and make the data more amenable to latent class analysis.

Paternal control.

Paternal control was assessed with a single dichotomous item on spanking. Fathers were asked whether they spanked their child in the past month "because he/she was misbehaving or acting up."

Correlates of Fathering Patterns

To learn more descriptively about each of the patterns of fathering that emerged, I examined how several individual and contextual characteristics were associated with the father clusters.

Participants' own biological fathers' involvement.

A single item asked fathers about the level of involvement of their own biological father. The four response options were very involved, somewhat involved, never involved, and never knew biological father. Unlike the other correlates described thus far, this item was from the baseline survey, as the response rate was higher than for a similar question asked three years later. Because this was a time-invariant variable, as the question refers to the events from the past ("How involved in raising you was your biological father?), the respondents' answers should be the same in the baseline survey as in the three-year follow-up questionnaire; thus the baseline item was used to include more fathers in the analyses. Response options included that the respondents' biological father was very involved (4), somewhat involved (3), not involved (2), or that respondents never knew their biological father (1). Responses were coded such that higher values indicate more involvement of the biological father.

Paternal age.

Fathers reported their age in years, which ranged from 18 to 71 years old.

Paternal self-assessment.

Paternal self-assessment was measured via a single item: "Please think about how you feel about yourself as a father to [child]. Would you say you are…" on a 4-point response scale anchored by "an excellent father" to "not a very good father." Values were scored such that higher numbers reflect more positive self-assessment.

Father religiosity.

Two items were used as measures of fathers' religiosity. One question asked about the frequency of attending religious services, which was on a 7-point scale ranging from every day (1) to never (7). Responses were reverse-scored so that higher values represent more frequent attendance at religious services.

A second item more specifically linked faith and family. Fathers were asked to rate their level of agreement with the following statement: "My religious faith is an important guide for the way I treat my family in daily life." Response options were strongly agree, somewhat agree, somewhat disagree, and strongly disagree. Higher means indicate stronger agreement that a father's faith guides the way he treats his family.

Father depression.

Fathers' depression was measured via questions taken from the Composite International Diagnostic Interview – Short Form, a standardized instrument for assessing mental disorders in research studies (Hofferth, 2003). The items were aligned with the Diagnostic and Statistical Manual of Mental Disorders – Fourth Edition (DSM-IV), which was the current version at the time of data collection. The survey questions asked whether parents had feelings on dysphoria or anhedonia in the past year that lasted at least two weeks, followed by questions of duration and specific symptoms of: losing interest, feeling tired, change in weight, trouble sleeping, trouble concentrating, feeling worthless, and thinking about death. An indicator variable was created by Fragile Families researchers to classify fathers regarding whether they were probable cases for depression or not.

Parenting stress.

Parenting stress was operationalized by the "Aggravation in Parenting" scale, which was derived from the Child Development Supplement of the Panel Study of Income Dynamics ("Fragile Families Scales Documentation and Question Sources for Three-Year Questionnaires," 2006). The Fragile Families study used four of the nine items to measure parenting stress, such as "being a parent is harder than I thought it would be" and "I find that taking care of my child(ren) is much more work than pleasure." Parents were asked to rate their agreement on a four-point scale, in which 1 = strongly agree, 2 = somewhat agree, 3 = somewhat disagree, and 4 = strongly disagree. Reverse-coding scores resulted in higher values indicating more parenting stress. The internal reliability for the present sample was .62.

Work stress.

The three-item Work Flexibility Scale (Emlen, Koren, & Schultze, 1999) was created to measure the ability to negotiate work demands with demands of family. Items included "my shift and work schedule cause extra stress for me and my child"; "where I work, it is difficult to deal with child care problems during working hours"; and "in my work schedule I have enough flexibility to handle family needs." Fathers were asked to rate how true each of the three statements was on a four-point scale: always true, often true, sometimes true, and never true. The first two items were reverse-scored so that higher scores reflect more work stress and less flexibility to handle family needs. The internal consistency of the work stress scale in the present sample (α=.55).

Work hours.

A single item asked fathers how many hours they usually work at their current or most recent job, including overtime.

Family characteristics

Socioeconomic status.

Aspects of the familial context may relate to how fathers parent their child. Socioeconomic status (SES) was measured by family income and fathers' and mothers' education level, ranging from less than a high school diploma (1) to college or graduate school (4).

Family structure.

Indicators of marital status at the time when measures of paternal involvement were collected (child age 3) as well as residential status based on father-reports were considered as correlates that may differentiate father clusters.

Father-mother relationship quality.

The quality of the father-mother relationship was assessed using a five-item scale of couples' supportiveness. Both mothers and fathers were asked how often their partner: 1) "is fair and willing to compromise when you have a disagreement," 2) "expresses love and affection for [them]," 3) "encourages or helps [them] with things that are important to [them]," 4) "listens to [them] when [they] need someone to talk to," and 5) "really understands [their] hurts and joys." Responses ranged from "often" (1) to "sometimes" (2) to "never" (3). Fathers who were no longer with the mother of the focal child were asked to reflect on how the mother acted during the last month their relationship. Fathers'

scores were reversed so that higher values reflected a higher quality relationship between the father and mother. Reliability for this scale was high (α=.81).

Paternal perception of coparenting.

To assess the relationship between fathers and mothers vis-à-vis parenting, I used a coparenting scale of six items concerning fathers' perception of whether mothers were supportive in helping raise their child. Sample statements include: "She respects the schedules and rules you make for the child;" "She supports you in the way you want to raise the child;" and "You and the mother talk about problems that come up with raising the child." Fathers rated their agreement with each statement on a four-point scale from 1 (always true) to 4 (never true). Items were reverse-scored such that higher scores reflect a more cooperative coparenting relationship. The coparenting scale had adequate reliability (α=.75).

Total number of children with mother.

Fathers were asked how many children they had with the mother, including the focal child. The number of children ranged from one to ten children with the mother. Given the wide range, another item was created by recoding into a dichotomous variable indicating whether the respondent had more than one child with the mother.

Multiple partner fertility.

A dichotomous item asked whether fathers had children with someone other than the mother.

Child characteristics.

Two child characteristics were examined: gender and temperament. In terms of the measure of children's temperament, infant emotionality was measured in the one-year follow-up survey using items from the Emotionality, Activity, and Sociability (EAS) Temperament Survey for Children ("Fragile Families Scales Documentation and Question Sources for Three-Year Questionnaires," 2006). Three items (of five total) were included in Fragile Families: child often fusses and cries; child gets upset easily, and child reacts strongly when upset. Mothers and fathers reported how much these given behaviors were like their one-year-old infant on a five-point rating scale, anchored by "not at all like my child" (1) and "very much like my child" (5). These items were summed to construct an emotionality score ranging from 3 to 15. Other published work has shown modest internal consistency with this scale (α=.60; Walters, 2014). Both fathers' (α=.60) and mothers' (α=.57) reports of emotionality were considered, which is a strength given that most father studies including child temperament rely on solely mothers' perspectives (McBride et al., 2002).

Analytic Strategy

In order to determine patterns of Black fathers' parenting, I conducted latent class analysis using multiple dimensions of father behavior. Conceptually similar to cluster analysis, latent class analysis (LCA) is a person-centered analytical technique that identifies subgroups within heterogeneous data that differ across a set of observed variables (in this case, aspects of fathering). Person-centered analyses are ideal for describing patterns of characteristics, providing a more qualitatively nuanced description

of the sample by considering subgroups of participants who behave similarly across a set of characteristics, rather than examining each parenting behavior independently.

LCA is modeling technique that identifies an underlying latent variable with multiple classes that describes the associations among a set of observed indicator variables, which may be categorical or continuous (Jung & Wickrama, 2008). I used indicator variables that cover the following conceptual categories of paternal involvement: engagement, warmth, and control.

To determine the optimal number of latent groups, I used Latent GOLD Version 4.5 (Vermunt & Magidson, 2005) to specify a series of models with one to six classes based on theoretical and empirical considerations. I assessed these models according to several statistical and conceptual criteria. I considered how the model solutions fit theoretical expectations based on model diagnostics and a visual depiction of the fathering patterns represented by a profile plot of means for each parenting indicator by father cluster. Such a plot displays the fathering measures along the x-axis and the means along the y-axis, with different lines representing different classes of fathers.

