USF UNIVERSITY OF
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# Nonresident Paternal Factors and the Psychosocial Adjustment of Black Adolescents from SingleMother Households 

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by

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## Dedication

I dedicate this dissertation to my mother in heaven. I treasure the time we had together on earth, and I hold dear the values you instilled in me. You epitomized fortitude and radiated love. Thank you for always making me feel capable and loved.

I also dedicate this dissertation to my husband. Thank you for believing in me and encouraging me! You are a wonderful support, and I am so proud of all that we are accomplishing together!

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#### Abstract

This study examined the role of nonresidential, Black fathers in the psychosocial adjustment of Black adolescents from single-mother households. Participants included 107 noncohabiting Black parental dyads with children between the ages of 12 and 18 years. Participants completed measures of positive parenting, parent-child relationship quality, depressive symptoms, coparenting relationship quality, and adolescents' emotional and behavioral functioning. Results of hierarchical multiple regressions found that father factors contributed unique variance to adolescent outcomes when using father-reported and combined father- and mother-reported adolescent functioning. Coparenting relationship quality mediated the relationship between father-child relationship quality and adolescent behavioral problems when using mother-reported and combined father- and mother-reported adolescent functioning. This study highlights the unique contributions of nonresident Black father factors to adolescent outcomes and supports the need for further research in this area.


## Introduction

Although paternal involvement has been associated with better outcomes for adolescents, there remains a dearth of studies examining the positive influence fathers who do not live with their children (i.e., nonresidential fathers) have on their adolescents' lives (Ali \& Dean, 2015; Bastaits, Ponnet, \& Mortelmans, 2014; Coley, Lewin-Bizan, \& Carrano, 2011; Harper \& Fine, 2006; Pan \& Farrell, 2006; Yoder, Brisson, \& Lopez, 2016). Given that the rates of nonresident fathers are highest among African Americans ${ }^{1}$ (U.S. Census Bureau, 2016), studies targeting this population of families are underrepresented in research (Connor \& White, 2011). Studies on the resilience of Black adolescents from single-mother households have focused primarily on maternal factors and the adolescent's relationship with the mother as protective factors for the adolescent (Anton, Jones, \& Youngstrom, 2015; Armistead, Forehand, Brody, \& Maguen, 2002; Chester, Jones, Zalot, \& Sterrett, 2007; Kim \& Brody, 2005; Merten \& Henry, 2011; Sterrett, Jones, \& Kincaid, 2009); whereas limited attention has been given to paternal factors and the adolescent's relationship with the father as protective factors for the adolescent (Caldwell et al., 2014; Coley et al., 2011; Harper \& Fine, 2006; Pan \& Farrell, 2006). Of the studies that have examined the role of nonresidential Black fathers in adolescent outcomes, some have failed to include father reports (Cooper, 2009; Jordan \& Lewis, 2005). In addition, limited studies have controlled for socioeconomic status (Cooper, 2009; Pan \& Farrell, 2006), which has been

[^0]associated with negative outcomes for Black adolescents from single-mother households (SMH; Hurd, Stoddard, \& Zimmerman, 2013). In the present study, I sought to add to the extant literature on the protective factors for Black adolescents from SMHs by examining the nonresidential paternal factors associated with psychosocial adjustment of Black adolescents.

## Coparenting Framework for African American Single-Mother Families

The present study was guided by the Coparenting Framework for African American Single-Mother Families (Jones, Zalot, Foster, Sterrett, \& Chester, 2007), consistent with the ecological risk/protective perspective (Murry, Bynum, Brody, Willert, \& Stephens, 2001), which proposes that nontraditional coparents (e.g., nonresidential fathers) may influence youth's psychosocial adjustment in ways comparable to single mothers. Specifically, it was posited that nonresidential fathers may influence youths' psychosocial outcomes directly through their positive parenting, depressive symptoms, and father-child relationship quality as well as indirectly through the coparenting relationship quality with the child's mother. Therefore, I examined the association between adolescents' psychosocial adjustment and the parenting styles, parent-adolescent relationship, parental mental health, and coparenting relationship quality of single mothers and nonresidential fathers. Consistent with the Coparenting Framework for African American Single-Mother Families, it was expected that paternal factors would influence adolescents' outcomes in similar ways as has been found for maternal factors.

## Rates of Single-Mother Households in the US

Approximately $35 \%$ of children in the US live in SMHs at any one point in time and nearly half of all children will spend some portion of their childhood in a SMH (DeBell, 2008; The Annie E. Casey Foundation, 2015). This rate has increased dramatically over the past 50 years with only $15 \%$ of children being raised in single-parent families from 1910 to 1970 (Vespa,

Lewis, \& Kreider, 2013). In the 1970s, couples began postponing marriage, cohabitating more frequently, and divorcing at higher rates (Cruz, 2013; Vespa et al., 2013). The confluence of these trends resulted in a significant increase in single-mother families.

Although the rate of children being reared in a SMH is on the rise for all youth, there is significant racial variability in the percentage of children who live in a SMH with Black children having the highest percentage (67\%), followed by Latino/Latina children (42\%) and White children (25\%; The Annie E. Casey Foundation, 2015). The rate of decline of children growing up in two-parent households is also steeper for Black children compared to other races. For example, there was a 16-point decline in Black children living in two-parent households from 1975 to 1998, compared to a 10-point decline for White children over the same time span (Hernandez, 2000). In fact, it has been estimated that at least $80 \%$ of all Black youth will live in a SMH at some point during childhood (Haskins, 2009).

The rate of nonmarital births increased dramatically among Black women in the latter half of the $20^{\text {th }}$ century. Since the mid-1990s, the rate has fluctuated around the staggering rate of 70\%. In 2015, 70.6\% of Black children were born to unmarried mothers (Martin, 2017). Many factors contribute to the stark increase of nonmarital births. With the rate of Black marriages declining sharply since 1960 , the number of years that an average woman is likely to have a nonmarital birth increased (Haskins, 2009). In addition, the rate of divorce among Black couples has increased in parallel with $70 \%$ of Black women's first marriages expected to end in divorce (Raley \& Bumpass, 2003). The compilation of delayed marriages resulting in increased nonmarital births and higher divorce rates has created a society where the numbers of Black children being raised in SMHs are exceedingly high (Child Trends Databank, 2015).

## Influence of Living in a SMH on Black Children

Black children living in SMHs are at greater risk for myriad negative psychosocial outcomes compared to Black children living in two-parent households. Specifically, Black adolescents living in SMHs have higher rates of emotional and behavioral problems, academic problems, sleep problems, substance abuse, engagement in criminal activity, high school dropout, teenage pregnancy, and earlier sexual debuts (Coley, 2003; Langley, 2016; Mandara, Rogers, \& Zinbarg, 2011; Montgomery \& Marinos, 2016; Troxel, Lee, Hall, \& Matthews, 2014; Wright \& Younts, 2009).

The preponderance of literature on Black youth from SMHs suggests that these youth exhibit greater externalizing behaviors compared to their counterparts who live in two-parent households. Externalizing behaviors can include misconduct, defiance, aggression, rule breaking, drug and alcohol use, sexual behaviors, inattention, and hyperactivity. Black youth from SMH are more likely to use alcohol or other drugs (Mandara et al., 2011; Montgomery \& Marinos, 2016; Wang, Simons-Morton, Farhart, \& Luk, 2009), engage in more criminal behavior (Wright \& Younts, 2009), have more sexual partners (Langley, 2016; Mulatu, Leonard, Godette, \& Fulmore, 2008), and display more disruptive behavior problems at school (Eamon \& Altshuler, 2004) including having greater hyperactivity, impulsivity, attention, and conduct problems (Zalot, Jones, Kincaid, \& Smith, 2009). There is some evidence to suggest that gender differences exist in these outcomes, with male adolescents being at greater risk for engaging in externalizing behavior than female adolescents (Mandara et al., 2011). Although the majority of available studies suggest that growing up in a SMH is related to increased risk for Black youth, at least two studies have found no differences in externalizing behaviors between adolescents from single-parent and two-parent households (Friedman, Terras, \& Glassman, 2000; Wu \&

Thomson, 2001). Specifically, Friedman et al. (2000) found that living in a SMH did not predict substance use or illegal behavior among court-adjudicated Black adolescent males, and Wu and Thomson (2001) found that although living in a SMH during adolescence was associated with earlier sexual debut, duration of living in a SMH was not. Further investigation is warranted on the aspects of SMHs that are related to higher levels of externalizing behaviors.

The available literature suggests that Black adolescents living in SMHs are at greater risk for internalizing problems than adolescents from two-parent households. Internalizing problems refer to depressive symptoms, anxiety, and psychosomatic complaints. Living in a SMH has been found to account for a considerable portion (30\%) of the variance in Black adolescents' depressive symptoms, with Black female adolescents experiencing higher levels of depressive symptoms than Black male adolescents or White adolescents (Wight, Aneshensel, Botticello, \& Sepúlveda, 2005). In a study of Black female adolescents, researchers found that those from SMHs reported higher levels of depressive symptoms than adolescents from two-parent households (Merten \& Henry, 2011). Although the literature on family structure and internalizing symptoms among Black adolescents is sparser than the literature on externalizing symptoms, prior research has found that Black female adolescents from SMHs are more likely to experience depressive symptoms.

There is also some literature to suggest the negative effect of being raised in a SMH on Black youths' academic achievement. For example, Ricciuti (2004) found that Black adolescents from SMH had lower vocabulary scores than youth from two-parent homes. In addition, Heard (2007) found that living in a SMH was associated with a lower GPA among Black adolescents. Researchers have also compared academic achievement between Black preadolescents from SMHs and two-parent households (Gutman, Sameroff, \& Eccles, 2002). They found that
preadolescents from SMHs, compared to two-parent households, had poorer GPAs, lower math achievement, and greater absences. Overall, these studies suggest that Black adolescents from SMHs are at risk for poorer academic achievement as compared to Black adolescents from twoparent families.

## Correlates of Higher Rates of Neighborhood Poverty

It is well-documented that Black children living in SMHs are at significant economic disadvantage compared to children living in two parent homes (U.S. Census Bureau, 2016; Ferriss, 2006). Children living in SMHs generally have lower household incomes and higher poverty rates compared to children living with both parents (U.S. Census Bureau, 2016; Ricciuti, 2004). Black SMHs have disproportionately high poverty rates compared to other household compositions (Vespa et al., 2013). It is estimated that the poverty rate of Black children living in SMHs is up to six times higher than children living in two-parent families (Haskins, 2009). In fact, approximately half of Black children who live in SMHs live below the poverty line (Vespa et al., 2013).

Impoverished children tend to grow up in risky neighborhoods characterized by prevalent exposure to violence, drugs, and alcohol (Gonzalez, Jones, Kincaid, \& Cuellar, 2012; McBride Murry, Berkel, Gaylord-Harden, Copeland-Linder, \& Nation, 2011). Several studies have shown the harmful effects of poverty on Black children's development (Ceballo \& McLoyd, 2002; Garo, 2013; Hurd et al., 2013). Specifically, neighborhood poverty has been associated with increased risk for internalizing, externalizing, and poorer academic performance and problemsolving skills for Black children and adolescents (Garo, 2013; Gonzalez et al., 2012; Hurd et al., 2013; O'Brien Caughy \& O'Campo, 2006). Clearly, family income is a variable of importance when exploring the psychosocial adjustment of Black children from SMHs.

## Correlates of Higher Rates of Father Absence

Researchers have documented the deleterious effects of father absence on children. Children who grow up with absent fathers are more likely to engage in criminal activity and substance abuse, drop out of school, and have poorer academic performance (DeBell, 2008; Jaffee, Caspi, Moffitt, Taylor, \& Dickson, 2001; Pan \& Farrell, 2006). Specifically, researchers found that boys with absent fathers are more likely to use drugs (Mandara \& Murray, 2006; Montgomery \& Marinos, 2016), and girls are more likely to have teenage pregnancies (Ellis et al., 2003). Gender role development and interpersonal relationships are also impaired for fatherabsent children (Mandara, Murray, \& Joyner, 2005). Researchers have consistently demonstrated, across studies, the unfavorable outcomes of children who grow up with uninvolved fathers.

Conversely, children who grow up with positively involved fathers demonstrate lower levels of delinquency (Coley \& Medeiros, 2007; Pan \& Farrell, 2006), sexual-risk taking (Alleyne-Green, Grinnell-Davis, Clark, \& Cryer-Coupet, 2015; Peterson, 2007), and alcohol and substance abuse (Caldwell, Sellers, Bernat, \& Zimmerman, 2004; Jordan \& Lewis, 2005; Pan \& Farrell, 2006), as well as higher levels of self-esteem (Cooper, 2009), academic success (Battle \& Coates, 2004; Bryant \& Zimmerman, 2003; Caldwell et al., 2004), cognitive development (Shannon, Tamis-LeMonda, London, \& Cabrera, 2002), perceived competence, and better overall psychological well-being (Dubowitz et al., 2001). Of importance, researchers have noted the harmful effects of children who are raised by fathers who demonstrate antisocial behaviors (Coley et al., 2011; Jaffee, Moffitt, Caspi, \& Taylor, 2003). Researchers caution that not all father involvement is beneficial for the child. However, researchers have consistently
demonstrated, across multiple studies, the favorable outcomes associated with children who have a positive father figure present throughout their childhood even in SMHs.

## Child Poverty and Father Absence

Few studies have delineated the unique contributions of childhood poverty and father absence on Black children's less favorable outcomes (Mandara et al., 2011; Wu \& Qi, 2006). Of the existing studies, inconclusive findings have been reached. Prior researchers have argued that father absence is a factor that contributes to putting children at disadvantage, analogous to being low-income or having parents with low educational attainment (DeBell, 2008), making it difficult to ascertain whether the better outcomes for children are based primarily on the nonresidential father's monetary support or actual presence in the child's life. Given that similar findings have been found for the effects of both poverty and father absence examined independently, it is necessary to elucidate the relationship between the variables to improve child outcomes. For example, it is plausible that father presence is not essential to child well-being as long as the father provides monetary support. Alternatively, it is possible that Black children from SMHs are buffered from the risks of poverty when their nonresidential fathers play a positive role in their lives outside of monetary contributions. There may also be cumulative negative effects of children being both impoverished and having uninvolved or underinvolved fathers. It is also probable that variables such as increased maternal distress, lower maternal monitoring, and lower maternal warmth are the more proximal factors contributing to the poorer psychosocial outcomes of Black children and adolescents from SMHs.

## Protective Factors for Children Living in a SMH

Several protective factors have been identified for Black children living in SMHs
including higher versus lower levels of maternal warmth and monitoring, lower versus higher
levels of maternal depressive symptoms, and better mother-child and coparent relationship quality (Anton et al., 2015; Armistead et al., 2002; Chester et al., 2007; Sterrett et al., 2009). Although there has been much less research on the benefits of nonresidential father factors than of residential mother factors on childhood outcomes, available studies suggest that nonresident paternal warmth and monitoring, mental health, and relationship with their adolescents are also related to adolescent adjustment (Coley et al., 2011; Harper \& Fine, 2006; Pan \& Farrell, 2006).

## Maternal Factors.

Maternal positive parenting. Positive parenting is characterized by parenting behavior that is high in warmth, monitoring, and consistency. Numerous studies have found that maternal positive parenting is associated with less internalizing and externalizing behaviors for Black children and adolescents (Anton et al., 2015; Armistead et al., 2002; Boyd \& Waanders, 2013; Chester et al., 2007; Kim \& Brody, 2005; Sterrett et al., 2009). Correspondingly, researchers found that maternal psychological control and inadequate parenting (i.e., poor monitoring and parent-child relationship quality) were related to more adjustment problems among Black youth (Jones, Forehand, Brody, \& Armistead, 2002; Kincaid, Jones, Cuellar, \& Gonzalez, 2011; Taylor, Larsen-Rife, Conger, Widaman, \& Cutrona, 2010). Maternal warmth and consistency have been found to buffer the cumulative effects of stress on externalizing behavior in urban Black and White preadolescents from SMHs (Lanza, Rhodes, Nix, \& Greenberg, 2010). There is convincing evidence in the extant literature to suggest that maternal positive parenting is a strong predictor of youth's emotional and behavioral functioning.

Mother-child relationship quality. Close mother-child relationships are a strong protective factor for Black children in SMHs. Several studies have found that a close motherchild relationship is associated with fewer internalizing and externalizing problems (Armistead et
al., 2002; Montague, Cavendish, Enders, \& Dietz, 2010). Conversely, mother-adolescent communication problems are associated with increased internalizing and externalizing problems (Taylor et al., 2010). In addition, using nationally representative data from the Add Health dataset on White, Black, and Hispanic adolescent girls, researchers found that mother-daughter relationship quality played a protective role against dropping out of school, teen pregnancy, risky sexual behaviors, and depressive symptoms for adolescent girls (Merten \& Henry, 2011). Given the consistent association between mother-child relationship quality and adolescents' psychosocial outcomes across studies, the construct appears to be a vital contributor to the positive adjustment of Black youth from SMHs.

Maternal depressive symptoms. Several studies have highlighted the importance of maternal depressive symptoms in relation to the psychosocial outcomes for Black children and adolescents from SMHs (Forehand, Jones, Brody, \& Armistead, 2002; Jackson, 2003; Jackson, Choi, \& Preston, 2015; Jones, Forehand, Brody, \& Armistead, 2002; Jones, Forehand, \& Neary, 2001; Kim \& Brody, 2005). Mothers’ depressive symptoms were found to be related to children's depressive symptoms (Jones et al., 2001) as well as children's and adolescents' internalizing and externalizing behaviors both directly and indirectly through inadequate resources and community risk (Jones et al., 2002). Of note, one study, which included 277 Black children aged 7-15 years and their unmarried mothers, found that maternal depressive symptoms were related to internalizing symptoms for daughters, but not sons, suggesting gender differences in how maternal depressive symptoms relates to child well-being (Forehand et al., 2002). Research on preschool-aged children with Black unmarried mothers also found that maternal depressive symptoms predicted poorer academic achievement in the early school years (Jackson, 2003) and were related positively to preschoolers' behavioral problems (Jackson et al., 2015).

Taken together, available research suggests that maternal depressive symptoms are related to youth's psychosocial outcomes; however, gender may play a role in how children and adolescents respond emotionally.

## Paternal Factors.

Paternal positive parenting. As with mothers, and consistent with the Coparenting Framework for African American Single-Mother Families (Jones et al., 2007), paternal warmth and monitoring have been related to positive psychosocial outcomes for Black adolescents. Paternal warmth has been associated with children's well-being and children's enhanced reading and math skills (Coley et al., 2011; Harper \& Fine, 2006). Paternal limit setting has also been related to better child well-being (Harper \& Fine, 2006). The available research suggests a positive connection between paternal positive parenting and Black youth outcomes.

Father-child relationship quality. A growing literature is emerging to suggest the importance of the paternal-child relationship quality on child psychosocial outcomes. To date, father-child relationships have been positively associated with better academic achievement and self-esteem for daughters (Cooper, 2009), decreased risk for alcohol use, and a reduction in aggressive behaviors (Caldwell et al., 2014) for children and adolescents (Jordan \& Lewis, 2005) of Black nonresidential fathers. Additionally, using a predominantly Black sample of nonresidential fathers, Harper and Fine (2006) demonstrated that father-child relationship quality contributed to child well-being above and beyond the effects of paternal psychological distress, coparenting conflict, father warmth, and father limit setting. Moreover, father-child relationship quality was found to mediate the relationships between both paternal warmth and child wellbeing and limit setting and child well-being. Consistent with the Coparenting Framework for African American Single-Mother Families (Jones et al., 2007), these studies indicate the positive
association between paternal-child relationship quality and several indicators of youths' outcomes including academic performance, internalizing symptoms, externalizing symptoms, and overall child well-being.

Paternal depressive symptoms. Although fathers' depressive symptoms have been established as a risk factor for myriad negative child outcomes, the large majority of studies used predominantly White samples (Kane \& Garber, 2004; Marchand-Reilly, 2012). There is a dearth of research examining the influence of nonresidential Black fathers' depressive symptoms on youth outcomes. To my knowledge, only one study has addressed this topic to date. Harper and Fine (2006) found that paternal psychological distress was associated with poorer child wellbeing in a predominantly Black sample of nonresidential fathers of children aged 3 to 12 . Child gender moderated this relationship with a stronger association between paternal psychological distress and child well-being found for girls than boys. Previous studies on depressive symptoms in nonresidential Black fathers have shown that fathers with higher depressive symptoms exhibit less contact, engagement, and closeness with their children as well as lower monitoring and higher conflict (Bronte-Tinkew, Moore, Matthews, \& Carrano, 2007; Davis, Caldwell, Clark, \& Davis, 2009; Howard Caldwell, Bell, Brooks, Ward, \& Jennings, 2011). Consistent with the Coparenting Framework for African American Single-Mother Families (Jones et al., 2007), the same factors that are associated with adolescent adjustment for mothers should be associated with adolescent adjustment for fathers. Therefore, higher levels of depressive symptoms in nonresidential Black fathers are expected to be associated with poorer adjustment in adolescents.

Coparenting Relationship Quality. Several studies have found that the coparenting relationship quality between the single Black mother and her coparent is related to adolescents' psychosocial outcomes. Coparenting relationship quality is a term used to describe the level of
cooperativeness, communication, and respect shared by two or more people raising a child together (McHale \& Irace, 2011). The extant literature on coparenting and single Black mothers has most commonly asked the mother to respond in reference to the person who most helps her in raising her child, which is often the adolescent's nonresident father or maternal grandmother (see Jones et al., 2007 for a review). The studies reviewed in this section included samples consisting of coparents identified as nonresident fathers, maternal grandmothers, other maternal relatives, and maternal friends unless otherwise stated.

Prior research has demonstrated the positive influence of supportive coparenting and the negative influence of high conflict coparenting on youth outcomes. The spillover hypothesis (Erel \& Burman, 1995) suggests that the valence of the coparenting relationship leads to a "spill over" (i.e., indirect effect) into the mother-child relationship, which in turn is associated with youth outcomes (Parent, Jones, Forehand, Cuellar, \& Shoulberg, 2013). Available research has shown that support received from the coparent to the mother was related to child competence, whereas conflict between the mother and her coparent was related to maladjustment among youth (Shook, Jones, Forehand, Dorsey, \& Brody, 2010). Coparenting conflict has consistently been found to be related to negative child adjustment (Jones, Forehand, Dorsey, Foster, \& Brody, 2005; Spjeldnes \& Choi, 2008), and coparenting conflict was found to be a stronger predictor of youth maladjustment than coparenting support (Jones, Shaffer, Forehand, Brody, \& Armistead, 2003). Researchers found that coparent warmth mediated the association between coparenting conflict and youth externalizing behaviors (Goodrum, Jones, Kincaid, Cuellar, \& Parent, 2012).

In a study of low-income Black families of preschoolers, coparenting conflict between mothers and fathers was associated positively with increased child behavioral problems (Spjeldnes \& Choi, 2008). Specific to coparenting among single mothers and nonresidential
fathers, researchers found that coparenting conflict, reported by both the mother and father, was related negatively to child wellbeing in a sample of 3-12 year olds in regular contact with their nonresidential father (Harper \& Fine, 2006). It is clear from the extant research that the coparenting relationship is strongly associated with parenting behaviors and youth outcomes.

## Current Study

Given these patterns of findings, I sought to extend the extant literature on the protective factors of Black children from SMHs. Existing research has focused primarily on maternal factors (i.e., maternal depressive symptoms, maternal positive parenting, and mother-child relationship quality) that are related to better outcomes for children from SMHs (Anton et al., 2015; Armistead et al., 2002; Chester et al., 2007; Kim \& Brody, 2005; Merten \& Henry, 2011; Sterrett et al., 2009). Scant attention has been given to nonresidential father factors (paternal depressive symptoms, paternal positive parenting, and father-child relationship quality) that may contribute to better psychosocial outcomes for Black youth from SMHs (Caldwell et al., 2014; Coley et al., 2011; Harper \& Fine, 2006; Pan \& Farrell, 2006). The existing research has also relied heavily on maternal and child reports of parental and child behaviors, to the exclusion of paternal reports (Cooper, 2009; Jordan \& Lewis, 2005). Despite the well-documented literature explicating the socioeconomic disadvantage of Black children from SMHs, few studies have controlled for SES when evaluating the influence of parental factors (Harper \& Fine, 2006; Pan \& Farrell, 2006). In addition, few studies have controlled for father involvement when examining aspects of nonresidential fatherhood that are related to youth outcomes. In the present study, I sought to address these limitations and to contribute substantive knowledge to the extant literature on the protective factors of Black children from SMHs by examining the nonresidential paternal factors associated with psychosocial adjustment among Black adolescents from SMHs.

The current study addressed the two following sets of hypotheses:
Hypothesis 1. Given that the Coparenting Framework for African American SingleMother Families (Jones et al., 2007) suggests direct relationships between nontraditional coparent (i.e., nonresidential father) factors and youth outcomes as does family research on fathers' unique contributions to youth's psychosocial functioning (Coley et al., 2011; Harper \& Fine, 2006; Pan \& Farrell, 2006), I expected that higher paternal positive parenting, lower depressive symptoms, and higher father-child relationship quality would be uniquely related to adolescents' lower externalizing, lower internalizing, and higher academic achievement above and beyond maternal positive parenting, depressive symptoms, and mother-child relationship quality.

Hypothesis 2. Consistent with the Coparenting Framework for African American SingleMother Families (Jones et al., 2007), which suggests an indirect association between nontraditional coparent (i.e., nonresidential father) factors and adolescent outcomes through the coparenting relationship with the adolescent's mother, I hypothesized that the coparenting relationship quality would mediate the relationships between father factors and adolescent psychosocial functioning in that fathers who have lower depressive symptoms, higher positive parenting, and better father-child relationships would in turn have better coparenting relationships that would be related to more favorable youth outcomes.

## Method

## Participants

Participants for the present study included 107 noncohabiting Black parental dyads with children between the ages of 12-18 years living primarily with their biological mother. A minimum sample size of 107 was based on an a priori power analysis with a desired power of .80 and alpha set at .05 for a medium effect size for a hierarchical multiple regression with eight predictors (Cohen, 1992). Participation in the study was restricted to parents who 1) selfidentified as African American or Black, 2) were noncohabiting, 3) had a biological child together between the ages of 12 and 18 who resided primarily with the mother, and 4) had been separated for at least two months. In addition, fathers had to have communicated (e.g., in-person, by telephone, skype/facetime, text message, email, instant message, or postal mail) with the adolescent at least three times within the last 12 months. Only one child per parental dyad was included in this study, and all parents were at least 18 years old.

Fathers' ages ranged from 27 to $68(M=41.81, S D=8.88)$, and mothers' ages ranged from 27 to $57(M=39.19, S D=7.63)$. All parents identified as African American or Black. All parents were noncohabiting and the duration of noncohabitation ranged from never living together to living apart for two months with fathers reporting an average of approximately 8 years $(M=8.78, S D=8.83)$ and mothers reporting an average of 10 years $(M=10.30, S D=$ 10.43) living apart. On average, target children in the study were approximately 14.5 years old ( $S D=2.18$ ), and completing the $8^{\text {th }}$ grade $(S D=2.41)$. Slightly more than half of the target children were female (53.3\%). The duration that target children lived apart from their biological
father ranged from 2 months to 18 years, with fathers reporting an average of 7 years ( $M=7.46$, $S D=5.14)$ and mothers reporting an average of 8 years $(M=8.58, S D=5.66)$ living apart. Father-child contact ranged from 0 to 30 times within the past 30 days with fathers reporting an average of approximately 17 times $(M=16.93, S D=10.53)$ and mothers reporting an average of 15 times $(M=14.86, S D=10.86)$. The majority of children in the sample $(59.8 \%)$ received reduced priced lunch. See Table 1 for detailed demographic information for the study's participants.

## Recruitment

Given the difficulty of recruiting fathers, particularly nonresidential Black fathers, for research projects, I employed a variety of recruitment methods. Through the collaboration with a large, diverse school district in Florida, from which the project received approval, the PI and her research team recruited via sending letters of invitation (see Appendix A) home with high school students to give to their parents, and attending basketball and football games, parent-teacher conferences, and student after-school pick-up.

Families were also recruited through various community contacts including community leaders and directors of various agencies and organizations. Recruiting via personal contacts of the PI and research team and snowballing techniques (asking participants to refer other parents) were also used. The PI and research team posted and handed out flyers (see Appendix B) throughout an urban county in Florida including at community events, parks, and bus transit stations, placed newspaper advertisements (see Appendix C) and a cover story of the project (see Appendix D) in a local newspaper marketed to the Black population in an urban county in Florida), and placed online advertisements (see Appendix C) through Craigslist and Facebook to recruit participants for this study.