I determined empirical fit of the model based on multiple absolute and relative fit indices. First, the Bayesian Information Criterion (BIC), an indicator of absolute goodness-of-fit, has been found to be the best information criterion to determine class enumeration, with lower values indicating better fit (Nylund, 2007). The bootstrap *p* value, in which a non-significant *p* value represents a good fit (Langeheine, Pannekoek, & Van de Pol, 1996), is recommended when the number of indicators is large or the number of categories for each indicator is large. In addition to these measures of model fit, it is important that the model follow the assumption of local independence, or that

there is no correlation between indicators given a respondent's score on the latent class variable. Local independence is determined by low bivariate residuals (BVRs) between indicators. High BVRs above 3.84 indicate that the model does not adequately explain the bivariate relations between indicators (Magidson & Vermunt, 2004), and adding direct effects may result in models with better fit to the data. Lastly, to compare model fit between models with different numbers of classes, the bootstrap likelihood ratio test provides a *p* value that indicates whether the model fit significantly improves from the previous model (*k*-1 classes) to the current model (*k* classes) (Nylund, Asparouhov, & Muthén, 2007). After selecting a model based on conceptual feasibility and empirical indices of good fit, fathers were placed in latent classes for which they were assigned the highest posterior probability of membership as indicated by the LCA model.

Given this study's multidimensional perspective on father-child engagement, it was important to understand how the relative frequency of fathers' engagement in specific activity types may differ across patterns of parenting behaviors. Therefore, in addition to testing differences between clusters of fathers, I also tested differences in mean levels *within* clusters using paired samples t-tests.

Following the establishment of latent father classes, I then analyzed whether these subgroups of fathers differed on several sociodemographic characteristics. Specifically, I considered correlates commonly examined in previous work (e.g., fathers' demographics, SES, fathers' level of stress, fathers' relationship with the mother, and number of children in the family), as well as child factors of interest (child gender, infant emotionality). I conducted univariate ANOVAs analyses. Significant overall differences were followed up with post-hoc analyses testing pairwise differences with Bonferroni corrections.

Results

Descriptive Summary of Sample of Fathers

The African American fathers in this sample were about thirty years old at the time of the baseline survey three years prior, but there was quite a bit of variation in that the ages ranged from 18 to 71 (Table 10). Paternal self-assessment was high, with about half of the fathers agreeing that they were "an excellent father," and a third who believed they were "a very good father." Stress from parenting and work were moderate, with means of 2 or below on a 4-point scale indicating somewhat true. Fathers worked on average 43 hours a week, with some variation. Most of the fathers in the sample knew their biological fathers, with about a third reporting each level of involvement: about a third had very involved biological fathers growing up, a third with somewhat involved biological fathers, and a third whose biological fathers were not involved. Twelve percent of the sample met the criteria for depression. In terms of religiosity, frequency of attendance at religious services was near the median of the scale, or a few times a month. Nearly two-thirds of Black fathers strongly agreed that their religious faith was an important guide for the way they treat their family in daily life.

Socioeconomic status was moderate in the sample, but with substantial variation. Average family income was just over $30,000 a year, with median income of $22,000, and ranging from no income to $72,000. Fathers' and mothers' education levels were similar on average. Attainment of a high school diploma was the modal category, but approximately a third of both fathers and mothers had at least some college education. About a quarter of the sample were married to the mother of the focal child, and two-thirds of fathers resided with their child. Fathers reported fairly high quality relationships

with the mother in terms of their ability to compromise, express affection, encourage, listen to, and understand them (*M*=2.54 out of 3). Coparenting relationships also were quite positive, with a mean of 3.76 out of 4. On average, fathers had one other child with the mother in addition to the focal child, with some fathers having up to ten children in total with the mother. Multiple partner fertility was common, as 43% of fathers had children with someone other than the mother of the focal child.

In terms of child characteristics, boys and girls were represented equally. Parental ratings of infant emotionality were somewhat higher among fathers (*M*=9.15) than mothers (*M*=8.64), both of which indicate that fussiness, getting upset easily, and reacting strongly were somewhat like the focal child as an infant.

Descriptive Summary of Father Parenting Behaviors

Fathers in the sample spent time with their three-year-olds across each type of activity, spending more days than not engaged in most activities (Table 11). As these values for play, caregiving, social, and cognitive activities are sums of multiple items, I will divide the means by the number of items comprising the scale to compare relative weekly frequency. Consistent with prior literature, fathers engaged in play at the highest frequency (slightly more than four days a week; *M*=8.73 divided by 2 items = 4.37). This was closely followed by the frequency of caregiving activities, which included feeding the child and putting the child to bed, with an average frequency of 3.62 days per week. Fathers sang songs, and read and told stories to their three-year-olds at a similar frequency (3.39 days a week). Engagement in social activities was the lowest of all activity types (*M*=2.42 days a week), which is perhaps not surprising given that scale included items that may not happen often, such as taking the child out to eat a restaurant

and taking the child to visit relatives. Paternal warmth was very high among Black fathers, with a mean of 17.64 out of 21, indicating that on average, fathers often hugged and verbally expressed love and appreciation to their child. The frequency of spanking over the past month due to misbehaving was fairly low. About 4 out of 10 fathers reported that they spanked their child.

All of the six indicators of paternal involvement were significantly and positively correlated with one another, with the exception of no association between paternal engagement in cognitive activities and spanking. Correlations among the father-child engagement scales were moderate, with the highest correlation between play and cognitive engagement (r=.68). Warmth was positively correlated with all types of paternal engagement, most notably play (r=.64) and cognitive activities (r=.53). Correlations between spanking and the other indicators of engagement and warmth were low, ranging from .03 to .15.

Descriptions of Fathers' Parenting Based on Class Membership

I estimated six latent class models (ranging from 1 to 6 clusters) using the scores for each father on six indicators: paternal engagement through play, engagement through caregiving, engagement through social activities, engagement through cognitive activities, paternal warmth, and paternal spanking. Summary statistics for these six models are displayed in Table 12. Overall, model statistics favored the 4-cluster solution. Although the 3-class solution had the lowest BIC (15361.78), the 4-class solution had a similarly low BIC (15374.72). The 4-class model had a non-significant bootstrap p value (.13), whereas the 3-class model did not (.02). Furthermore, the bootstrap likelihood ratio test revealed that the 4-class model was preferred over the 3-class model (p< .001), and

that the 4-class solution was not significantly different from the 5-class solution (p=.15). The bivariate residuals are acceptable in the 4-class model (highest residual of 2.54 is below the threshold of 3.84). As an added benefit for interpretability and further exploration of class membership, each parenting cluster comprised a reasonable proportion of the sample, from 15 to 41 percent. Thus, I adopted the 4-class model as the final cluster solution and used it in subsequent analyses to determine individual and family characteristics that were associated with class membership.

The clusters are graphically described using the means of each paternal involvement indicator: play, caregiving, social activities, cognitive activities, warmth, and spanking (Figure 1). Standardized means were used so that visual comparisons between clusters and comparisons to the sample mean could be easily made. Both standardized means and raw means for the engagement, warmth, and control measures for each cluster are provided in Table 13.

The largest cluster (41%, n=579) of Black fathers, labeled Average Involved, was around the sample mean in all domains. All indicators of engagement, warmth, and spanking were within half a standard deviation of the sample mean. More specifically, these fathers reported playing with their child and engaging in cognitive activities about five days a week (M=10.47, SD=2.46), feeding and putting the child to bed more than four times a week (M=8.81, SD=3.89), and going out to eat and visiting with friends a couple days a week (M=5.43, SD=2.97). The Average Involved cluster closely reflected the relative frequencies of the sample as a whole. Fathers in this cluster engaged most often and equally in play and caregiving (p=.23), followed by social and cognitive activities at similar levels (p=.77). Fathers in this cluster demonstrated warmth by

hugging, saying I love you, and telling their children that they are appreciated nearly every day (M=19.80, SD=2.12). Their level of warmth was as high as their highest-frequency engagement indicators (play, p=.44; and caregiving, p=.08). Again, this was aligned with the relative rates for the sample as a whole in which warmth had the highest standardized value. In terms of control, less than half of the fathers reported spanking their child in the past month (M=0.40, SD=0.49), which is not statistically different from the mean of the entire sample.