Of the 107 families who completed the survey, $58.9 \%$ were recruited via Craigslist advertisements posted in major cities throughout the United States, $20.6 \%$ from community outreach, $17.6 \%$ from personal contacts of the research team, and $2.8 \%$ from snowballing techniques and newspaper advertisements.

## Measures

Parents completed survey packets over the telephone. Measures for this study were selected based upon their sound psychometric properties and previous use with primarily Black samples. The measures had a $6^{\text {th }}$ grade reading level, and all items were read to the participants. Mothers and fathers each completed a demographic questionnaire and measures that assessed the following constructs: positive parenting, parent-child relationship quality, depressive symptoms, coparenting relationship quality, adolescents' emotional and behavioral problems, adolescents' school competence, and economic hardships of the parents. Items and measures more sensitive in nature were administered toward the end of the survey packet. Measures are described below in the aforementioned order.

Demographic Information. Parents completed a brief demographic questionnaire (Appendix E) developed for the purposes of this study. The form assessed the age, sex, race of the parent and child, family structure, who resides with the parent, length of time child has been living in a SMH, frequency of interaction with the nonresidential father, parental romantic involvement, whether the child receives free or reduced lunch, and parents' educational and occupational status. Socioeconomic status was calculated using parental educational attainment and occupational level (Hollingshead, 1975). Parents were asked for the name of the target child to assure both parents were completing the survey in response to the same child.

Positive Parenting. The Revised Children's Report of Parental Behavior Inventory - 30 (CRPBI-30; Schuldermann \& Schuldermann, 1988; See Appendix F) is a parent version of the CRPBI-30 that is used to assess parents' perceptions of their parenting behaviors. The CRPBI30 parent form contains 30 items that create three subscales comprised of 10 items each: Acceptance vs. Rejection (e.g., I am a person who gives my child lots of care and attention), Psychological Control vs. Psychological Autonomy (e.g., I am a person who is always trying to change my child), and Firm Control vs. Lax Control (e.g., I am a person who believes in having a lot of rules and sticking with them). The Acceptance vs. Rejection subscale was used for the purposes of this study to assess positive parenting. For each item, participants were asked to rate the extent to which each item was like them on a three-point scale from 1 (not like me) to 3 (a lot like me). The total for the Acceptance subscale was the sum of the items, with higher scores indicating higher levels of parental acceptance. High parental acceptance is consistent with an authoritative parenting style, which is associated with better adolescent outcomes (Schuldermann \& Schuldermann, 1988). The CRPBI-30 subscales are highly correlated with the subscales of the CRBPI-108 (.94-.95). Psychometric properties of the CRPBI-30 subscales have demonstrated sound test-retest reliability (.79-89) and adequate internal consistencies ( $\alpha \mathrm{s}=.63-75$ ). This measure has been used in studies with predominately Black parents (Taylor et al., 2010). The items comprising the Acceptance scale demonstrated good internal consistency reliability with fathers ( $\alpha=.82$ ) and acceptable internal consistency reliability with mothers $(\alpha=.68)$ in the current sample.

Parent-Child Relationship Quality. Parent-child relationship quality was measured using the 20-item short form of the Interaction Behavior Questionnaire (IBQ; Prinz, Foster, Kent, \& O'Leary, 1979; See Appendix G), which is an extensively used measure designed to assess
parent-adolescent communication and interactive behaviors. Parents responded to items concerning the parent-child relationship (e.g., For the most part, my child likes to talk to me and In general, I don't think we get along very well) using a true/false format. The item responses were summed together to yield a total score between 0 and 20. Negatively worded items were reverse-scored, such that higher scores indicate better parent-child relationship quality. The IBQ items have demonstrated adequate internal consistency (>.88) and test-retest reliability (.57 to .82) for the parent-report (Prinz et al., 1979; Robin \& Foster, 1989). The short form IBQ correlates highly ( $r=.96$ ) with the full version (Robin \& Foster, 1989). The IBQ has been used in multiple studies with Black parent samples (Armistead et al., 2002; Jones et al., 2001). The scores of the scale items demonstrated sound internal consistency reliability for fathers ( $\alpha=.83$ ) and mothers $(\alpha=.88)$ in this sample.

Depressive Symptoms. The Patient Health Questionnaire-9 (PHQ-9; Spitzer, Kroenke, \& Williams, 1999, p.; see Appendix H) is a 9-item measure that is frequently used to measure depressive symptoms experienced over the last two weeks based on DSM-IV, and consistent with DSM 5, criteria for major depressive disorder. Parents were asked to rate the frequency that they experienced depressive symptoms over the last two weeks using a four-point scale from 0 (not at all) to 3 (nearly every day). Sample items include little interest or pleasure in doing things and feeling down, depressed, or hopeless. The sum of the item responses was used to calculate the total score for the scale. The total score can range from 0 to 27, with higher scores reflecting greater depressive symptoms. The scores on the measure have demonstrated sound psychometric properties including internal consistency reliability ( $\alpha=.86-89$ ), two day testretest reliability (.84), and strong criterion and construct validity (Kroenke, Spitzer, \& Williams, 2001). Researchers have supported the factor structure of the PHQ-9 with Black samples
(Huang, Chung, Kroenke, Delucchi, \& Spitzer, 2006), and multiple research studies have utilized this measure with primarily Black samples (Gitlin, Chernett, Dennis, \& Hauck, 2012; Sharma, Zehtabchi, Rojas, \& Birkhahn, 2009). The scores of the scale items demonstrated satisfactory internal consistency reliability for fathers $(\alpha=.73)$ and mothers $(\alpha=.83)$ in the current sample.

Coparenting Relationship Quality. The Parenting Alliance Measure (PAM; Abidin \& Konold, 1999; see Appendix I) is a 20 -item measure used to assess the perceived working alliance between parental figures of children aged 1-19. The total PAM score was used for the purposes of this study to assess overall coparenting relationship quality. Parents were asked to rate each statement on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). Sample items include When there is a problem with our child, we work out a good solution together and My child's other parent tells me that I am a good parent. The total score was calculated by summing the item responses. The total raw score can range from 20 to 100 , with higher scores indicating a higher quality coparenting relationship. Researchers reported a high internal consistency reliability for fathers' $(\alpha=.96)$ and mothers' $(\alpha=.97)$ responses (Abidin \& Konold, 1999). Mothers and fathers also demonstrated adequate 4-6 week test-retest reliabilities (. 88 and .63 , respectively), and fathers demonstrated higher parenting alliance scores compared to mothers. The scale was developed and validated using a nonclinical sample (Abidin \& Konold, 1999; Konold \& Abidin, 2001). It has been used previously in research with primarily Black samples and in samples with nonresidential fathers, and it has demonstrated good psychometric properties (Coates \& Phares, 2014; Loper, Phillips, Nichols, \& Dallaire, 2013). In the current study, the item scores of the PAM demonstrated high internal consistency reliabilities for fathers $(\alpha=.94)$ and mothers $(\alpha=.95)$.

Adolescent Emotional and Behavioral Problems. The Child Behavior Checklist/6-18
(CBCL; Achenbach \& Rescorla, 2001; see Appendix J) is a widely used, parent-rated measure of the emotional and behavioral functioning of children and adolescents age 6-18. The CBCL consists of 120 items that create competence scales, syndrome scales, broadband scales, and DSM oriented scales. This study used the broadband scales of internalizing (e.g., cries a lot and too fearful or anxious) and externalizing (e.g., breaks rules at home, school, or elsewhere and gets in many fights) problems to assess the adolescent's emotional and behavioral functioning. Parents were asked to rate their adolescent's behavior within the last 6 months using a 3-point scale from 0 (not true) to 2 (very true or often true). Raw scores were converted into T-scores derived from a normative sample of similar-aged peers. For the broadband subscales, T-scores between 60 to 63 represent the Borderline Clinical range (indicating problem levels above the $84^{\text {th }}$ percentile) and T-scores above 63 represent the Clinical range (above the $90^{\text {th }}$ percentile). The CBCL has excellent psychometric properties including good internal consistency ( $\alpha \mathrm{s}=.83$ to .93 ), one-year test-retest reliability (. 65 to .80 ), and criterion related validity. The CBCL was validated using a normative sample including both clinical and nonclinical populations (Achenbach \& Rescorla, 2001), and it has been used in prior research with Black parents' reports of their children's behavior (Parent et al., 2013; Sterrett et al., 2009). Item scores on the internalizing and externalizing subscales demonstrated high internal consistency reliability for fathers ( $\alpha=.80$ and $\alpha=.87$, respectively) and mothers ( $\alpha=.86$ and $\alpha=.85$, respectively) in the current sample.

School competence. Parents also completed items that comprise the school competence subscale of the CBCL (Appendix K). The subscale items asked parents to rate their child's performance in each academic subject using a 4-point scale from 0 (failing) to 3 (above
average). The subscale also assessed whether the child is in special classes, has repeated a grade, or has had any other school-related problems. There is also an option to indicate that the child does not attend school. The response values were summed to create a raw score, which was used to compute a T-score that compares the child's responses to same-aged peers of the same gender. For the school competence subscale, T-scores between 31 and 35 represent the Borderline Clinical range (indicating levels below the $35^{\text {th }}$ percentile) and T -scores below 31 represent the Clinical range (indicating levels below the $30^{\text {th }}$ percentile). Higher T-scores indicate higher levels of school competence. The school competence subscale has sufficient psychometric properties including good one-week test-retest reliability (.90) and acceptable internal consistency $(\alpha=.63)$. In the current sample, however, item scores on the school competence subscale demonstrated unacceptable internal consistency reliability for fathers ( $\alpha=.36$ ) and mothers $(\alpha=.46)$. Therefore, this outcome measure was not included in the analyses.

Economic Hardships. Economic hardships were assessed using a 10-item measure taken from the Survey of Income and Program Participation (US Census Bureau, 1996) and the 1997 and 1999 New York City Social Indicators Survey (Social Indicators Survey Center, 2002, 2003; see Appendix L). Parents were asked to indicate whether they had experienced financial hardships across a number of areas in the past 12 months using a yes/no answer format. Sample items included In the past 12 months, did you receive free food or meals? and In the past 12 months, did you borrow money from friends or family to help pay bills? The 10 items were summed, with a total possible range of 0 to 10 for each parent. Higher scores indicate greater economic hardships. This scale has been shown to have adequate internal consistency ( $\alpha=$.66) in previous samples (Choi \& Jackson, 2012). Item scores on the economic hardships measure
demonstrated adequate internal consistency reliability for fathers ( $\alpha=.82$ ) and mothers ( $\alpha=.79$ ) in the current sample.

## Procedure

Prior to the start of recruitment, the primary investigator (PI) trained Black male and female undergraduate research assistants on the study procedures including in-person recruitment, posting advertisements to Craigslist, contacting community members to solicit assistance with recruitment, screening participants for eligibility over the telephone and inperson, administering the telephone survey in a uniform way, and completing thank you letters and money orders to mail following survey completion. The PI trained the project manager to mastery on study procedures and provided initial monitoring and feedback as the project manager trained new research assistants. Weekly lab meetings also took place in which the PI and project manager would provide instruction, modeling, and feedback on recruitment techniques. A research assistant manual was developed and is available upon request. In total, 21 ( 6 male, 15 female) research assistants took part in the study for varying lengths of time ranging from less than one semester (1 month) to five semesters ( 20 months).

Participants were recruited via multiple methods including through a large, diverse school district in Florida (i.e., sending letters of invitation home, attending parent-teacher conferences, and student after school pickup), community leaders, advertisements (i.e., flyers and newspaper ads), online websites (i.e., Facebook and Craigslist), and recruitment at public locations (i.e.., bus transit centers and parks) and community events (i.e., health fairs and community meetings). With respect to recruitment participants through schools, upon receiving study approval from my university's and a local school district's institutional review boards, permission to recruit at schools within the school district with children aged 12-18 years was sought from the school
principals. Upon receiving permission to recruit parents whose children were enrolled at certain schools in the district, letters of invitation to participate in the study were sent home with children enrolled in physical education courses.

In addition to recruitment through the schools, the research team informed community contacts of the study's purpose and eligibility criteria. The research team asked community contacts to share information about the project with individuals who might be eligible for the study and encourage the individuals to contact the research team with their interest. Individuals also contacted the research team regarding interest upon seeing flyers or advertisements about the study. Parents who contacted the research team by telephone were read the telephone script that provides an overview of the study (see Appendix M).

If a parent indicated interest in participating in the study by contacting the research team, the parent was screened for eligibility, including his or her willingness to inform the other parent about the study and encourage the other parent to contact the research team regarding the project. When the other (second) parent contacted the research team, that parent was screened for eligibility and provided with more information about the study. If the second parent was eligible, the research team arranged a convenient time for the telephone survey to take place. Parents were provided with reminder phone calls and/or emails to complete the telephone survey.

Prior to administering the telephone survey, the research team reviewed informed consent (Appendix N ) with the parent. During the consenting process, a member of the research team provided the parent with information regarding the objectives of the study, procedures for participating in the study, risks and benefits of participating in the study, information on confidentiality, and contact information for the PI and research advisor. After the second parent completed the telephone survey, the PI re-contacted the first parent to arrange a time to review
informed consent and complete the survey. All parents were asked to share information about the study with other parents who may be eligible. All parents were offered a list of mental health referrals (see Appendix O) upon completion of the survey. Each parent received a $\$ 20$ money order for completing the survey. In addition, the target child was entered into a drawing to win an iPad raffled at the conclusion of the study.

Of the 698 families screened for participation in the study, 118 families completed a telephone survey, yielding a $16.9 \%$ completion rate (see Figure 1 for a flow chart of the completion rate). Data from 11 families were excluded due to either not having completed surveys from both parents (9), parents living together (1), or father living with the target child (1). In total, 107 sets of surveys were used in the analyses of the present study. This study was approved (see Appendix P) and conducted in accordance with the university's institutional review board, governed by APA guidelines.

Table 1. Descriptive Statistics for Participants' Demographic Characteristics

|  | Fathers$(n=107)$ |  |  | Mothers$(n=107)$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M(\%) | SD | Range | M | SD | Range |
| Age | 41.81 | 8.88 | $\begin{aligned} & 27.00- \\ & 68.00 \end{aligned}$ | 39.19 | 7.63 | $\begin{aligned} & 27.00- \\ & 57.00 \end{aligned}$ |
| Race |  |  |  |  |  |  |
| Black | 100\% |  |  | 100\% |  |  |
| Current Marital Status |  |  |  |  |  |  |
| Married | 13.1\% |  |  | 7.5\% |  |  |
| Separated | 22.4\% |  |  | 18.7\% |  |  |
| Divorced | 16.8\% |  |  | 17.8\% |  |  |
| Single | 47.7\% |  |  | 56.1\% |  |  |
| Number of Biological Children | 3.17 | 2.03 | . $00-10.00$ | 2.95 | 1.78 | $\begin{aligned} & 1.00- \\ & 1000 \end{aligned}$ |
| Number of Nonbiological Children | 0.40 | . 88 | . $00-4.00$ | 0.37 | 1.09 | . $00-6.00$ |
| Educational Level |  |  |  |  |  |  |
| Partial High School | 11.2\% |  |  | 4.7\% |  |  |
| High School Graduate | 43.9\% |  |  | 21.5\% |  |  |
| Partial College | 29.9\% |  |  | 48.6\% |  |  |
| Bachelor's Degree | 12.1\% |  |  | 16.8\% |  |  |
| Graduate Degree | 2.8\% |  |  | 8.4\% |  |  |
| Occupational Status |  |  |  |  |  |  |
| Employed | 68.2\% |  |  | 77.6\% |  |  |
| Unemployed | 22.4\% |  |  | 14.0\% |  |  |
| Retired | 3.7\% |  |  | 0.9\% |  |  |
| Disabled | 5.6\% |  |  | 7.5\% |  |  |

Table 1 (Continued)

| Socioeconomic Status |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Major Business and Professional | 5.61\% |  |  | 13.08\% |  |  |
| Medium Business, Minor Professional, |  |  |  |  |  |  |
| Technical | 17.76\% |  |  | 40.19\% |  |  |
| Skilled Craftsmen, Clerical, Sales |  |  |  |  |  |  |
| Workers | 26.17\% |  |  | 22.43\% |  |  |
| Machine Operators, Semiskilled |  |  |  |  |  |  |
| Workers | 29.91\% |  |  | 16.82\% |  |  |
| Unskilled Laborers, Menial Service |  |  |  |  |  |  |
| Workers | 20.56\% |  |  | 7.48\% |  |  |
| Child gets Free Lunch |  |  |  |  |  |  |
| Yes | 59.8\% |  |  | 72.0\% |  |  |
| No | 40.2\% |  |  | 28.0\% |  |  |
| Child's Gender |  |  |  |  |  |  |
| Male | 46.7\% |  |  | 46.7\% |  |  |
| Female | 53.3\% |  |  | 53.3\% |  |  |
| Child's Age | 14.48 | 2.19 | $\begin{aligned} & 12.00- \\ & 18.00 \end{aligned}$ | 14.50 | 2.18 | $\begin{aligned} & 12.00- \\ & 18.00 \end{aligned}$ |
| Child's Grade | 8.90 | 2.41 | $\begin{aligned} & 4.00- \\ & 14.00 \end{aligned}$ | 9.01 | 2.39 | $\begin{aligned} & 3.00- \\ & 14.00 \end{aligned}$ |
| Child's Main Home |  |  |  |  |  |  |
| Mother | 100\% |  |  | 100\% |  |  |
| Siblings | 35.5\% |  |  | 41.1\% |  |  |
| Mother's Romantic Partner | 4.7\% |  |  | 4.7\% |  |  |

Table 1 (Continued)

| Time Apart from Biological Father (Years) | 7.46 | 5.14 | . $20-18.00$ | 8.58 | 5.66 | . $20-18.00$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age Separated from Biological Father (Years) | 7.01 | 5.11 | .00-17.00 | 5.89 | 5.40 | .00-17.00 |
| Time Apart from Coparent | 8.78 | 8.83 | . $20-51.00$ | 10.30 | 10.43 | . $00-51.00$ |
| Coparents' Relationship Status |  |  |  |  |  |  |
| Romantic | 4.7\% |  |  | 6.5\% |  |  |
| Friendly | 78.5\% |  |  | 84.1\% |  |  |
| Hostile | 4.7\% |  |  | .9\% |  |  |
| No Relationship | 12.1\% |  |  | 8.4\% |  |  |
| Days Talked with Biological Father | 16.93 | 10.53 | . $00-30.00$ | 14.86 | 10.86 | . $00-30.00$ |



Figure 1. Recruitment Flow Chart

## Results

## Data Analysis

Two sets of hypotheses were tested for the present study. Data were first screened for violations of normality assumptions using descriptive statistics. Reliability was assessed using internal consistency reliabilities. Prior to testing Hypothesis 1, zero-order correlations were run to examine the relationships between the predictor and outcome variables. Next, hierarchical multiple regressions were run to test whether father factors (i.e., paternal depression, paternalchild relationship, and paternal positive parenting) contributed unique variance to adolescents' externalizing and internalizing problems. Each model was conducted in the following order: control variables (i.e., economic hardships and father-child contact) were entered into the first block of the analysis, mother factors (i.e., maternal depressive symptoms, maternal positive parenting, and maternal-child relationship quality) were entered into the second block of the analysis, and father factors (i.e., paternal depressive symptoms, paternal positive parenting, and paternal-child relationship quality) were entered into the third block of the analysis. Fathers' reports of father factors and father-child contact and mothers' reports of mother factors, economic hardships, and adolescent outcomes were used in the primary analyses. Subsequent analyses examined the models using fathers' reports of adolescent functioning and combined father and mother reports of adolescent functioning. Combined father and mother reports were calculated by averaging fathers' and mothers' sum scores for internalizing problems and externalizing problems.

To test Hypothesis 2, path analysis was employed using Mplus Version 7 (Muthen \& Muthen, 1998-2012). Path analysis is a subset of structural equation modeling that examines relationships between two or more observed variables based on a priori hypotheses developed by the researcher. Path analysis is used to test the fit of the data to the proposed model. Given the continuous scores of the variables, maximum likelihood robust (MLR) was used. MLR provides better power for non-normal data. As the model is nearly saturated, overall fit of the model was not evaluated. Rather, the regression coefficients of the variables within the proposed model were evaluated. Fathers' reports of father factors, mothers' reports of mother factors and adolescent outcomes, and combined father and mother reports of coparenting relationship quality were used in the primary analyses. Subsequent analyses examined the models using fathers' reports of adolescent functioning and combined father and mother reports of adolescent functioning.

## Preliminary Analyses

See Table 2 for psychometric properties of the study variables. Study measures demonstrated acceptable psychometric properties with the exception of the school competence scale measuring academic performance. The school competence scale was not included in subsequent analyses due to poor internal consistency reliability. The table reveals that parents who participated in this study reported primarily within normal limits for the constructs under study. On average, parents reported high levels of warm parenting and parent-child relationships as well as minimal depressive symptoms. Overall, parents reported coparenting relationship quality falling within normal limits as well as typical levels of adolescent internalizing and externalizing problems.

Intercorrelations between study variables demonstrated several significant correlations (see Table 3 for the correlation matrix). Among the father factors, higher father-child relationship quality was positively correlated with higher paternal positive parenting, $r(105)=$ $21, p=.030$, and negatively correlated with more paternal depressive symptoms, $r(105)=-.24, p$ $=.012$. Higher father-child relationship quality was negatively correlated with more fatherreported adolescents' internalizing, $r(105)=-.34, p<.001$, and externalizing problems, $r(105)=$ $-.39, p<.001$, and greater paternal depressive symptoms were also positively correlated with more father-reported adolescents' internalizing, $r(105)=.36, p<.001$, and externalizing problems, $r(105)=.19, p=.045$.

With respect to mother factors, higher mother-child relationship quality was positively correlated with higher maternal positive parenting, $r(105)=.45, p<.001$, and negatively correlated with greater maternal depressive symptoms, $r(105)=-.22, p=.024$. Higher maternal positive parenting was negatively associated with more mother-reported adolescent internalizing, $r(105)=-.32, p=.001$, and externalizing problems, $r(105)=-.42, p<.001$. Higher mother-child relationship quality was negatively correlated with more mother-reported adolescent internalizing, $r(105)=-.39, p<.001$, and externalizing problems, $r(105)=-.60, p<.001$, and greater maternal depressive symptoms was positively correlated with more mother-reported adolescent internalizing, $r(105)=.47, p<.001$, and externalizing problems, $r(105)=.40, p<$ . 001 .

Correlations between parents demonstrated that higher father-child relationship quality was positively correlated with higher mother-child relationship quality, $r(105)=.26, p=.006$, and higher paternal positive parenting was negatively correlated with greater maternal depressive symptoms, $r(105)=-.24, p=.024$, and greater maternal economic hardships, $r(105)=.34, p<$
.001. In addition, higher mother-child relationship quality was negatively correlated with more father-reported externalizing problems, $r(105)=-.26, p=.006$, and higher father-child relationship was negatively correlated with more mother-reported externalizing problems, $r$ (105) $=-.22, p=.024$. Higher mother-child relationship quality, $r(105)=-.35, p<.001$, father-child relationship quality, $r(105)=-.24, p=.011$, and maternal positive parenting, $r(105)=-.27, p=$ .005 , were correlated negatively with combined father and mother-reported internalizing problems, whereas greater maternal depressive symptoms, $r(105)=.37, p<.001$, and paternal depressive symptoms, $r(105)=.24, p=.013$, were correlated positively with combined father and mother-reported internalizing problems. Higher mother-child relationship quality, $r(105)=-$ $.56, p<.001$, father-child relationship quality, $r(105)=-.37, p<.001$, and maternal positive parenting, $r(105)=-.31, p=.001$, were correlated negatively with combined father and motherreported externalizing problems, whereas greater maternal depressive symptoms, $r(105)=.25, p$ $=.011$, and paternal depressive symptoms, $r(105)=.20, p=.044$, were correlated positively with combined father and mother-reported externalizing problems,

Parents' ratings of adolescents' internalizing problems and externalizing problems were also correlated significantly. That is, father-reported internalizing and externalizing problems, $r(105)=.61, p<.001$, mother-reported internalizing and externalizing problems, $r(105)=.59, p$ < . 001, and combined father and mother reported internalizing and externalizing problems, $r(105)=.60, p<.001$, were positively correlated. Father-reported internalizing problems correlated positively with mother-reported internalizing behaviors, $r(105)=.36, p<.001$, and mother-reported externalizing problems, $r(105)=.23, p=.018$. Father-reported externalizing problems also correlated significantly with mother-reported externalizing problems, $r(105)=.33$, $p<.001$. Combined father and mother reported internalizing problems correlated positively with
father-reported internalizing, $r(105)=.79, p<.001$, and externalizing problems, $r(105)=.46, p$ $<.001$, and mother-reported internalizing, $r(105)=.86, p<.001$, and externalizing, $r(105)=.52$, $p<.001$, problems. Combined father and mother reported externalizing problems correlated positively with father-reported internalizing, $r(105)=.51, p<.001$, and externalizing problems, $r(105)=.81, p<.001$, and mother-reported internalizing, $r(105)=.48, p<.001$, and externalizing, $r(105)=.82, p<.001$, problems.

## Father Factors and Adolescent Outcomes

Hierarchical regressions were used to test the first hypothesis that higher paternal positive parenting, lower depressive symptoms, and higher father-child relationship quality would be uniquely related to adolescents' externalizing and internalizing problems above and beyond maternal positive parenting, depressive symptoms, and mother-child relationship quality. Fatherchild contact and economic hardships were entered in the first block of the analysis, mother factors were entered in the second block of the analysis, and father factors were entered in the third block of the analysis. Separate models were run for adolescent internalizing problems and adolescent externalizing problems.

Mother-Reported Adolescent Functioning. A correlation matrix of the predictor and outcome variables is displayed in Table 4. Higher mother-child relationship quality, $r(105)=-$ $.39, p<.001$, and greater maternal acceptance, $r(105)=-.32, p=.001$, were negatively associated with mother-reported adolescent internalizing problems, whereas higher levels of maternal depressive symptoms, $r(105)=.47, p<.001$, were positively associated with motherreported adolescent internalizing problems. Maternal economic hardships, $r(105)=.26, p=.007$, and greater maternal depressive symptoms, $r(105)=.40, p<.001$, were associated positively with mother-reported adolescent externalizing problems, whereas higher mother-child
relationship quality, $r(105)=-.60, p<.001$, father-child relationship quality, $r(105)=-.22, p=$ .024 , and maternal acceptance, $r(105)=-.42, p<.001$, were associated negatively with motherreported adolescent externalizing problems. See Table 5 for a summary of the hierarchical regression results detailed below.

Adolescents' internalizing problems. The final model accounted for $34 \%$ of the variance in mother-reported adolescent internalizing problems, $F(8,98)=6.24, p<.001$. In contrast to Hypothesis 1, adding the father factors to the model did not significantly increase the variance accounted for, $F_{\text {change }}(3,98)=0.01, p=.998, \Delta R^{2}=.000$. When controlling for all other variables, mother-child relationship quality, $t(98)=-2.11, p=.037, \beta=-.22$, and maternal depressive symptoms, $t(98)=4.46, p<.001, \beta=.40$, were significant predictors of motherreported adolescent internalizing problems. None of the father factors were significant predictors of mother-reported adolescent internalizing problems.

Adolescents' externalizing problems. The final model accounted for 50\% of the variance in mother-reported adolescent externalizing problems, $F(8,98)=12.34, p<.001$. Inconsistent with the first Hypothesis, adding the father factors to the model did not significantly increase the variance accounted for, $F_{\text {change }}(3,98)=1.50, p=.219, \Delta R^{2}=.02$. When controlling for all other variables, mother-child relationship quality, $t(98)=-4.46, p<.001, \beta=-.39$, maternal depressive symptoms, $t(98)=3.59, p=.001, \beta=.28$, and maternal positive parenting, $t(98)=-2.61, p=$ $.010, \beta=-.21$, were significant predictors of mother-reported adolescent externalizing problems. None of the father factors were significant predictors of mother-reported adolescent externalizing problems.

Father-Reported Adolescent Functioning. Additional exploratory analyses were run to test Hypothesis 1 using father-reported adolescent functioning. A correlation matrix of the
predictor and outcome variables is displayed in Table 6. Higher father-child relationship quality, $r(105)=-.34, p<.001$, was associated negatively, and higher paternal depressive symptoms, $r(105)=.36, p<.001$, was positively associated with father-reported adolescent internalizing problems. Higher mother-child relationship quality, $r(105)=-.32, p=.001$, and father-child relationship quality, $r(105)=-.39, p<.001$, was associated negatively with father-reported adolescent externalizing problems, whereas higher levels of paternal depressive symptoms, $r(105)=.19, p=.045$, were associated positively with father-reported adolescent externalizing problems. See Table 7 for a summary of the hierarchical regression results detailed below.