The next largest proportion of fathers (25%, n=355), labeled Low Involved-Disciplinarians, were marked by relatively low interaction in play and cognitive activities, but also higher than average probability of spanking their child. This quarter segment of fathers spent less time in all types of engagement and exhibited less warmth than the sample means, but these lower numbers were especially pronounced regarding play and cognitive activities, which were about three-quarters of a standard deviation below the mean and half a standard deviation below the mean, respectively. Across types of engagement, fathers in the Low Involved-Disciplinarian cluster revealed spent the *most* time taking their child out to eat and visiting family (i.e., social activities), followed by caregiving, which was significantly greater than cognitive engagement (p<.001). These fathers spent the *least* time playing imaginary games or playing inside with toys with their children, relative to other types of activities (p<.001). The Low Involved-Disciplinarians' level of warmth was as high as their highest type of engagement (social activities, p=.71). In other words, these fathers displayed physical and verbal affection to their children as often as they engaged in taking their child out to eat and visiting

relatives. Additionally, this cluster of fathers reported spanking slightly more than the sample average (46%).

Cluster 3 (19%, *n*=261) included fathers who were high in all four categories of engagement as well as warmth (almost all at least half a standard deviation above the mean). Labeled Highly Involved, this group of fathers played, sang songs, and read stories to their children almost daily (*M*=17.85, *SD*=2.81), and also took care of their children's feeding and bedtime needs about five days out of the week (*M*=9.83, *SD*=4.01). The Highly Involved fathers' pattern of engagement was distinct from the other groups. These fathers engaged in very high levels of cognitive stimulation as well as time spent playing with the child. For these fathers, play and cognitive activities, such as reading stories, occurred significantly more frequently ($p<.001$) than engagement in caregiving and social activities, which were at similar levels ($p=.25$).

The Highly Involved group told their children they loved and appreciated them and hugged them every day (*M*=20.94, *SD*=0.35). They expressed warmth less than their high frequency of cognitive activities and play, at similar levels as their time in child care activities ($p=.18$), and slightly more than in social engagement ($p=.01$). Similar to the first cluster of Average Involved, this group of Highly Involved fathers reported spanking their child at the same level as the sample overall (40%).

The smallest proportion of fathers (15%, *n*=204), labeled Uninvolved, represents virtually the opposite of the previous group of Highly Involved fathers. In terms of engagement, this cluster was about a standard deviation below the mean in all four types of engagement activities. Father-child interaction in play, caregiving, social and cognitive activities was low relative to the sample mean (with scores reflecting that each occurred

about once or twice a week). Similar to Low Involved-Disciplinarians, fathers in the Uninvolved cluster were most engaged in taking their child out to eat and visiting family. The levels of caregiving and cognitive stimulation were similar for Uninvolved fathers (p=.89), followed by the least time in play (p<.001).

The most dramatic difference between this group and all the other three groups of fathers is their low score on paternal warmth. At almost two standard deviations below the mean, fathers in the Uninvolved cluster expressed love and affection to their child approximately three times a week, a mean score of 8.74 compared to a sample mean of 17.6 out of 21. Uninvolved fathers spent less time showing warmth to their child than time engaged in any type of activity. Furthermore, the Uninvolved cluster of fathers reported significantly less spanking than other cluster groups and the overall sample mean, with about one in five fathers reporting that they spanked their child for misbehaving in the past month.

I examined differences among the clusters on each of the six paternal involvement indicators using Analysis of Variance (ANOVA). ANOVA results indicated that there were cluster differences on all paternal involvement measures, including play ($F(3, 1395)=1293.68$, $p< .001$), caregiving ($F(3, 1395)=247.86$, $p< .001$), social activities ($F(3, 1395)=876.22$, $p< .001$), cognitive activities ($F(3, 1395)=636.69$, $p< .001$), warmth ($F(3, 1395)=820.28$, $p< .001$), and spanking ($F(3, 1395)=11.83$, $p< .001$). Post-hoc tests using the Bonferroni correction denote significant differences between each of the four father clusters on the first five indicators of play, caregiving, social engagement, cognitive engagement, and warmth. In terms of father spanking, only the fourth cluster (Uninvolved) was significantly different from the other three clusters, with a lower than

average likelihood of spanking. These differences are indicated by subscript in the table of raw and standardized means by father cluster (Table 13).

Correlates of Fathers' Parenting Clusters

To determine how the father clusters differed on various individual and family characteristics, I conducted ANOVAs. Following significant overall effects, I followed up with post-hoc tests using a Bonferroni correction to indicate which differences were significant between specific clusters.

Results from these analyses are presented in Table 14. The four clusters of Black fathers did not differ in terms of involvement of biological father, age, how much faith guides their family, parental stress, or work hours. However, among the variables for which there were significant differences between the groups of fathers, a similar pattern emerged such that the Highly Involved cluster had better self-perceptions, lower stress, less depression, and were more religiously engaged than the Uninvolved group of fathers. The remaining two clusters, Average Involved and Low Involved-Disciplinarians, generally fared somewhere in between the other two groups.

The Highly Involved fathers reported the highest paternal self-assessment, with two-thirds reporting to be "an excellent father" (66.3%). On the other hand, only one in four of the Uninvolved fathers reported that they were excellent fathers (26.0%). The Highly Involved cluster also reported more religious involvement. That is, these fathers attended religious services on average about a few times a month (M=3.86, SD=1.53), which was statistically significantly more than fathers in other parenting groups. Fathers in the Highly Involved cluster had the lowest diagnosis likelihood of depression (9.3%), although this was only marginally lower than one other group (Uninvolved; 16.7%).

Highly Involved fathers reported the lowest work stress (*M*=1.52, *SD*=0.62), followed by Average Involved fathers (*M*=1.64, *SD*=0.69). Perhaps not surprisingly, fathers who were the least engaged and warm (Uninvolved) reported the most work stress (*M*=1.79, *SD*=0.72).

Fathers in different parenting clusters also differed on broader contextual characteristics. Although measures of SES were similar across cluster, family structure was associated with cluster membership. Similar to patterns of father characteristics across cluster groups, more traditional family structure and positive relationship dynamics were linked to the Highly Involved fathers, whereas more fragile family environments were associated with the Uninvolved fathers, and the other two clusters generally falling somewhere in between. For example, nearly a third of Highly Involved fathers were married (32%), which was greater than the proportion of Uninvolved fathers (8%), but not statistically different from the Average Involved (31%) and Low Involved-Disciplinarian (26%) fathers. Fathers in the Highly Involved and Average Involved subgroups both had significantly higher average ratings of quality of relationship with the mother (*M*=2.73, *SD*=0.34; *M*=2.66, *SD*=0.39, respectively) and coparenting relationship (*M*=3.86, *SD*=0.27; *M*=3.79, *SD*=0.32, respectively) than the other two subgroups. A higher proportion of fathers in the Highly Involved, Average Involved, and Low Involved-Disciplinarians reported having more than one child with the mother (about 60%) compared to Uninvolved fathers (40%).

Multiple partner fertility had no association with father cluster membership. Father clusters also were similar across the child characteristics of gender and temperament, whether reported by mothers or fathers.

Discussion

The purpose of this study was to evaluate whether a typology of fathering would emerge among a sample of Black fathers along the paternal involvement dimensions of engagement, warmth, and control, and to determine whether father and family characteristics would be associated with membership in particular clusters. The present study was the first to consider fathers in different family structures, as opposed to solely married fathers (Jain et al., 1996; Paquette et al., 2000) or residential fathers (Goodman et al., 2011; Lee et al., 2011).

Latent class analysis revealed distinctive, meaningful groups of fathers based on all three dimensions of paternal involvement. Utilizing a multidimensional perspective on the dimension of engagement in particular allowed an informative glance into what fathers *do* with their children. These four patterns of fathering behavior differed across overall amount of time fathers spent with their children, but also in what types of activities fathers prioritized. What a father does with his child when they spend time together is important, and researchers should continue to ask about what fathers are doing with their children, not just how often. We cannot assume that all fathers do is play with their child, simply because on average fathers spend disproportionately more time in play than mothers do (Lamb, 2010b). In fact, fathers in clusters with different levels of engagement overall expressed different patterns of activities, with the most involved fathers spending the majority of father-child interaction time in play and cognitively stimulating activities, followed by fathers who predominately played and took care of their child's needs, and the two less involved fathers engaging mostly in social events with their children.

Consistent with prior research on correlates of fathering, the groups varied in paternal supports and stressors in addition to family structure. However, there were no differences between fathering clusters with respect to socioeconomic status, which was partially aligned with the complex findings in previous person-centered fathering research (Goodman et al., 2011; Jain et al., 1996; Paquette et al., 2000).