Adolescents'internalizing problems. The final model accounted for $22 \%$ of the variance in father-reported adolescent internalizing problems, $F(8,98)=3.51, p=.001$. Consistent with Hypothesis 1, adding the father factors to the model significantly increased the variance accounted for, $F_{\text {change }}(3,98)=7.28, p<.001, \Delta R^{2}=.17$. When controlling for all other variables, father-child relationship quality, $t(98)=-2.67, p=.009, \beta=-.27$, and paternal depressive symptoms, $t(98)=3.12, p=.002, \beta=.29$, were significant predictors of fatherreported adolescent internalizing problems. None of the mother factors were significant predictors of father-reported adolescent externalizing problems when controlling for all other variables.

Adolescents' externalizing problems. The final model accounted for $24 \%$ of the variance in father-reported adolescent externalizing problems, $F(8,98)=3.88, p=.001$. In support of the first hypothesis, adding the father factors to the model significantly increased the variance accounted for, $F_{\text {change }}(3,98)=5.63, p=.001, \Delta R^{2}=.13$. When controlling for all other variables, mother-child relationship quality, $t(98)=-2.10, p=.038, \beta=-.23$ and father-child relationship quality, $t(98)=-3.43, p=.001, \beta=-.34$, were significant predictors of father-reported adolescent
externalizing problems. No other father or mother factors were significant predictors of fatherreported adolescent externalizing problems.

Combined Father- and Mother-Reported Adolescent Functioning. Additional exploratory analyses were run to test Hypothesis 1 using combined father and mother-reported adolescent functioning. A correlation matrix of the predictor and outcome variables is displayed in Table 8. Higher mother-child relationship quality, $r(105)=-.35, p<.001$, father-child relationship quality, $r(105)=-.24, p=.011$, and greater maternal acceptance, $r(105)=-.27, p=$ .005 , was negatively associated with combined father and mother-reported adolescent internalizing problems, whereas higher levels of maternal depressive symptoms, $r(105)=.37, p$ <.001, and paternal depressive symptoms, $r(105)=.24, p=.013$, were positively associated with combined father and mother-reported adolescent internalizing problems. Higher mother-child relationship quality, $r(105)=-.56, p<.001$, father-child relationship quality, $r(105)=-.37, p<$ .001 , and maternal acceptance, $r(105)=-.31, p=.001$, was associated negatively with combined father and mother-reported adolescent externalizing problems, whereas higher maternal depressive symptoms, $r(105)=.25, p=.011$, and paternal depressive symptoms, $r(105)=.20, p$ $=.044$, were associated positively with combined father and mother-reported adolescent externalizing problems. See Table 9 for a summary of the hierarchical regression results detailed below.

Adolescents'internalizing problems. The final model accounted for $29 \%$ of the variance in combined father and mother -reported adolescent internalizing problems, $F(8,98)=4.94, p<$ .001. In contrast to Hypothesis 1, adding the father factors to the model did not significantly increase the variance accounted for, $F_{\text {change }}(3,98)=2.51, p=.063, \Delta R^{2}=.06$. When controlling for all other variables, maternal depressive symptoms, $t(98)=3.28, p=.001, \beta=.31$, was a
significant predictor of combined father and mother-reported adolescent internalizing problems. No other father or mother factors were significant predictors of combined father and motherreported adolescent internalizing problems.

Adolescents' externalizing problems. The final model accounted for $44 \%$ of the variance in combined father and mother-reported adolescent externalizing problems, $F(8,98) 9.52, p<$ .001. Consistent with Hypothesis 1, adding the father factors to the model significantly increased the variance accounted for, $F_{\text {change }}(3,98)=5.47, p=.002, \Delta R^{2}=.09$. When controlling for all other variables, mother-child relationship quality, $t(98)=-4.08, p<.001, \beta=-.38$, father-child relationship quality, $t(98)=-3.26, p=.002, \beta=-.28$, and paternal positive parenting, $t(98)=$ $2.09, p=.040, \beta=.18$, were significant predictors of combined father- and mother-reported adolescent externalizing problems. No other father or mother factors were significant predictors of combined father and mother-reported adolescent externalizing problems.

Taken together, hypothesis 1 was partially supported in that father factors contributed unique variance to adolescents' externalizing problems across the father-reported and combined father- and mother-reported models. Father factors only contributed unique variance to adolescents' internalizing problems using father-reported adolescent functioning. See Table 10 for a summary of hierarchical regression results across reporters.

## Coparenting Relationship Quality as a Mediator

Path analysis with bias-corrected bootstrapping was conducted using Mplus Version 7 to test the second hypothesis that coparenting relationship quality would mediate the relationships between father factors and adolescent psychosocial functioning in that fathers who have lower depressive symptoms, higher levels of positive parenting, and higher father-child relationship
quality will in turn have better coparenting relationships that will be related to more favorable youth outcomes.

Mother-Reported Adolescent Functioning. The model accounted for 4.4\% ( $p=.218$ ) of the variance in mother-reported adolescent internalizing problems, $14.7 \%(p=.011)$ of the variance in mother-reported adolescent externalizing problems, and $17.0 \%(p=.006)$ of the variance in combined father- and mother-reported coparenting relationship quality. See Figure 2 for a depiction of the path analysis results detailed below.

With respect to the model, higher levels of positive parenting were directly linked to better coparenting relationship quality ( $\beta=.20, p=.007$ ), whereas higher father-child relationship quality was directly linked to better coparenting relationship quality $(\beta=.32, p<$ .001). Better coparenting quality was also directly linked to less mother-reported adolescent externalizing problems ( $\beta=-.34, p<.001$ ).

Coparenting relationship quality mediated the relationship between father-child relationship quality and mother-reported adolescent externalizing behaviors $(\beta=-.30, p=.009$; 95\% CI [0.129 - 0.595]). No other indirect paths were significant.

Father-Reported Adolescent Functioning. The model accounted for 20.3\% ( $p=.030$ ) of the variance in father-reported adolescent internalizing problems, 20.5\% ( $p=.017$ ) of the variance in father-reported adolescent externalizing problems, and $17.0 \%(p=.006)$ of the variance in combined father- and mother-reported coparenting relationship quality. See Figure 3 for a depiction of the path analysis results detailed below.

With respect to the model, higher levels of positive parenting were directly linked to better coparenting relationship quality ( $\beta=.20, p=.007$ ), whereas higher father-child relationship quality was directly linked to better coparenting relationship quality $(\beta=.32, p<$
.001). Higher father-child relationship quality was also directly linked to less father-reported adolescent internalizing problems $(\beta=-.26, p=.018)$ and father-reported externalizing problems $(\beta=-.37, p=.002)$. Higher levels of depressive symptoms were directly linked to greater fatherreported adolescent internalizing problems ( $\beta=.29, p=.010$ ). Positive parenting was positively associated with father-reported adolescent externalizing behavior $(\beta=.20, p=.011)$.

Coparenting relationship quality did not have a direct effect or indirect effect on any of the adolescent outcomes based on fathers' reports.

Combined Father- and Mother-Reported Adolescent Functioning. The model accounted for $11.5 \%(p=.060)$ of the variance in combined father- and mother-reported adolescent internalizing problems, $22.8 \%(p=.002)$ of the variance in combined father- and mother-reported adolescent externalizing problems, and $17.0 \%(p=.006)$ of the variance in combined father- and mother-reported coparenting relationship quality. See Figure 4 for a depiction of the path analysis results detailed below.

With respect to the model, higher levels of positive parenting were directly linked to better coparenting relationship quality ( $\beta=.20, p=.007$ ), whereas higher father-child relationship quality was directly linked to better coparenting relationship quality ( $\beta=.32, p<$ .001). Better coparenting relationship quality was associated with fewer combined father- and mother-reported adolescent externalizing problems ( $\beta=-.28, p=.001$ ). Higher father-child relationship quality was directly linked to fewer combined father- and mother-reported adolescent externalizing problems ( $\beta=-.28, p=.011$ ). Positive parenting was positively associated with combined father- and mother-reported adolescent externalizing behavior ( $\beta=$ $.18, p=.006)$.

Coparenting relationship quality mediated the relationship between father-child relationship quality and combined father- and mother-reported adolescent externalizing behaviors $(\beta=-.20, p=.010 ; 95 \% \mathrm{CI}[0.083-0.392])$. No other indirect paths were significant.

Taken together, hypothesis 2 was partially supported in that coparenting relationship quality mediated the relationship between father-child relationship quality and adolescents' externalizing behaviors across the mother-reported and combined father- and mother-reported models. There is no support for coparenting relationship quality mediating the relationships between any other father factor and adolescent outcome. See Table 10 for a summary of the path analysis results across reporters.

Table 2. Psychometric Properties of Study Measures

| Measure | $\begin{gathered} \text { Father } \\ (n=107) \\ \hline \end{gathered}$ |  |  |  |  |  | $\begin{aligned} & \text { Mother } \\ & (n=107) \end{aligned}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | $S D$ | $\alpha$ | Range | Kurtosis | Skew | M | SD | $\alpha$ | Range | Kurtosis | Skew |
| Positive Parenting | 27.15 | 3.52 | . 82 | 10-30 | 5.69 | -2.14 | 28.62 | 1.97 | . 68 | 10-30 | 10.69 | -2.57 |
| Parent-Child Relationship | 16.93 | 3.41 | . 83 | 0-20 | 2.20 | -1.69 | 16.58 | 4.04 | . 88 | 0-20 | 4.28 | -1.96 |
| Depressive Symptoms | 1.87 | 2.91 | . 73 | 0-27 | 5.21 | 2.21 | 2.99 | 4.03 | . 83 | 0-27 | 8.47 | 2.37 |
| Coparenting Relationship | 78.85 | 14.47 | . 94 | 20-100 | 0.12 | -0.65 | 74.23 | 15.74 | . 95 | 20-100 | -0.55 | -0.30 |
| Combined Coparenting | 76.57 | 12.65 | . 95 | 20-100 | -0.18 | -0.59 | 76.57 | 12.65 | . 95 | 20-100 | -0.18 | -0.59 |
| Internalizing Problems | 46.51 | 9.06 | . 80 | $\leq 50-100$ | 0.52 | 0.67 | 48.14 | 10.92 | . 86 | $\leq 50-100$ | -0.61 | 0.41 |
| Externalizing Problems | 46.07 | 9.27 | . 87 | $\leq 50-100$ | -0.34 | 0.55 | 49.91 | 9.49 | . 85 | $\leq 50-100$ | -0.49 | 0.19 |
| School Performance | 51.22 | 5.28 | . 36 | 20-65 | 3.20 | -1.78 | 50.09 | 6.13 | . 46 | 20-65 | 0.57 | -1.21 |
| Combined Internalizing | 47.33 | 8.26 | . 85 | $\leq 50-100$ | -0.25 | 0.34 | 47.33 | 8.26 | . 85 | $\leq 50-100$ | -0.25 | 0.34 |
| Combined Externalizing | 47.99 | 7.66 | . 88 | $\leq 50-100$ | -0.13 | 0.38 | 47.99 | 7.66 | . 88 | $\leq 50-100$ | -0.13 | 0.38 |
| Combined School | 50.66 | 5.15 | . 51 | 20-65 | 1.54 | -1.49 | 50.66 | 5.15 | . 51 | 20-65 | 1.54 | -1.49 |

Table 3. Correlations between Predictor and Outcome Variables

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Father-child contact | - |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Maternal Hardships | -. 09 | - |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Maternal Positive | . 01 | -. 12 | - |  |  |  |  |  |  |  |  |  |  |  |
| Parenting |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. Mother-Child | -. 10 | -. 14 | .45** | - |  |  |  |  |  |  |  |  |  |  |
| Relationship Quality |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. Maternal | -. 19 | . $22^{*}$ | -. 10 | -. 22 * | - |  |  |  |  |  |  |  |  |  |
| Depressive Symptoms |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6. Paternal Positive | . $30 * *$ | -.21* | . 12 | -. 00 | -.24* | - |  |  |  |  |  |  |  |  |
| Parenting |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7. Father-Child | . 12 | . 00 | . 02 | .26* | -. 03 | .21* | - |  |  |  |  |  |  |  |
| Relationship Quality |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8. Paternal Depressive | -. 09 | . 06 | -. 001 | -. 06 | . 12 | -. 10 | -.24* | - |  |  |  |  |  |  |
| Symptoms |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9. Mother-Reported | -. 04 | . 18 | -.32** | -.39** | .47** | -. 13 | -. 08 | . 06 | - |  |  |  |  |  |
| Internalizing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Problems |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10. Mother-Reported | -. 02 | .26** | -. 42 ** | -.60** | .40** | -. 03 | -.22* | . 13 | . $59 * * *$ | - |  |  |  |  |
| Externalizing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Problems |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11. Father-Reported | -. 10 | -. 03 | -. 10 | -. 16 | . 12 | -. 07 | -.35** | .36* | . $36{ }^{* * *}$ | .23* | - |  |  |  |
| Internalizing |  |  |  |  |  |  |  | * |  |  |  |  |  |  |
| Problems |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12. Father-Reported | . 03 | . 03 | -. 08 | $-.32 * *$ | -. 00 | . 09 | $-.39 * *$ | .19* | . 19 | . 33 *** | . 61 *** | - |  |  |
| Externalizing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Problems |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table 3 (Continued)


Table 4. Correlations between Predictor and Outcome Variables using Mother-Reported Adolescent Functioning

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1. Father-child contact | - |  |  |  |  |  |  |  |  |  |
| 2. Maternal Hardships | -.09 | - |  |  |  |  |  |  |  |  |
| 3. Maternal Positive | .01 | -.12 | - |  |  |  |  |  |  |  |
| Parenting |  |  |  |  |  |  |  |  |  |  |
| 4. Mother-Child <br> Relationship Quality | -.10 | -.14 | $.45^{* *}$ | - |  |  |  |  |  |  |
| 5. Maternal <br> Depressive Symptoms <br> 6. Paternal Positive | -.19 | $.22^{*}$ | -.10 | $-.22^{*}$ | - |  |  |  |  |  |
| Parenting | $-.21^{*}$ | .12 | -.00 | $-.24^{*}$ | - |  |  |  |  |  |
| 7. Father-Child <br> Relationship Quality <br> 8. Paternal Depressive | -.09 | .06 | -.001 | -.06 | .12 | -.10 | $-.24^{*}$ | - |  |  |
| Symptoms | .00 | .02 | $.26^{*}$ | -.03 | $.21^{*}$ | - |  |  |  |  |
| 9. Mother-Reported <br> Internalizing | -.04 | .18 | $-.32^{* *}$ | $-.39^{* *}$ | $.47^{* *}$ | -.13 | -.08 | .06 | - |  |
| Problems <br> 10. Mother-Reported <br> Externalizing | -.02 | $.26^{* *}$ | $-.42^{* *}$ | $-.60^{* *}$ | $.40^{* *}$ | -.03 | $-.22^{*}$ | .13 | $.59 * *$ | - |
| Problems |  |  |  |  |  |  |  |  |  |  |