Latent Classes of Paternal Involvement Among Black Fathers

With respect to the parenting clusters, fathers were most differentiated by levels of play, caregiving, social activities, cognitive activities, and warmth. The largest group of fathers (41%), Average Involved, exhibited paternal involvement behaviors that were close to the sample mean, with slightly above average engagement and warmth, and average reports of spanking. A quarter of fathers displayed lower-than-average engagement, particularly in play and cognitive activities, with slightly more reports of spanking their child (Low Involved-Disciplinarians). The Highly Involved cluster of fathers, about one-fifth of the sample, spent significantly more time interacting with their young children, particularly in playful and cognitively stimulating activities, as well as expressing their affection for their child often. The smallest subgroup of fathers had the lowest involvement in each domain of engagement, warmth, and control, rarely spending time with their children, expressing affection to them, or corporally punishing them. Importantly, this cluster was classified as Uninvolved due to substantially lower paternal involvement in a range of parenting behaviors. In contrast to the early studies on fathering, which described father involvement based on a single dimension such as whether they lived with the child (Pleck, 2010), the present study greatly expands previous research by capturing multiple aspects of fathering, as well as acknowledging

that residential status may influence but not necessarily determine fathers' level of involvement.

These varying levels of father-child engagement, paternal warmth, and spanking across clusters demonstrate a benefit of person-centered methodologies by revealing that fathers who are high in one parenting dimension may not necessarily be high in another dimension. For example, whereas one subgroup of fathers was very low in engagement and also lower in control (Uninvolved), another profile was low in engagement but marginally higher in control (Low Involved-Disciplinarians).

About one in five fathers comprised possibly the most noteworthy parenting subgroup, classified as Highly Involved. These fathers frequently interacted with their young children in all types of activities and often showed love and appreciation. Delving more deeply into the relative frequency of engagement within these person-oriented profiles, these highly involved fathers exhibited a distinct pattern of father-child engagement. Fathers in the Highly Involved subgroup privileged an interaction style that was full of play and cognitive stimulation, all in the context of very warm, secure environment.

With their emphasis on playing and teaching their children along with frequent affirmations of their love, these Highly Involved fathers were conceptually similar to two previously identified fathering groups in addition to a more recent conceptualization of fathering. First, Highly Involved fathers in the present study were reminiscent of the "playmates-teachers" in the seminal person-centered fathering study (Jain et al., 1996). The Highly Involved profile of fathers may also align with the "stimulative" fathers found in the typology by Paquette and colleagues. "Stimulative" fathers, who represented

about a quarter of the sample, were marked by their emotional support and enhanced stimulation of their children such as through teaching them new games. Additionally, these stimulative fathers were really "into" their children, as they often talked positively about them with other people. Likewise, fathers in the Highly Involved profile exhibited the most emotional support via warmth, as well as stimulating their children cognitively and through play, as well as opening their children to the world by taking them places outside of the home (social activities). Also similar to the current study, these fathers represented a substantial proportion of the sample (about a fifth in this study and about a quarter in Paquette's study).

Lastly, a connection could be made between the Highly Involved fathers in the present study and "activative" fathering as well (Paquette, 2004), a conceptualization that followed and supported Paquette and colleagues' earlier empirical typology of fathering (Paquette et al., 2000). The term "activative" derives from the father-child activation relationship, or the attachment bond between fathers and children that supports the child's need for stimulation, overcoming limits, and taking chances. Fathers activate their children by creating stimulating contexts that encourage children to explore the physical and social environment around them. Specifically, "activative fathering" may be achieved through behaviors such as playing with objects in atypical ways and using more sophisticated vocabulary and sentence structure beyond their child's level. Children's new experiences facilitated by fathers may trigger children's affective and cognitive arousal, challenging children beyond their current level of competence. At the same time, fathers also convey affection by sensitively attuning their reactions to their children, and protecting their children from harm during rough and tumble play, and occasionally

allowing their child to "win" at a game or contest. The focus on father-child interaction in play and novel experiences align nicely with the particularly high levels of play and cognitive stimulation (singing songs and sharing stories) exhibited by Highly Involved fathers in the present study. Importantly, these destabilizing experiences are situated in an environment of great affection and care for the child, which is reflected in the high level of paternal warmth exhibited by Highly Involved fathers.

It is noteworthy that this study on paternal involvement provided empirical link to father-child activation theory, a theory that addresses how the paternal involvement dimensions of paternal engagement, warmth, and control may coalesce. One operationalization of activative fathering (Stevenson & Crnic, 2012) used qualitative observations of fathers' behavior in naturalistic settings. The present study found such a constellation of fathering behaviors similar to activative fathering in a sample of African American fathers in different family structures using father-reported quantity of engagement, expression of warmth, and spanking incidence. Thus, a theoretical integration of how dimensions of paternal involvement are related to activative fathering may be useful to extend our conceptualization of fathering and expand the ways we can operationalize particular modes of fathering that may have beneficial outcomes for children. Additionally, this constellation of parenting behaviors deserves further study in more diverse samples, also considering the implications for fathers themselves and for their children's development.

Fathers in the highly involved, playmate-teacher, activative parenting profile represent an important constellation of fathering behaviors that is beginning to receive more attention in the broader fathering literature. These "playmate-teacher" fathers

prioritized playing with and teaching their children in an environment of great warmth. Such fathers challenge their children in a positive way, and research suggests it is this combination of pushing children beyond their limits while providing the supportive environment of love that may promote children's social-emotional development (Stevenson & Crnic, 2012).

There were additional parallels between other parenting profiles that emerged in this study and in previous findings. Results of prior study on fathers' social-affective behaviors and linguistic stimulation produced an "Average Parenting" cluster that comprised the largest subgroup of the sample (Goodman et al., 2011), as was the case in the present study. These profiles of "Average" fathers in both studies were within half a standard deviation of the sample mean on all indicators of parenting behavior. Another study of more conceptually similar parenting constructs (i.e., engagement, discipline) found a pattern of fathering characterized by high involvement in caretaking (Jain et al., 1996), which might be comparable to the Average Involved cluster found among this sample of Black fathers in which caregiving was among the highest types of engagement reported. Of note, the present study considered fathers in all family structures, as opposed to only intact, married families (Jain et al., 1996; Paquette et al., 2000) or residential fathers (Goodman et al., 2011; Lee et al., 2011).

Another similarity to prior studies using person-oriented perspectives was the emergence of a subgroup of fathers who were low on every parenting behavior examined. In this study, such a profile was classified as Uninvolved given the overarching construct of paternal involvement. Likewise, other studies classified these groups according to the

parenting measures included, as in “disengaged” (Jain et al., 1996), “low discipline” (Lee et al., 2011), or “detached/low verbal” (Goodman et al., 2011).

The Low Involved-Disciplinarian parenting profile was reminiscent of the “disciplinarians” (Jain et al., 1996) and “authoritarian” (Paquette et al., 2000) fathers from other studies. In the present study, this was the only subgroup of fathers who reported marginally more spanking than the sample on average. At the same time, it is important to note that their level of spanking was not statistically significantly different from either the Average Involved or the Highly Involved clusters, and the raw mean for this group was fairly low generally speaking (less than half of fathers ever spanked their child in the past month).

To summarize the comparison with previous person-oriented fathering research, the current study found many similar patterns as in other work. Results were most similar to the typology found in the seminal person-oriented fathering piece (Jain et al., 1996): Average Involved as the “caretakers” from Jain and colleagues’ typology, Low Involved-Disciplinarians as the “disciplinarians,” Highly Involved as the “playmates-teachers,” and Uninvolved as the “disengaged” group of fathers. Importantly, the present study extended research on parenting patterns to consider fathers who are unwed and not residential, fathers of daughters as well as sons, and African American fathers.

A consistent correlation among the three core dimensions of paternal involvement was the positive association between overall engagement and warmth. As mirrored in the positive and moderately high bivariate correlations between warmth and each engagement indicator, the four parenting clusters followed a pattern such that when engagement was above the sample mean, paternal warmth was as well (and vice versa).

The finding that parenting quantity (father-child interaction time) and quality (paternal warmth) covaried with each other was consistent with the single person-oriented study of similar paternal involvement constructs (Paquette et al., 2000). More broadly, this was supported by prior findings that activity frequency and warmth-responsiveness are at least moderately positively correlated (e.g., Pleck, 1997), although the results are mixed, with other studies reporting weak or no correlations between engagement and warmth (e.g., Brown, McBride, Shin, & Bost, 2007). These inconsistent findings may be a function of construct operationalization and/or informant source (self-report, observed, etc.).