Table 5. Hierarchical Regression Results for Father Factors Contributing Unique Variance to Adolescent Outcomes using Mother-Reported Adolescent Functioning

|  | Internalizing |  |  | Externalizing |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
|  | $F$ | $p$ | $R^{2}$ | $F$ | $p$ | $R^{2}$ |  |
| $F$ | 6.24 | .000 | .34 | 12.34 | .000 | .50 |  |
| F change | $\Delta F$ | $p$ | $\Delta R^{2}$ | $\Delta F$ | $p$ | $\Delta R^{2}$ |  |
|  | .01 | .998 | .00 | 1.50 | .219 | .02 |  |
| Block 1 | $\beta$ | $t$ | $p$ | $\beta$ | $t$ | $p$ |  |
| Father-Child Contact |  |  |  |  |  |  |  |
| Maternal Hardships | -.02 | -.21 | .834 | .00 | .01 | .992 |  |
| Block 2 | .174 | 1.80 | .076 | .26 | 2.71 | $.008^{*}$ |  |
| Mother-Child Relationship Quality | -.22 | -2.32 | $.022^{*}$ | -.45 | -5.38 | $.000^{* * *}$ |  |
| Maternal Depressive Symptoms | .40 | 4.64 | $.000^{* * *}$ | .26 | 3.35 | $.000^{* * *}$ |  |
| Maternal Positive Parenting | -.18 | -1.95 | .054 | -.18 | -2.24 | $.028^{*}$ |  |
| Block 3 |  |  |  |  |  |  |  |
| Father-Child Relationship Quality | -.01 | -.15 | .878 | -.12 | -1.45 | .149 |  |
| Paternal Depressive Symptoms | -.00 | -.03 | .973 | .04 | .57 | .567 |  |
| Paternal Positive Parenting | -.00 | -.10 | .923 | .13 | 1.58 | .118 |  |
| Note. $N=107$ |  |  |  |  |  |  |  |
| $* p<.05 . * * p<.01 . * * * p<.001$. |  |  |  |  |  |  |  |

Table 6. Correlations between Predictor and Outcome Variables using Father-Reported Adolescent Functioning

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1. Father-child <br> contact | - |  |  |  |  |  |  |  |  |  |
| 2. Maternal | -.09 | - |  |  |  |  |  |  |  |  |
| Hardships |  |  |  |  |  |  |  |  |  |  |
| 3. Maternal Positive <br> Parenting | .01 | -.12 | - |  |  |  |  |  |  |  |
| 4. Mother-Child <br> Relationship Quality | -.10 | -.14 | $.45^{* *}$ | - |  |  |  |  |  |  |
| 5. Maternal <br> Depressive <br> Symptoms | -.19 | $.22^{*}$ | -.10 | $-.22^{*}$ | - |  |  |  |  |  |
| 6. Paternal Positive <br> Parenting | $.30^{* *}$ | $-.21^{*}$ | .12 | -.00 | $-.24^{*}$ | - |  |  |  |  |
| 7. Father-Child <br> Relationship Quality | .12 | .00 | .02 | $.26^{*}$ | -.03 | $.21^{*}$ | - |  |  |  |
| 8. Paternal <br> Depressive <br> Symptoms | -.09 | .06 | -.00 | -.06 | .12 | -.10 | $.24^{*}$ | - |  |  |
| 9. Father-Reported <br> Internalizing | -.10 | -.03 | -.10 | -.16 | .12 | -.07 | $-.34^{* *}$ | $.36^{* *}$ | - |  |
| Problems <br> 10. Father-Reported <br> Externalizing <br> Problems | .03 | .03 | -.08 | $-.32^{* *}$ | -.00 | .09 | $-.39^{* *}$ | $.19^{*}$ | $.61^{* *}$ | - |
| Note. $N=107$ <br> $* p<.05 * * p<.01$. | $* * * p<.001$. |  |  |  |  |  |  |  |  |  |

Table 7. Hierarchical Regression Results for Father Factors Contributing Unique Variance to Adolescent Outcomes using Father-Reported Adolescent Functioning

|  | Internalizing |  | Externalizing |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $F$ | $p$ | $R^{2}$ | $F$ | $p$ | $R^{2}$ |
| $F$ | 3.51 | .001 | .22 | 3.88 | .001 | .24 |
| F change | $\Delta F$ | $p$ | $\Delta R^{2}$ | $\Delta F$ | $p$ | $\Delta R^{2}$ |
|  | 7.28 | .000 | .17 | 5.63 | .001 | .13 |
| Block 1 | $\beta$ | $t$ | $p$ | $\beta$ | $t$ | $p$ |
| Father-Child Contact |  |  |  |  |  |  |
| Maternal Hardships | -.10 | -1.03 | .307 | .03 | .30 | .767 |
| Block 2 | -.04 | -.38 | .703 | .03 | .29 | .773 |
| Mother-Child Relationship Quality |  |  |  |  |  |  |
| Maternal Depressive Symptoms | -.15 | -1.32 | .191 | -.37 | -3.41 | $.001^{*}$ |
| Maternal Positive Parenting | .08 | .76 | .450 | -.08 | -.79 | .433 |
| Block 3 | -.04 | -.35 | .726 | .08 | .77 | .443 |
| Father-Child Relationship Quality | -.27 | -2.67 | $.009^{* *}$ | -.34 | -3.43 | $.001^{* *}$ |
| Paternal Depressive Symptoms | .29 | 3.12 | $.002^{* *}$ | .12 | 1.28 | .202 |
| Paternal Positive Parenting | .05 | .47 | .638 | .16 | 1.67 | .101 |
| Note. $N=107$ |  |  |  |  |  |  |

Table 8. Correlations between Predictor and Outcome Variables using Combined Father- and Mother-Reported Adolescent Functioning

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Father-child contact | - |  |  |  |  |  |  |  |  |  |
| 2. Maternal | -. 09 | - |  |  |  |  |  |  |  |  |
| Hardships |  |  |  |  |  |  |  |  |  |  |
| 3. Maternal Positive | . 01 | -. 12 | - |  |  |  |  |  |  |  |
| Parenting |  |  |  |  |  |  |  |  |  |  |
| 4. Mother-Child | -. 10 | -. 14 | . $45^{* *}$ | - |  |  |  |  |  |  |
| Relationship Quality |  |  |  |  |  |  |  |  |  |  |
| 5. Maternal | -. 19 | .22* | -. 10 | -.22* | - |  |  |  |  |  |
| Depressive |  |  |  |  |  |  |  |  |  |  |
| Symptoms |  |  |  |  |  |  |  |  |  |  |
| 6. Paternal Positive | . 30 ** | -.21* | . 12 | -. 00 | -.24* | - |  |  |  |  |
| Parenting |  |  |  |  |  |  |  |  |  |  |
| 7. Father-Child | . 12 | . 00 | . 02 | .26* | -. 03 | .21* | - |  |  |  |
| Relationship Quality |  |  |  |  |  |  |  |  |  |  |
| 8. Paternal | -. 09 | . 06 | -. 00 | -. 06 | . 12 | -. 10 | -.24* | - |  |  |
| Depressive |  |  |  |  |  |  |  |  |  |  |
| Symptoms |  |  |  |  |  |  |  |  |  |  |
| 9. Combined- | -. 08 | . 10 | $-.27 * *$ | $-.35 * *$ | .37** | -. 12 | -.24* | .24* | - |  |
| Reported |  |  |  |  |  |  |  |  |  |  |
| Internalizing |  |  |  |  |  |  |  |  |  |  |
| Problems |  |  |  |  |  |  |  |  |  |  |
| 10. Combined- | . 00 | . 18 | $-.31 * *$ | $-.56 * *$ | . 25 ** | . 04 | -.37** | .20* | .60** | - |
| Reported |  |  |  |  |  |  |  |  |  |  |
| Externalizing |  |  |  |  |  |  |  |  |  |  |
| Problems |  |  |  |  |  |  |  |  |  |  |
| Note. $N=107$ |  |  |  |  |  |  |  |  |  |  |
| $* p<.05 . * * p<.01$. | **p<.00 |  |  |  |  |  |  |  |  |  |

Table 9. Hierarchical Regression Results for Father Factors Contributing Unique Variance to Adolescent Outcomes using Combined Father- and Mother-Reported Adolescent Functioning

|  | Internalizing |  |  | Externalizing |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $F$ | $p$ | $R^{2}$ | $F$ | $p$ | $R^{2}$ |
| $F$ | 4.94 | . 000 | . 29 | 9.52 | . 000 | . 44 |
|  | $\Delta F$ | $p$ | $\Delta R^{2}$ | $\Delta F$ | $p$ | $\Delta R^{2}$ |
| F change | 2.51 | . 063 | . 06 | 5.47 | . 002 | . 09 |
|  | $\beta$ | $t$ | $p$ | $\beta$ | $t$ | $p$ |
| Block 1 |  |  |  |  |  |  |
| Father-Child Contact | -. 07 | -. 70 | . 484 | . 02 | . 19 | . 851 |
| Maternal Hardships | . 09 | . 97 | . 336 | . 18 | 1.83 | . 071 |
| Block 2 |  |  |  |  |  |  |
| Mother-Child Relationship Quality | -. 23 | -2.23 | .028* | -. 50 | -5.37 | . 000 *** |
| Maternal Depressive Symptoms | . 31 | 3.31 | .001** | . 11 | 1.29 | . 199 |
| Maternal Positive Parenting | -. 14 | -1.41 | . 160 | -. 06 | -. 69 | . 491 |
| Block 3 |  |  |  |  |  |  |
| Father-Child Relationship Quality | -. 16 | -1.63 | . 107 | -. 28 | -3.26 | .002** |
| Paternal Depressive Symptoms | . 16 | 1.76 | . 081 | . 10 | 1.24 | . 219 |
| Paternal Positive Parenting | . 02 | . 21 | . 835 | . 18 | 2.09 | .040* |
| Note. $N=107$ $* p<.05 . * * p<.01 . * * * p<.001 .$ |  |  |  |  |  |  |

Table 10. Hierarchical Regression and Path Analysis Results Across Reporters of Adolescent Functioning

|  | Internalizing Problems |  |  | Externalizing Problems |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mother- <br> Reported | FatherReported | CombinedReported | Mother- <br> Reported | FatherReported | CombinedReported |
| Hypothesis 1 R $27 * *$ er |  |  |  |  |  |  |
| Father-Child | -. 01 | $-.27 * *$ | -. 16 | -. 12 | $-.34 * *$ | $-.28 * *$ |
| Relationship |  |  |  |  |  |  |
| Quality |  |  |  |  |  |  |
| Paternal | -. 00 | .29** | . 16 | . 04 | . 12 | . 10 |
| Symptoms |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Paternal | -. 00 | . 05 | . 02 | . 13 | . 16 | .18* |
| Positive |  |  |  |  |  |  |
| Parenting |  |  |  |  |  |  |
| Hypothesis 2 |  |  |  |  |  |  |
| Father-Child | . 00 | -.26* | -. 14 | -. 10 | -.37* | -.28* |
| Relationship |  |  |  |  |  |  |
| Quality |  |  |  |  |  |  |
| Paternal | . 04 | .29* | . 19 | . 08 | . 11 | . 12 |
| Depressive |  |  |  |  |  |  |
| Symptoms |  |  |  |  |  |  |
| Paternal | -. 08 | . 03 | -. 03 | . 09 | .20* | .18** |
| Positive |  |  |  |  |  |  |
| Parenting |  |  |  |  |  |  |
| Coparenting | -. 17 | . 06 | -. 15 | $-.34 * * *$ | . 11 | $-.28 * *$ |
| Relationship |  |  |  |  |  |  |
| Quality |  |  |  |  |  |  |
| Indirect Father- | -. 05 | -. 02 | -. 05 | $-.11^{* *}$ | -. 04 | $-.09 * *$ |
| Child |  |  |  |  |  |  |
| Relationship |  |  |  |  |  |  |
| Indirect | . 00 | . 00 | . 00 | . 00 | . 00 | . 00 |
| Paternal |  |  |  |  |  |  |
| Depressive |  |  |  |  |  |  |
| Symptoms |  |  |  |  |  |  |
| Indirect | -. 03 | -. 01 | -. 03 | -. 07 | -. 02 | -. 06 |
| Paternal |  |  |  |  |  |  |
| Positive |  |  |  |  |  |  |
| Parenting |  |  |  |  |  |  |
| Note. $N=107$ |  |  |  |  |  |  |
| *p <.05. **p < | 1. ***p< |  |  |  |  |  |



Figure 2. Path Analysis for the Relationship between Father Factors and Mother-Reported Adolescent Functioning


Figure 3. Path Analysis for the Relationship between Father Factors and Father-Reported Adolescent Functioning


Figure 4. Path Analysis for the Relationship between Father Factors and Combined-Reported Adolescent Functioning

## Discussion

In the current study, I investigated whether paternal factors would contribute unique variance to the prediction of adolescents' emotional and behavioral functioning above and beyond maternal factors. In addition, I sought to explore whether paternal factors were indirectly related to adolescents' emotional and behavioral functioning through coparenting relationship quality. First the overall results will be reviewed, followed by discussion of the individual hypotheses.

The present findings suggested that results varied based on the reporter of adolescent functioning. When maternal reports of adolescent functioning were used, none of the father factors were significantly related to adolescent outcomes controlling for maternal factors, and the variance accounted for was not significantly increased when adding father factors to the models. When paternal reports of adolescent functioning were used, adding father factors to the models contributed a significant increase in variance for both adolescent internalizing and externalizing problems. Better father-child relationship quality was related to fewer adolescent internalizing and externalizing problems, and greater paternal depressive symptoms were related to more adolescent internalizing problems. When combined father and mother reports of adolescent functioning were used, only the model for adolescent externalizing problems resulted in a significant increase in variance accounted for when adding father factors to the model. Fatherchild relationship quality was related negatively to adolescent externalizing problems, indicating that better communication and interactions in the father-child relationship was related to fewer behavioral problems, and paternal positive parenting was related positively to adolescent
externalizing problems, indicating that greater paternal acceptance was associated with increased behavioral problems in adolescents.