However, this integration of quantity and quality using person-oriented methodologies is novel in fathering research generally, which tends to use variable-centered approaches focusing on particular parenting dimensions separately. Only one other person-oriented study conceptually considered these three core dimensions of paternal involvement (as well as other constructs that do not cleanly fit into any dimension). Paquette and colleagues (2000) captured paternal engagement by fathers' level of involved in play and caregiving, paternal warmth was termed "emotional support," and control was operationalized as discipline (correcting misconduct and teaching appropriate behavior) and attitudes toward physical punishment. Paquette and colleagues' study considered two types of father-child interaction, play and caregiving. Among their sample of married Canadian fathers of sons, the two fathering groups that were hypothesized to be more adaptive for child outcomes (authoritative and stimulative fathers) played more and spent more time taking care of their child than the other two

groups (authoritarian and permissive fathers). Similarly, the present study found higher engagement in two groups in particular, Average Involved and Highly Involved fathers.

Given the extensive literature on parenting styles defined by levels of warmth and control, it was surprising that there was no authoritative cluster of fathers in the sample who were high in both warmth and control – a parenting style found to be associated with positive outcomes for children in some contexts (e.g., Baumrind, 1967; Steinberg et al., 1994). There also was no permissive parenting profile of high warmth and low control in this sample. Even though some research suggests that the authoritarian parenting style is common among Black parents (e.g., Baumrind, 1972; Dornbusch et al., 1987), there was only one cluster with lower warmth and marginally higher spanking (Low Involved-Disciplinarians), but they comprised only a quarter of the sample. Furthermore, their level of control was not statistically different from either the Average Involved or Highly Involved subgroups.

It may be useful to examine carefully the conventional wisdom and scholarship that Black parents are particularly punitive with their children (Gershoff, Lansford, Sexton, Davis-Kean, & Sameroff, 2012). First, it must be acknowledged that the bulk of the existing research in this area refers to mothers (rather than fathers), and often includes families with older children and adolescents (rather than young children). Baumrind (1972) recognized decades ago that Black parents could appear authoritarian when utilizing White standards. There is research that counters these negative stereotypes from both attitudinal and behavioral perspectives. For example, a growing body of work on Black and low-income fathers' beliefs about parental roles finds that these fathers privilege their responsibilities as providers and nurturers, not merely disciplinarians and

authority figures (Coles, 2001; Edin & Nelson, 2013). In terms of disciplinary strategies, another study reported that Black fathers were more likely to engage in non-physical responses to misbehavior, including inductive discipline and withdrawing privileges, rather than corporal punishment (Bradley, 2000). More generally, scholars have argued that previous research supporting Black fathers' harsh disciplinary styles may have been methodologically biased and therefore overstated their use of physical punishment (Mandara, 2006; Roopnarine, 2004). The current study, with its larger, more representative sample, found no empirical evidence for fathers' emphasis on spanking, and thus supports the conceptual arguments and qualitative evidence for a more balanced view of Black fathers' use of punishment.

At the same time, not finding a truly "high" control group of fathers also could be a function of the limited measure of control, a single item indicator of spanking. Only three percent of variance in the spanking item was explained by these latent class results, even though descriptive statistics revealed this indicator to have almost maximum variation possible for a dichotomous item (SD=0.49). More complex measures of control and monitoring should be considered, such as involved-vigilant parenting (Brody et al., 2001) or the Parent-Child Conflict Tactics Scale (Lee et al., 2011), that considers multiple ways of disciplining children (e.g., setting limits, controlling exposure to outside influences).

It is important to keep in mind that paternal warmth as operationalized in this study does not require fathers to be physically present with their children, which was a necessity with paternal engagement. Warmth was assessed by three items regarding how often fathers say they love their child, how often they tell their children they appreciated

something they did, and how often they hug their child – only the latter of which requires the father to be present with the child. Thus, one cannot come to the conclusion that engagement and warmth were positively correlated merely because both dimensions required a father's presence.

Due to this study's multidimensional conceptualization of the father-child interaction, distinct patterns were revealed regarding relative engagement frequency within each cluster. Fathers in the Average Involved and Highly Involved subgroups had higher within-cluster levels of play and lower within-cluster levels of social activity engagement. Both the Low Involved-Disciplinarians and the Uninvolved clusters had similar relative frequencies of the four engagement dimensions, with higher social engagement, followed by caregiving and cognitive activities, and the least engagement in play.

Thus, fathers in both the less-engaged clusters (Low Involved-Disciplinarians and Uninvolved) seem to prioritize social involvement over other types of activities. This may suggest that fathers who have limited interaction with their children – which may be due to structural or other reasons – may choose to invest that time in activities that extend beyond the home and connect their child to the outside world (i.e., visiting relatives, going out to eat). Particularly for the Uninvolved parenting group, 86 percent of which were nonresidential fathers, these men may engage in more social activities outside the home if they do not live with the child, and perhaps mothers circumscribe fathers' interaction with the child (e.g., maternal gatekeeping).

An alternative explanation of some fathers' relative frequency of social activities could be statistical: Fathers in each parenting cluster had levels of social engagement that

were closest to the sample mean, perhaps due to the low average of the sample overall and somewhat less sample variability in social activity engagement. In other words, Black fathers reported somewhat similar levels of spending time with their young children in social activities, which could be why little variance in this parenting indicator was explained by the fathering profiles (R^2=.17).

Another noteworthy finding related to within-cluster patterns of engagement activities concerned the nearly opposite patterns between the Low Involved-Disciplinarians and the Highly Involved fathers. The Low Involved-Disciplinarians were especially low in the engagement dimensions of play and cognitive activities, the exact two dimensions in which Highly Involved fathers were especially high. The fact that play was the lowest engagement dimension within the Low Involved-Disciplinarians aligns with descriptions of authoritarian fathers who tend to be not very affectionate and more often use control, such as physical punishment, to garner respect for authority and obedience (Paquette, 2004). It appears that fathers in these different clusters may play quite different roles in their families. Fathers in the second cluster (Low Involved-Disciplinarians) appear to be those whom the mother may call in specifically to discipline the child (the "wait till your father comes home" type). On the other hand, Highly Involved fathers may view themselves more as "fun" daddies, those who enjoy spending time with their children and being affectionate towards them, participating in games, stories, and activities that the child may like.

The differing patterns of engagement *across* clusters and *within* each cluster highlight the utility of taking a multidimensional perspective to father-child engagement (e.g., Cabrera et al., 2000), considering the types of activities in which a father is

interacting with his child, not simply the overall amount of time engaged. Had a single engagement indicator been used instead of multiple indicators for the conceptually distinct categories of play, caregiving, social activities, and cognitive stimulation, we would have missed important distinctions across parenting profiles and potentially overlooked connections with theoretically and empirically determined subgroups of fathers.

This study extends prior research by examining the empirical patterns that emerged among the multiple dimensions of the re-conceptualized construct of paternal involvement (Pleck, 2010), a construct that has often been taken up in a fragmented way. Furthermore, the present research takes a within-group approach to studying African American fatherhood, the only study to date that considers the heterogeneity among Black fathers from a person-oriented methodology. Only one prior study of father profiles examined race at all, reporting that African American fathers were less likely than White fathers to be classified in the parenting group which was marked by high sensitivity and positive regard, with low levels of intrusiveness and detachment (Goodman et al., 2011). The measures used in that study to develop latent profiles were based on exclusively qualitative features of father-infant interactions (and did not include how often fathers engaged in such interactions), in addition to the sample consisting of predominately low-income and working class families in rural settings. Thus, such a within-group approach among a larger, more representative sample was necessary to reveal the substantial variation in Black fathers' parenting styles.

Father and Family Characteristics Associated with Parenting Cluster Membership

With respect to correlates of these person-oriented profiles, results generally matched expectations based on previous literature. The Highly Involved cluster had the most personal supports and least risks compared to the other parenting groups. Regarding family characteristics, both the Highly and Average Involved clusters were similar to each other, with higher marriage rates, residency, better relationship with the mother, and more total children. Fathers in the Uninvolved pattern of fathering had the lowest assessment of their parenting, lower religiosity, marginally higher likelihood of being diagnosed with depression, most stress from work, and less relationship stability and support from the mother (i.e., quality of the relationship, coparenting, number of children with the mother).

Intergenerational father involvement was unrelated to fathers' profile membership. Despite some work suggesting that the presence of one's father has a positive effect on paternal involvement (Hofferth, 2003), other qualitative work with fathers of color suggests that the relationship is more complex, with some fathers using their own biological fathers as models, and others rejecting the pattern of fatherhood embodied by their own fathers, and others creating a father identity completely on their own, as they have no example on which to rely (Roy, 2006).