The findings related to coparenting relationship quality mediating the relationships between father factors and adolescent outcomes also varied somewhat by reporter of adolescent functioning. Both the mother-reported and combined father- and mother- reported models found that coparenting relationship quality had an indirect effect on the relationship between fatherchild relationship quality and adolescent externalizing problems, indicating that more positive father-child relationships led to higher levels of coparenting cooperation, which led to fewer behavioral problems in adolescents. None of the models supported an indirect link between paternal positive parenting or paternal depressive symptoms and adolescent functioning, and there were no significant indirect paths for coparenting relationship quality in the father-reported adolescent functioning model. Overall, these findings do not support the Coparenting Framework for African American Single-Mother Families that theorizes that nontraditional coparent factors are indirectly related to child outcomes via their influence on the coparenting relationship (Jones et al., 2007).

## Unique Contributions of Father Factors to Adolescent Functioning

Present findings offer some support for the first hypothesis that certain father factors are uniquely related to child outcomes. Specifically, both the father-reported and combined fatherand mother-reported models of adolescent functioning indicated that father-child relationship quality was uniquely related to adolescents' externalizing behaviors when controlling for covariates and mother factors. The finding that better father-child relationship quality was related to fewer behavioral problems among adolescents is consistent with previous research which found that the father-child relationship was related to decreased alcohol risk and fewer
aggressive behaviors for adolescents as well as better overall child wellbeing (Caldwell et al., 2014; Harper \& Fine, 2006; Jordan \& Lewis, 2005). The finding that father-child relationship quality had the strongest associations with adolescent functioning in the models extends metaanalytic findings that the quality of interactions between nonresident fathers and children and strong father-child relationships were the key forms of nonresident father involvement associated with child outcomes (Adamsons \& Johnson, 2013). The finding that father-child relationship quality was uniquely related to adolescent externalizing problems (father-reported and combined father- and mother-reported adolescent functioning) and internalizing problems (father-reported adolescent functioning) also extends previous research that found father-child relationship quality contributed unique variance to child well-being above and beyond paternal psychological distress, paternal positive parenting, and coparenting conflict (Harper \& Fine, 2006). Fatherchild relationship quality is a key factor in influencing adolescent outcomes, and future research on strengthening nonresident father-child relationship quality is warranted.

Paternal depressive symptoms were also related to adolescent internalizing problems when controlling for covariates and mother factors in the father-reported adolescent functioning model. The finding that greater paternal depressive symptoms were related to more adolescent internalizing problems is consistent with previous research which found that higher nonresident psychological distress was related to poorer child well-being (Harper \& Fine, 2006). The lack of significant findings between paternal depressive symptoms and adolescent externalizing problems was inconsistent with meta-analytic findings (Kane \& Garber, 2004) and previous research which demonstrated that father's depressive symptoms contributed incremental variance to children's emotional and behavioral functioning when controlling for maternal depressive symptoms (Marchand \& Hock, 1998). However, the current study controlled for various
maternal and paternal factors and used a sample of noncohabiting parents of adolescents versus married parents of preschoolers. To my knowledge, this is the first study to examine the relationship between nonresidential Black fathers' depressive symptoms and adolescent emotional and behavioral functioning. Given the strong research base supporting the link between fathers' depressive symptoms and youth's maladjustment (Kane \& Garber, 2004; Marchand-Reilly, 2012), more research is needed to explicate the relationship between nonresidential Black fathers' depressive symptoms and adolescent outcomes.

Lastly, paternal positive parenting was related positively to adolescent externalizing problems when controlling for covariates and mother factors in the combined father- and motherreported adolescent functioning model, indicating that greater paternal acceptance was related to more externalizing problems. This finding is contradictory to hypothesized directions and inconsistent with previous research which found that greater paternal warmth was related to better child wellbeing (Harper \& Fine, 2006). It is possible that nonresidential Black fathers of children who exhibit greater behavioral problems are more involved in the management of their children's behaviors including helping them to calm down when they are upset and talking with their children about their worries that may be related to their maladaptive behaviors, which are areas assessed in our measure of positive parenting. Interestingly, paternal positive parenting was not significantly related to mother-reported, father-reported, or combined father- and motherreported adolescent externalizing behaviors in bivariate analyses or in the mother-reported or father-reported multivariate models. It is possible the significant association between paternal positive parenting and combined father- and mother-reported adolescent externalizing was induced by inclusion of other variables in the model to which paternal positive parenting was
associated including father-child contact, maternal economic hardships, maternal depressive symptoms, and father-child relationship quality.

## Coparenting Relationship Quality as a Mediator

Present findings offer limited support for the second hypothesis that coparenting relationship quality would mediate the relationships between father factors and adolescent functioning. The mother-reported and combined father- and mother- reported models found an indirect effect of father-child relationship quality on adolescent behavioral problems transmitted through coparenting relationship quality, which is consistent with the Coparenting Framework for African American Single-Mother Families (Jones et al., 2007).

Coparenting relationship quality did not mediate the relationships between paternal positive parenting or paternal depressive symptoms and adolescent functioning in any of the models contrary to the Coparenting Framework for African American Single-Mother Families that theorizes that nontraditional coparent factors (e.g., father factors) are indirectly related to child outcomes via their influence on the coparenting relationship (Jones et al., 2007). Studies conducted by the framework developers' research team have predominantly included the single mother's coresidential mother as the nontraditional coparent. It is possible that the attributes of the nontraditional coparent and child's relationship with the nontraditional coparent differs depending on residential status and relationship to the child.

The findings related to coparenting relationship quality mediating the relationships between father factors and adolescent outcomes also varied somewhat by reporter of adolescent functioning. Both the mother-reported and combined father- and mother- reported models found that coparenting relationship quality had an indirect effect on the relationship between fatherchild relationship quality and adolescent externalizing problems, indicating that better father-
child relationships led to higher levels of coparenting cooperation, which led to fewer behavioral problems in adolescents. None of the models supported an indirect link between paternal positive parenting or paternal depressive symptoms and adolescent functioning, and there were no significant indirect paths for coparenting relationship quality in the father-reported adolescent functioning model. Overall, these findings do not support the Coparenting Framework for African American Single-Mother Families (Jones et al., 2007).

To my knowledge, this is the first empirical study to investigate whether coparenting relationship quality mediates nonresidential Black father factors and adolescent psychosocial functioning. Research on the mediators between nonresidential father involvement and youth outcomes indicates that maternal positive parenting mediates the relationships in that higher levels of nonresidential father involvement are associated with improved maternal positive parenting, which in turn is associated with better youth outcomes (Choi, 2010; Choi \& Jackson, 2011, 2012; Jackson \& Schemes, 2005). In addition to maternal parenting, both maternal depressive symptoms and maternal parenting stress mediated the relationship between nonresident fathers' presence and child behavior problems (Jackson et al., 2015; Jackson, Preston, \& Thomas, 2013).

Previous research has found that coparenting conflict is a stronger predictor than coparenting support of youth maladjustment (Jones et al., 2003); therefore, future research on this topic may want to investigate coparenting conflict in addition to coparenting cooperation and teamwork, as assessed in this study. In addition, previous research suggests a "spill over" effect by which the valence of the coparenting relationship influences mother-child relationship quality, which in turn is associated with youth outcomes (Parent et al., 2013). Studies investigating mediators of the relationship between nonresidential father involvement and youth outcomes
provide support for maternal factors as mediators (Jackson et al., 2015; Jackson et al., 2013). A model that includes maternal factors as potential mediators for the relationship between various aspects of the coparenting relationship (including coparenting conflict) and youth outcomes may more clearly elucidate the relationship between coparenting relationship quality and youth outcomes.

## Multi-Informants of Adolescent Functioning

Study findings highlight the discrepant results found when using multi-informants of adolescent functioning including father reports, mother reports, and combined father- and mother- reports. Specifically, findings when using father-reported and combined father- and mother-reported adolescent functioning lent support to unique contributions of father factors to adolescent outcomes, whereas findings when using mother-reported adolescent functioning did not. Several factors including issues of multiple informants, parent gender differences in reporting adolescent functioning, and common method variance contribute to the discrepant findings.

Meta-analyses have demonstrated low to moderate agreement, on average, between multiple informants on youth's emotional and behavioral problems depending upon informant's observation of youth in similar settings, with parents yielding moderate to large levels of agreement (Achenbach, McConaughy, \& Howell, 1987; De Los Reyes et al., 2015). Metaanalytic findings based on 341 studies published from 1989-2014 showed parents' mean correlations for youth's internalizing and externalizing problems to be .48 and .58 , respectively (De Los Reyes et al., 2015). Because parents in the current sample were noncohabiting and often saw their children in different settings from one another, parents' correlations of .36 for internalizing problems and .33 for externalizing problems were lower than the means reported
for parents in the meta-analysis and more closely resembled means for different types of informants (e.g., parent/teacher). Given this context, it is probable that adolescents displayed different behaviors in their primary home with their mother compared to the settings in which they interacted with their nonresidential fathers.

Parents' reports of their behaviors and the behaviors of their children also contributed to the discrepant findings across reporters of adolescent functioning. For example, fathers reported fewer internalizing and externalizing problems as compared to mothers, which is consistent with previous research on interparent agreement on adolescent functioning (Duhig, Renk, Epstein, \& Phares, 2000; Schroeder, Hood, \& Hughes, 2010). It is also notable that parents' reports of children's functioning is intertwined with parents' functioning, and prior research has demonstrated that parents experiencing depression or anxiety over-report their children's symptoms (De Los Reyes \& Kazdin, 2004). It is also possible that nonresidential fathers, compared to residential mothers, are less aware of adolescents' behavior across contexts due to having less contact and communication with the adolescent. Common method variance also contributes to the understanding of statistically significant associations between father factors and adolescent outcomes when using father-reported (and to an extent, combined father- and mother- reported) adolescent functioning in the models, which likely resulted in inflated statistical associations. Taken together, various methodological and theoretical factors may contribute to the discrepancy in findings across reporters. Future research is needed to elucidate the influence of nonresident father factors on adolescent outcomes that addresses adolescents' various behavioral displays across contexts, nonresident fathers' knowledge of adolescent behavior across contexts, parent functioning on perceptions of adolescent behavior, and methodological concerns.

## Implications

This is the first known study to examine the relationships between various nonresident father (i.e., paternal depressive symptoms, positive parenting, and father-child relationship quality) and coparenting factors and the emotional and behavioral functioning of Black adolescents from SMHs. Findings of the current study added substantive information to the literature on the protective factors of Black adolescents from SMHs, which have important implications for targeting nonresident father and coparent factors to improve adolescents’ emotional and behavioral functioning. There is extensive research highlighting the importance of mother factors as protective for Black adolescents from SMHs (Anton et al., 2015; Jones et al., 2002; Montague et al., 2010). The current research provides support for father factors and coparenting relationship quality also contributing to adolescent functioning.

Providers working with Black adolescents from SMHs should be aware of the potential benefits of including nonresidential fathers in family-based prevention and intervention programs in order to help reduce the development or exacerbation of youths' emotional or behavioral problems. Given study findings, providers should focus on interventions to strengthen fatherchild relationship quality, which emerged as a key factor in influencing adolescent outcomes. Interventions developed to strengthen nonresident Black fathers' relationships with their sons highlight the effectiveness of this approach in improving youth outcomes (Caldwell et al., 2014). Study findings suggest that high father-child relationship quality is related to improved outcomes for adolescents as well as coparenting relationship quality, which also is associated with improved adolescent outcomes. Therefore, targeting improvements in the father-child relationship may both directly improve adolescent outcomes and indirectly improve adolescent outcomes through improvements in the coparenting relationship.

Study findings also provide support for interventions to reduce paternal depressive symptoms to improve adolescents' internalizing problems. Providers may benefit from involving nonresident fathers in interventions targeted to improve adolescents' emotional problems by having them participate in receiving psychoeducation and learning coping strategies to decrease depressive symptoms. In addition, nonresident fatherhood programs (and fatherhood programs in general) should target the reduction of depressive symptoms in fathers for improved adolescent outcomes.

Previous research has found that coparenting relationship quality and father's mental health are key determinants of levels of father involvement for nonresident Black fathers (Coates \& Phares, 2014). Findings from the current study further highlight that coparenting relationship quality and fathers' depressive symptoms contribute to adolescent functioning. Therefore, these two areas should be included in fatherhood programs to both increase the positive involvement of nonresident Black fathers and decrease maladjustment of Black adolescents from SMHs.

## Limitations and Future Research

Although this study contributes important information to the field as the first to examine the aspects of nonresidential Black fatherhood uniquely related to adolescents' psychosocial adjustment controlling for key maternal factors, several limitations must be noted. A primary limitation is that measures of adolescent functioning, parent-child relationship quality, and positive parenting were based solely on parent report, which is subject to response bias. Relatedly, the current study used a monomethod design, which tends to have inflated statistical associations due to common method variance. Future research may wish to include childreported, teacher-reported, or clinician assessed measures of child emotional and behavioral problems as well as obtain school academic records, which would be less affected by inflated
statistical associations due to parent psychological functioning or common method variance. Future research should also use multi-informant reports (i.e., child and parent) of parent-child relationship quality and positive parenting to obtain a more comprehensive measure of parentchild interactions and parenting styles as well as limit response bias. Alternatively, parent-child relationship quality could be assessed via observational methods.

Self-selection bias is also a concern of this study. Because both biological parents were needed to participate in the telephone survey, this study inevitably excluded parents who did not have contact information for the other parent or were otherwise unable to contact or have the other parent participate in the study including families in which there was a restraining order, a parent was incarcerated, or a parent was uninterested in participating in the study. Given that several families were excluded from the current study due to paternal incarceration, future studies should examine study variables among families in which the father is currently incarcerated.

The majority of participants (58.9\%) were recruited via craigslist advertisements posted in the community volunteers section. Therefore, many parents were presumably internet savvy and financially motivated to participate in the research study. Due to the telephone survey methodology, researchers assessed, but were unable to confirm, participants' eligibility including parental status, noncohabiting parental status, race, age of child, and frequency of father-child contact. The research team protocol involved having another member of the research team screen a potential participant whenever the initial screener determined the potential participants' eligibility was questionable. Whenever two members of the research team agreed that a potential participants' eligibility was questionable, the family was informed that they did not meet study criteria. In all cases, when one research assistant determined questionable eligibility, the family
was ultimately excluded from the study. Future studies may wish to employ additional methods to verify eligibility status such as recruiting families through agencies in which referral agents are able to confirm that participants meet study eligibility requirements.