There were no differences in fathering groups based on age, similar to prior findings (Goodman et al., 2011; Paquette et al., 2000), which suggests that fathers across the age span in this study (18-71 years old) were equally likely to display these different patterns of parenting behaviors. In terms of fathers' beliefs, paternal self-assessment paralleled fathers' level of involvement, with fathers in the Highly Involved subgroup

rating themselves most positively, followed by the Average Involved, Low Involved-Disciplinarians, and Uninvolved profiles.

With respect to religiosity, fathers in the Highly Involved subgroup attended religious services more often than fathers in the other three groups. A majority of the Highly Involved fathers reported attending services once a week, compared to a mode of a few times a year for the other three parenting profiles. The importance of religiosity for Highly Involved fathers was consistent with Letiecq's (2007) study of African American fathers of Head Start children. Fathers who were highly spiritual engaged in more proactive and authoritative parenting, including increased warmth and monitoring. Furthermore, perhaps the salience of religiosity is connected to a previous finding that attendance at religious services was a strong predictor of greater father-child involvement for *married* Black men (Perry et al., 2012), given that the Highly Involved profile of fathering contained the highest proportion of married men. At the same time, the majority of the Highly Involved fathers in the present study were unwed (approximately two-thirds), thus religiosity may be an important source of support and encouragement for men more broadly to engage in warm, playful, and stimulating interactions with their young children.

Paternal depression followed a similar pattern, with marked differences between the Highly Involved and Uninvolved groups. This alignment of fathers' beliefs and mental health with membership in paternal involvement clusters is consistent with other work highlighting the importance of fathers' self-esteem in predicting their positive interactional style with their children among low-income fathers (Fagan, 1996), and that fathers who were more secure in their social relationships were more likely to be in the

fathering cluster most similar to the Highly Involved profile in the present study (Paquette et al., 2000).

Thus, the relevance of fathers' personal beliefs and psychological issues may be of particular import for parenting programs aimed at increasing father involvement. Fathers who believed that they were excellent fathers and had better mental health were more likely to be classified as Highly Involved fathers. This is consistent with the working model of self-as-parent (Abidin, 1992), suggesting that supporting father involvement may begin with supporting men's positive self-beliefs and personal wellbeing.

It was somewhat surprising that there was no difference in average parental stress across the four fathering clusters, but this could have been a function of overall low reported stress (M=2.07), less variability for the scale (SD=0.69), and lower reliability of the Aggravation in Parenting scale subset of items in this sample (α=.62). The lack of association between parental stress and fathers' profile of parenting in the present study conflicts with an earlier study of fathering typology, which found that parental stress was the most powerful factor distinguishing groups of fathers (Paquette et al., 2000).

However, Uninvolved fathers reported more work stress than Average Involved fathers, who reported more stress than Highly Involved fathers. Fathers in all four clusters also worked similar hours per week, which is consistent with some prior studies (e.g., McGill, 2014), but not others (Paquette et al., 2000). The association between paternal work and parenting behavior is complex and may vary as a function of multiple characteristics of the work environment (e.g., pressure, supportiveness, type of shift), as found by Goodman and colleagues (2011).

Some structural factors were unrelated to fathering cluster membership, specifically socioeconomic status as operationalized through income and education. Fathers in all four parenting groups had similar financial resources, a finding that parallels all previous person-centered father studies that examined potential correlates of cluster membership. Regarding parental education, this study's findings are contrary to another in which better educated fathers are more likely to belong to more involved (Jain et al., 1996), authoritative (Paquette et al., 2000), and activative fathering (Stevenson & Crnic, 2012) patterns of behavior. In the case of the latter finding, perhaps the greater range of education levels (1 to 7 vs. 1 to 4 in the present study) and thus possibly additional variation allowed for such distinctions between profiles of fathering to emerge.

At the same time, it is encouraging that fathers can be highly involved, warm, and appropriately controlling with their young children regardless of financial resources and educational attainment. Involved fathering is not just about financial provision. However, this does not serve to ignore the real structural hindrances to being a highly involved father, such as residential status and relationship with the mother of the child. Family structure was related to the patterns of father-child engagement, warmth, and spanking such that married and residential fathers were more likely to present in clusters with higher levels of engagement across activity types as well as more expression of warmth. Specifically, both married fathers and residential fathers were less likely to be in the Uninvolved fathering group, and residential fathers were more likely to be in the Average Involved and Highly Involved clusters. At the same time, there were still sizeable proportions of unmarried and even non-residential fathers in the most highly engaged and warm cluster (approximately 68% and 16%, respectively). Structural factors have an

effect in the sense that it may be more difficult to be engaged when not living in the home, and vice versa (more difficult to be unengaged when living in the home). Yet there were substantial numbers of Black fathers who remain very involved with their children, regardless of family situation.

In sum, some structural factors mattered in which pattern of paternal involvement a father displayed, but other factors seemed not to play a role. That fathers in different parenting clusters varied more in family structure and father-mother relationship quality rather than SES was corroborated by other studies with fathers (Paquette et al., 2000) as well as mothers (Chan & Koo, 2011).

Fathers in the Highly Involved and Average Involved parenting groups had the highest relationship quality with the mother, followed by Low Involved-Disciplinarians, and Uninvolved clusters. This maps onto fathering research examining dimensions of paternal involvement separately, which finds that a better relationship with the mother was related to more paternal engagement (Roggman, Bradley, & Raikes, 2013) and more inductive reasoning disciplinary strategies (Woodworth, Belsky, & Crnic, 1996), which may be associated with less corporal punishment. Yet all three person-oriented studies found no relation between type of fathering and parental relationship quality, although that may have been a function of only including fathers who were married or cohabiting.

Levels of coparenting followed a similar trend as father-mother relationship quality, with the Highly Involved and Average Involved subgroups at a higher level than the Low Involved-Disciplinarian and Uninvolved groups. Given that this was a sample of fathers with varying relationships with the child's mother, it is notable that the means for each fathering cluster were high, even among the Uninvolved cluster (M=3.66 out of 4).

At the same time, fathers in the Uninvolved cluster had significantly fewer children with the mother, with 40% reporting more than one child with the mother compared to at least 55% for the other three parenting groups. In sum, these differences across relationship quality, coparenting, and number of children suggest greater commitment and stability in the romantic relationship with the mother among more involved fathers.

With respect to child characteristics, the lack of association between child gender and parenting profile membership (Goodman et al., 2011), as well as infant emotionality and parenting profile membership (Jain et al., 1996), was mirrored in other person-oriented fathering research with different samples and measures. Child temperament has been implicated as a possible within-child factor associated with activative fathering (Paquette & Bigras 2010), although that has not been empirically supported in person-centered fathering work, including the present study. Yet it is possible that children's early emotionality may moderate the effects of fathering on their developmental outcomes, as proposed by differential susceptibility literature (Ellis et al., 2011). Although not statistically significant, there was a trend such that Low Involved-Disciplinarians had children with higher ratings of infant emotionality as reported by both mothers and fathers, suggesting a positive correlation between difficult temperament and increased corporal punishment.

Considerations, Strengths, and Future Directions

To begin, the current study was the first to examine person-oriented fathering behaviors among a sample of Black fathers. As with any clustering technique, the groups that emerge are only as useful as the indicators used to produce them. It is possible that different patterns of fathering would have resulted if different measures of paternal

involvement had been used. There were only a handful of items representing each of the engagement indicators, and many of the engagement subscales had low correlations or internal consistency. At the same time, high correlations may not be expected with such scales given that the items are proxies for the range of activities possible within a particular type of activity. Also, the correlations were likely a function of having a limited set of items, as other studies that used the more extensive measure found satisfactory reliability (Leavell et al., 2012). Thus, in the current study I decided to include multiple types of activities, rather than only overall engagement, to provide a more descriptive depiction of Black fathers' parenting. As with any person-oriented methodology, researchers using latent class analysis must balance considerations of theoretical justification, statistical adequacy, and practical utility in selecting how many classes best represent the data.

The Fragile Families and Child Wellbeing Study represents a large, community-based sample of families from large cities in the U.S. This sample is more representative than most studies of fathers, especially research with Black families. Yet the families were recruited with certain selection criteria that limit generalizability, such as the overrepresentation of unmarried mothers and their families (Reichman et al., 2001). Also, many of the fathers were recruited and initially interviewed at the hospital during the child's birth. Thus, the fathers may not be representative of all fathers in that many of them visited the hospital when the child was born, regardless of relationship status with the mother. Perhaps such selection bias may have affected the fathering groups that emerged and/or the proportion of fathers represented in each cluster.

I used father-reported paternal engagement in this study. Other studies of father engagement have used mother-reports of father-child interactions because of more complete data and research suggesting that mothers report paternal engagement accurately (Nylund et al., 2007). A strength of father-reported information is that fathers are privy to what they do with their children, especially if some of the day is spent with children when mothers are not around and may not know about the extent of involvement (e.g., Martin, Brazil, & Brooks-Gunn, 2013), which may be especially the case for non-residential fathers. Even if mothers were always present, there is data to suggest that a mother's relationship to her child's father affects her ratings of his engagement (Lamb & Lewis, 2010).

Paternal warmth, although measured with items from an established scale, is often conceptualized more broadly in the parenting literature, including the responsiveness and sensitivity of parents to their child's needs. Warmth as measured in the current study may be more similar to positive regard, or an affectively caring and loving disposition toward the child. In terms of control, considering more types of disciplinary action could have better distinguished groups of fathers. Also, the single spanking item was worded in such a way as to possibly lead to underreporting. The question was a double-barreled one, asking whether fathers spanked their child "for misbehaving or acting up." It is possible that fathers may have responded in the negative to this question because they spanked their child for reasons other than what were provided in the question. In other words, fathers could have believed misbehaving referred to more serious forms of disobedience, rather than other behavior such as not listening to the father.

In terms of fathering correlates, other predictors not tested in the present study may help to explain cluster membership. Measures of fathers' attitudes about parental roles and what it means to be a good father could influence what behaviors fathers believe are important in raising their children and therefore enact those behaviors aligned with their beliefs.

The present study did consider coparenting (which measured whether the father felt supported by the mother in parenting the child), which was higher among Highly Involved and Average Involved fathers compared to Low Involved-Disciplinarian and Uninvolved fathers. A construct that more explicitly taps into how mothers may curtail or encourage the involvement of fathers, maternal gatekeeping, would be useful to examine in future studies. Maternal gatekeeping plays a role in defining what fathers are permitted to do with their children (Schoppe-Sullivan et al., 2008), which could be particularly salient in this sample that included non-residential fathers.

Given the cross-sectional measure of most of the correlates in this study, we cannot state the direction of effects between fathers' characteristics and their membership in certain parenting profiles. It could be that more depressed fathers pull away from their children and engage less in activities, or that fathers who do not spend time with their children (by choice or by force) leads them to feel depressed. Additionally, all of the items in the present survey were global measures of parenting (weekly frequency of engagement and warmth, spanking in the past month) and correlates (e.g., work stress), not same-day measures of each parenting behavior and father characteristic, limiting conclusions about causality. Future studies should examine fathers' beliefs and mental

health with parenting behaviors over time, teasing apart the interplay between psychological wellbeing and paternal involvement.

One important future direction would be to examine whether and how these profiles of fathering have implications for children's development. It may be that the Highly Involved fathers would have more socially skilled and emotionally competent children compared to children of fathers in other parenting groups. At the same time, given the similarities in the profile of fathers' personal risk and protective factors between the Highly Involved and Average Involved, there could be no difference for children's outcomes between these two groups. However, the resemblance of the Highly Involved fathers in this study to activative fathering (the constellation of highly playful, cognitively stimulating, and warm behaviors), there may be unique benefits for children with such fathers.

Conclusions

In sum, this study empirically tested the three core dimensions of the paternal involvement construct from a person-centered perspective among a large sample of African American fathers of young children. The study revealed the heterogeneity among Black fathers, in addition to extending patterns of fathering found in earlier work to a broader population in terms of race and family structure. Integrating multiple dimensions of parenting quantity and quality allowed for the discovery of unique subgroups of parents who differed across a constellation of behaviors. These findings broaden prior research on factors associated with paternal involvement, suggesting that personal characteristics of fathers, as well as family processes, were associated with membership in particular parenting patterns. A logical next step would be to determine potential

implications of these fathering clusters on children's cognitive, emotional, and social development. Researchers should continue to view parents as multifaceted individuals who interact with their children in a multitude of ways simultaneously, and that, compared to an approach that examines parenting behaviors in isolation, considering a typology of parenting provides a useful complementary perspective on the relationships between parenting and child outcomes.

Tables and Figures

Table 10 Sample father and family characteristics

	N	Range	*Mean* or %	*SD*
Father Characteristics				
Involvement of biological father	1219	1-4	2.09	0.96
Very involved		--	35.2%	
Somewhat involved		--	27.6%	
Not involved		--	30.3%	
Never knew biological father		--	6.9%	
Father age (years)	1383	18-71	30.89	7.77
Paternal self-assessment	1399	1-4	3.30	0.78
Not a very good father		--	1.1%	
A good father		--	16.1%	
A very good father		--	34.2%	
An excellent father		--	48.6%	
Attend religious services	1383	1-7	3.61	1.58
Faith guides family	1374	1-4	3.47	0.83
Strongly disagree		--	5.5%	
Somewhat disagree		--	5.3%	
Somewhat agree		--	26.2%	
Strongly agree		--	63.0%	
Father depression	1394	0-1	0.12	0.33
Parental stress	1399	1-4	2.07	0.69
Work stress	1300	1-4	1.64	0.68
Work hours	1360	2-80	43.08	12.12
Family Characteristics				
Family income ($)	1341	0-72,000	30,111.43	33,856.75

	N	Range	*Mean* or %	*SD*
Father education	1380	1-4	2.09	0.85
Less than a high school diploma		--	26.4%	
High school diploma or equivalent		--	44.2%	
Some college or technical/trade school		--	23.9%	
College bachelor's degree or graduate school		--	5.5%	
	1398	1-4	2.10	0.91
Mother education				
Less than a high school diploma		--	30.4%	
High school diploma or equivalent		--	35.8%	
Some college or technical/trade school		--	27.2%	
College bachelor's degree or graduate school		--	6.6%	
Marital status	1398	0-1	0.26	0.44
Residential status	1399	0-1	0.66	0.47
Father-mother relationship quality	1272	1-3	2.54	0.47
Coparenting	1280	1.17-4	3.76	0.35
Total children	1394	1-10	1.92	1.13
More than 1 child with mother	1394	0-1	0.56	0.50
Multiple partner fertility	1308	0-1	0.43	0.50
Child gender (boys=1)	1399	0-1	0.51	0.50
Child temperament (mother)	1318	3-15	8.64	3.18
Child temperament (father)	1099	2-15	9.15	3.26

Table 11 Means, standard deviations, and correlations for latent class indicator variables (*N*=1399)

Paternal Parenting Indicator	Range	*Mean (SD)*	*1*	*2*	*3*	*4*	*5*	*6*
1. Engagement - Play	0-14	8.73 (4.25)	--					
2. Engagement - Caregiving	0-14	7.23 (4.40)	.48**	--				
3. Engagement - Social	0-14	4.84 (3.17)	.38**	.29**	--			
4. Engagement - Cognitive	0-21	10.16 (6.12)	.62**	.39**	.30**	--		
5. Warmth	0-21	17.64 (4.96)	.64**	.46**	.35**	.53**	--	
6. Control - Spanking	0-1	0.39 (0.49)	.08**	.08**	.05**	.03	.15**	--

Note: $^{+}p<.10$, $*p<.05$, $**p<.01$, $***p<.001$.

Table 12 Model fit statistics for latent class analyses of paternal involvement classes (*N*=1399)

Model	BIC(LL)	L^2	*df*	Bootstrap *p* value	% reduction in L^2	Maximum BVR	BLRT *p* value	Classification Error
No direct effects								
One-class	16908.03	2203.64	474	< .001	--	441.65	--	--
Two-class	15551.94	796.85	467	< .001	63.84	35.20	< .001	5.7%
Three-class	15361.78	555.98	460	.024	43.32	4.04	< .001	13.6%
Four-class	**15374.72**	**518.21**	**453**	**.132**	**6.79**	**2.54**	**< .001**	**20.9%**
Five-class	15409.45	502.24	446	.192	3.18	0.93	.148	19.8%
Six-class	15441.04	483.12	439	.290	3.81	1.54	.072	24.5%

Note: BIC(LL) = Log-likelihood based Bayesian information criterion, L^2 = Likelihood ratio chi-square, BVR = Bivariate residuals, BLRT = Bootstrap likelihood ratio test. Bold font indicates the model that best fit the data.

Table 13 Raw means, standardized means, and (standard deviations) of paternal involvement by father cluster group

Variable	Cluster 1 Average Involved (41%, *n* = 579)	Cluster 2 Low Involved-Disciplinarians (25%, *n* = 355)	Cluster 3 Highly Involved (19%, *n* = 261)	Cluster 4 Uninvolved (15%, *n* = 204)
Raw Means				
Engagement - play	10.47 (2.46)$_a$	5.62 (2.44)$_b$	13.67 (0.72)$_c$	2.88 (2.12)$_d$
Engagement - caregiving	8.81 (3.89)$_a$	5.69 (3.42)$_b$	9.83 (4.01)$_c$	2.10 (1.74)$_d$
Engagement - social	5.43 (2.97)$_a$	4.38 (2.78)$_b$	6.41 (3.42)$_c$	1.94 (1.65)$_d$
Engagement - cognitive	11.20 (4.85)$_a$	6.92 (3.89)$_b$	17.85 (2.81)$_c$	2.99 (2.34)$_d$
Warmth	19.80 (2.12)$_a$	16.81 (3.80)$_b$	20.94 (0.35)$_c$	8.74 (4.80)$_d$
Control - spanking	0.40 (0.49)$_a$	0.46 (0.50)$_a$	0.40 (0.49)$_a$	0.21 (0.41)$_b$
Standardized means				
Engagement - play	0.41 (0.58)$_a$	**-0.73 (0.58)$_b$**	**1.16 (0.17)$_c$**	**-1.38 (0.50)$_d$**
Engagement - caregiving	0.36 (0.88)$_a$	-0.35 (0.78)$_b$	**0.59 (0.91)$_c$**	**-1.17 (0.39)$_d$**
Engagement - social	0.19 (0.94)$_a$	-0.14 (0.88)$_b$	0.49 (1.01)$_c$	**-0.91 (0.52)$_d$**
Engagement - cognitive	0.17 (0.79)$_a$	**-0.53 (0.63)$_b$**	**1.26 (0.46)$_c$**	**-1.17 (0.38)$_d$**
Warmth	0.43 (0.43)$_a$	-0.17 (0.77)$_b$	**0.67 (0.07)$_c$**	**-1.80 (0.97)$_d$**
Control - spanking	0.03 (1.01)$_a$	0.14 (1.02)$_a$	0.02 (1.01)$_a$	-0.36 (0.84)$_b$

Note: Significant differences at the .05 level are denoted by differences in subscripts. Standardized scores greater than .50 above or below the sample mean are highlighted in bold.

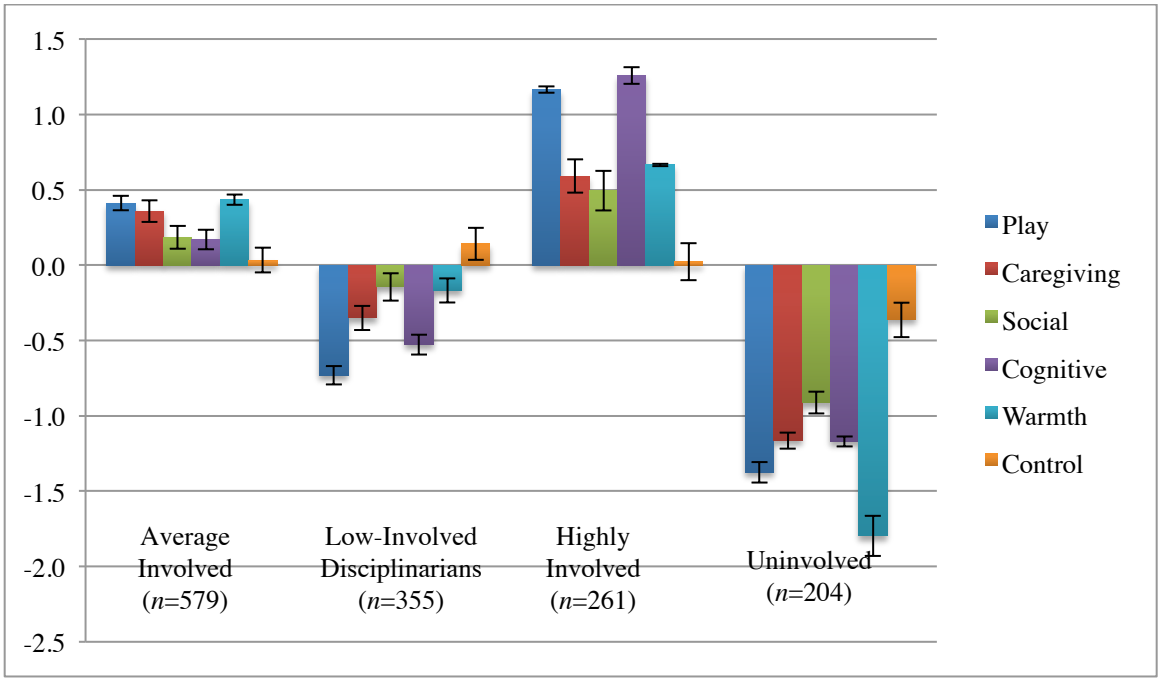


Figure 1 Classes of paternal involvement using standardized means

Table 14 Classes of paternal involvement by father and family characteristics

				Means or Percentages			
Correlate	***N***	***F***	***df***	Average Involved	Low Involved-Disciplinarians	Highly Involved	Uninvolved
Father Characteristics							
Involvement of biological father	1219	1.76	3, 1215	2.92	2.93	2.97	2.76
Father age (years)	1383	1.95	3, 1379	30.56	31.66	31.05	30.28
Paternal self-assessment	**1399**	**45.40*** **	**3, 1395**	**3.39_{a}**	**3.22_{b}**	**3.60_{c}**	**2.83_{d}**
Attend religious services	**1383**	**3.66***	**3, 1379**	**3.62_{a}**	**3.54_{a}**	**3.86_{b}**	**3.39_{a}**
Faith guides family	1374	1.98	3, 1370	3.49	3.39	3.54	3.45
Father depression (%)	**1394**	**2.95***	**3, 1390**	**13.7**	**9.9**	**9.3^{+}**	**16.7^{+}**
Parental stress	1399	1.48	3, 1395	2.09	2.07	2.00	2.12
Work stress	**1300**	**5.54**	**3, 1296**	**1.64_{a}**	**1.64**	**1.52_{b}**	**1.79_{c}**
Work hours	1360	1.56	3, 1356	43.77	42.06	43.24	42.60
Family Characteristics							
Family income ($)	1341	1.79	3, 1337	31763	30581	29633	25334
Father education	1380	1.31	3, 1376	2.05	2.13	2.13	2.03
Mother education	1398	1.58	3, 1394	2.07	2.16	2.15	2.02
Marital status (%)	**1398**	**15.45*** **	**3, 1394**	**30.7_{a}**	**25.9_{a}**	**32.1_{a}**	**7.8_{b}**
Residential status (%)	**1399**	**147.54*** **	**3, 1395**	**80.0_{a}**	**60.6_{b}**	**83.9_{a}**	**14.2_{c}**
Father-mother relationship quality	**1272**	**20.65** **	**3, 1268**	**2.66_{a}**	**2.60_{b}**	**2.73_{a}**	**2.55_{c}**
Coparenting	**1280**	**17.28*** **	**3, 1276**	**3.79_{a}**	**3.69_{b}**	**3.86_{a}**	**3.66_{b}**
Total children	**1394**	**5.60** **	**3, 1390**	**2.01_{a}**	**1.90_{a}**	**1.98_{a}**	**1.64_{b}**
More than 1 child with mother (%)	**1394**	**8.18*** **	**3, 1390**	**59.6_{a}**	**55.4_{a}**	**59.2_{a}**	**40.3_{b}**
Multiple partner fertility (%)	1308	2.01	3, 1304	41.4	44.7	40.6	51.2
Child gender (% of girls)	1399	0.56	3, 1395	48.0	51.0	46.4	50.5
Child temperament (mother-report)	1318	0.79	3, 1314	8.55	8.87	8.64	8.52
Child temperament (father-report)	1099	0.83	3, 1095	9.16	9.35	8.88	9.15

Note: $^{+}p<.10$, $*p<.05$, $**p<.01$, $***p<.001$. Significant differences at the .05 level are denoted by differences in subscripts. Percentages reflect the within-cluster proportion who responded affirmatively to that indicator. Thus, percentages in each row do not sum to 100%. Bold font indicates correlates that were significantly associated with father cluster membership.