Lastly, the present sample included noncohabiting Black parents of adolescents who selfselected to participate in a study focusing on parenting in Black families. Father factors and their relation to adolescent outcomes may reveal different patterns among families with residential fathers or different racial/ethnic backgrounds. Findings from the study should not be generalized beyond this subsample of fathers. Given the paucity of research on the relationship between nonresident Black father factors and child outcomes, future studies should continue to examine these relationships to determine whether these results are consistent and more fully explicate the relationships. More studies, including both quantitative and qualitative, are needed to understand the influence of nonresident fathers' depressive symptoms, parenting, father-child relationship, and coparenting relationship on child outcomes. Future research should investigate the influence of child gender, age of nonresident father status initiation, duration of nonresident father status, and coparenting conflict on the relationships between father factors and child outcomes as well as the mediators of coparenting relationship quality and child outcomes.

Despite these limitations, the study contributed substantive knowledge of how nonresidential fathers uniquely contribute to, and serve as protective factors for, their adolescents' psychosocial adjustment. Providers should continue efforts to engage and encourage nonresident father involvement and researchers should continue to extend the literature on the protective factors of Black children from SMHs.

## Conclusion

This study found some support for the Coparenting Framework for African American Single-Mother Families (Jones et al., 2007) in that nonresidential father factors were related to adolescent outcomes in similar ways as maternal factors. Additionally, father factors added incremental variance to adolescents' emotional and behavioral problems when fathers' reports of adolescent functioning were used and contributed unique variance to adolescents' behavioral problems when combined father and mother reports' of adolescent functioning were used. Father-child relationship quality emerged as a strong factor associated with adolescent adjustment and interventions designed to strengthen father-child relationships should be further developed and evaluated. I found limited support for coparenting relationship quality mediating the relationships between father factors and adolescent outcomes; however, father-child relationship quality was found to be related indirectly to adolescents' externalizing problems transmitted through coparenting relationship quality. Given that coparenting conflict has been found to be a stronger predictor of youth maladjustment than coparenting support (Jones et al., 2003), future exploration of the various aspects of the coparenting relationship as mechanisms through which father factors influence adolescent outcomes is warranted. This study adds support for the framework's supposition that attributes of nontraditional coparents (e.g., nonresidential father factors) influence youth's outcomes in similar ways as attributes of single mothers. However, our findings do not lend support to the framework's supposition that the relationships between nontraditional coparents and youth's outcomes are mediated by coparenting relationship quality. However, this study offers valuable initial findings regarding the role of nonresident Black father factors and coparenting relationship quality in influencing adolescents' emotional and behavioral functioning.

## References

Abidin, R. R., \& Konold, T. (1999). Parenting Alliance Measure: Professional manual. Odessa, FL: Psychological Assessment Resources.

Achenbach, T. M., McConaughy, S. H., \& Howell, C. T. (1987). Child/adolescent behavioral and emotional problems: Implications of cross-informant correlations for situational specificity. Psychological Bulletin, 101(2), 213-232. doi:10.1037/0033-2909.101.2.213

Achenbach, T. M., \& Rescorla, L. A. (2001). Manual for the ASEBA school-age forms \& profiles. Burlington, VT: University of Vermont, Research Center for Children, Youth, \& Families.

Adamsons, K., \& Johnson, S. K. (2013). An updated and expanded meta-analysis of nonresident fathering and child well-being. Journal of Family Psychology, 27(4), 589-599. doi:10.1037/a0033786

Ali, M. M., \& Dean, D., Jr. (2015). The influence of nonresident fathers on adolescent and young adult cigarette smoking. Families, Systems, \& Health, 33(3), 314-323. doi:10.1037/fsh0000137

Alleyne-Green, B., Grinnell-Davis, C., Clark, T. T., \& Cryer-Coupet, Q. R. (2015). The role of fathers in reducing dating violence victimization and sexual risk behaviors among a national sample of Black adolescents. Children and Youth Services Review, 55, 48-55. doi:10.1016/j.childyouth.2015.04.005

Anton, M. T., Jones, D. J., \& Youngstrom, E. A. (2015). Socioeconomic status, parenting, and externalizing problems in african american single-mother homes: A person-oriented approach. Journal of Family Psychology, 29(3), 405-415. doi:10.1037/fam0000086

Armistead, L., Forehand, R., Brody, G., \& Maguen, S. (2002). Parenting and child psychosocial adjustment in single-parent African American families: Is community context important? Behavior Therapy, 33(3), 361-375. doi:10.1016/S0005-7894(02)80033-8

Bastaits, K., Ponnet, K., \& Mortelmans, D. (2014). Do divorced fathers matter? The impact of parenting styles of divorced fathers on the well-being of the child. Journal of Divorce \& Remarriage, 55(5), 363-390. doi:10.1080/10502556.2014.920682

Battle, J., \& Coates, D. L. (2004). Father-only and mother-only, single-parent family status of Black girls and achievement in grade twelve and at two-years post high school. Journal of Negro Education, 73(4), 392-407. doi:10.2307/4129624

Boyd, R. C., \& Waanders, C. (2013). Protective factors for depression among African American children of predominantly low-income mothers with depression. Journal of Child and Family Studies, 22(1), 85-95. doi:10.1007/s 10826-012-9588-y

Bronte-Tinkew, J., Moore, K. A., Matthews, G., \& Carrano, J. (2007). Symptoms of major depression in a sample of fathers of infants: Sociodemographic correlates and links to father involvement. Journal of Family Issues, 28, 61-99. doi:10.1177/0192513x06293609

Bryant, A. L., \& Zimmerman, M. A. (2003). Role models and psychosocial outcomes among African American adolescents. Journal of Adolescent Research, 18(1), 36-67. doi:10.1177/0743558402238276

Caldwell, C. H., Antonakos, C. L., Assari, S., Kruger, D., De Loney, E. H., \& Njai, R. (2014). Pathways to prevention: Improving nonresident African American fathers' parenting
skills and behaviors to reduce sons' aggression. Child Development, 85(1), 308-325. doi:10.1111/cdev. 12127

Caldwell, C. H., Sellers, R. M., Bernat, D. H., \& Zimmerman, M. A. (2004). Racial identity, parental support, and alcohol use in a sample of academically at-risk African American high school students. American Journal of Community Psychology, 34, 71-82. doi:10.1023/B:AJCP.0000040147.69287.f7

Ceballo, R., \& McLoyd, V. C. (2002). Social support and parenting in poor, dangerous neighborhoods. Child Development, 73(4), 1310-1321. doi:10.1111/1467-8624.00473

Chester, C., Jones, D. J., Zalot, A., \& Sterrett, E. (2007). The psychosocial adjustment of African American youth from single mother homes: The relative contribution of parents and peers. Journal of Clinical Child and Adolescent Psychology, 36(3), 356-366. doi:10.1080/15374410701444306

Child Trends Databank (2015). Family structure. Retrieved from https://www.childtrends.org/?indicators=family-structure

Choi, J.-K. (2010). Nonresident fathers' parenting, family processes, and children's development in urban, poor, single-mother families. Social Service Review, 84(4), 655-677.

Choi, J.-K., \& Jackson, A. P. (2011). Fathers' involvement and child behavior problems in poor African American single-mother families. Children and Youth Services Review, 33(5), 698-704. doi:10.1016/j.childyouth.2010.11.013

Choi, J.-K., \& Jackson, A. P. (2012). Nonresident fathers' parenting, maternal mastery and child development in poor African American single-mother families. Race and Social Problems, 4(2), 102-111. doi:10.1007/s12552-012-9070-x

Coates, E. E., \& Phares, V. (2014). Predictors of paternal involvement among nonresidential, Black fathers from low-income neighborhoods. Psychology of Men \& Masculinity, 15(2), 138-151. doi:10.1037/a0032790

Coates, E. E., \& Phares, V. (2014). Predictors of paternal involvement among nonresidential, Black fathers from low-income neighborhoods. Psychology of Men \& Masculinity, 15, 138-151. doi:10.1037/a0032790

Cohen, J. (1992). A power primer. Psychological Bulletin, 112, 155-159. doi:10.1037/00332909.112.1.155

Coley, R. L. (2003). Daughter-father relationships and adolescent psychosocial functioning in low-income African American families. Journal of Marriage and Family, 65(4), 867875. doi:10.1111/j.1741-3737.2003.00867.x

Coley, R. L., Lewin-Bizan, S., \& Carrano, J. (2011). Does early paternal parenting promote lowincome children's long-term cognitive skills? Journal of Family Issues, 32(11), 15221542. doi:10.1177/0192513X11402175

Coley, R. L., \& Medeiros, B. L. (2007). Reciprocal longitudinal relations between nonresident father involvement and adolescent delinquency. Child Development, 78, 132-147. doi:10.1111/j.1467-8624.2007.00989.x

Connor, M. E., \& White, J. L. (2011). Black fathers: An invisible presence in America (2nd ed.). New York, NY US: Routledge/Taylor \& Francis Group.

Cooper, S. M. (2009). Associations between father-daughter relationship quality and the academic engagement of African American adolescent girls: Self-esteem as a mediator? Journal of Black Psychology, 35(4), 495-516. doi:10.1177/0095798409339185

Cruz, J. (2013). Marriage: More than a Century of Change (FP-13-13). Retrieved from National Center for Family \& Marriage Research:
https://www.bgsu.edu/content/dam/BGSU/college-of-arts-and-sciences/NCFMR/documents/FP/FP-13-13.pdf

Davis, R. N., Caldwell, C. H., Clark, S. J., \& Davis, M. M. (2009). Depressive symptoms in nonresident African American fathers and involvement with their sons. Pediatrics, 124(6), 1611-1618. doi:10.1542/peds.2009-0718

De Los Reyes, A., Augenstein, T. M., Wang, M., Thomas, S. A., Drabick, D. A. G., Burgers, D. E., \& Rabinowitz, J. (2015). The validity of the multi-informant approach to assessing child and adolescent mental health. Psychological Bulletin, 141(4), 858-900. doi:10.1037/a0038498

De Los Reyes, A., \& Kazdin, A. E. (2004). Measuring informant discrepancies in clinical child research. Psychological Assessment, 16(3), 330-334. doi:10.1037/1040-3590.16.3.330

DeBell, M. (2008). Children living without their fathers: Population estimates and indicators of educational well-being. Social Indicators Research, 87(3), 427-443. doi:10.1007/s11205-007-9149-8

Dubowitz, H., Black, M. M., Cox, C. E., Kerr, M. A., Litrownik, A. J., Radhakrishna, A., . . . Runyan, D. K. (2001). Father involvement and children's functioning at age 6 years: A multisite study. Child Maltreatment, 6(4), 300-309. doi:10.1177/1077559501006004003

Duhig, A. M., Renk, K., Epstein, M. K., \& Phares, V. (2000). Interparental agreement on internalizing, externalizing, and total behavior problems: A meta-analysis. Clinical Psychology: Science and Practice, 7(4), 435-453. doi:10.1093/clipsy/7.4.435

Eamon, M. K., \& Altshuler, S. J. (2004). Can we predict disruptive school behavior? Children \& Schools, 26(1), 23-37. doi:10.1093/cs/26.1.23

Ellis, B. J., Bates, J. E., Dodge, K. A., Fergusson, D. M., Horwood, L. J., Pettit, G. S., \& Woodward, L. (2003). Does father absence place daughters at special risk for early sexual activity and teenage pregnancy? Child Development, 74, 801-821. doi:10.1111/14678624.00569

Erel, O., \& Burman, B. (1995). Interrelatedness of marital relations and parent-child relations: A meta-analytic review. Psychological Bulletin, 118(1), 108-132. doi:10.1037/00332909.118.1.108

Ferriss, A. L. (2006). Social structure and child poverty. Social Indicators Research, 78(3), 453472. doi:10.1007/s11205-005-1606-7

Forehand, R., Jones, D. J., Brody, G. H., \& Armistead, L. (2002). African American children's adjustment: The roles of maternal and teacher depressive symptoms. Journal of Marriage and Family, 64(4), 1012-1023. doi:10.1111/j.1741-3737.2002.01012.x

Friedman, A. S., Terras, A., \& Glassman, K. (2000). Family structure versus family relationships for predicting to substance use/abuse and illegal behavior. Journal of Child \& Adolescent Substance Abuse, 10(1), 1-16. doi:10.1300/J029v10n01_01

Garo, L. A. (2013). Children's exposure to neighborhood poverty and violence: Implications for Black student middle school literacy in Charlotte, North Carolina. Vulnerable Children and Youth Studies, 8(1), 60-96. doi:10.1080/17450128.2012.668231

Gitlin, L. N., Chernett, N. L., Dennis, M. P., \& Hauck, W. W. (2012). Identification of and beliefs about depressive symptoms and preferred treatment approaches among
community-living older African Americans. The American Journal of Geriatric Psychiatry, 20(11), 973-984. doi:10.1097/JGP.0b013e31825463ce

Gonzalez, M., Jones, D. J., Kincaid, C. Y., \& Cuellar, J. (2012). Neighborhood context and adjustment in African American youths from single mother homes: The intervening role of hopelessness. Cultural Diversity and Ethnic Minority Psychology, 18(2), 109-117. doi:10.1037/a0026846

Goodrum, N. M., Jones, D. J., Kincaid, C. Y., Cuellar, J., \& Parent, J. M. (2012). Youth externalizing problems in African American single-mother families: A culturally relevant model. Couple and Family Psychology: Research and Practice, 1(4), 294-305. doi:10.1037/a0029421

Gutman, L. M., Sameroff, A. J., \& Eccles, J. S. (2002). The academic achievement of African American students during early adolescence: An examination of multiple risk, promotive, and protective factors. American Journal of Community Psychology, 30(3), 367-400. doi:10.1023/A:1015389103911

Harper, S. E., \& Fine, M. A. (2006). The effects of involved nonresidential fathers' distress, parenting behaviors, inter-parental conflict, and the quality of father-child relationships on children's well-being. Fathering, 4(3), 286-311. doi:10.3149/fth.0403.286

Haskins, R. (2009). Moynihan was right: Now what? Annals of the American Academy of Political and Social Science, 621(1), 281-314. doi:10.1177/0002716208324793

Heard, H. E. (2007). The family structure trajectory and adolescent school performance: Differential effects by race and ethnicity. Journal of Family Issues, 28(3), 319-354. doi:10.1177/0192513X06296307

Hernandez, D. (2000). Special demographic analysis report prepared for the National Academy of Sciences Committee on Integrating the Science of Development.

Howard Caldwell, C., Bell, L., Brooks, C. L., Ward, J. D., \& Jennings, C. (2011). Engaging nonresident African American fathers in intervention research: What practitioners should know about parental monitoring in nonresident families. Research on Social Work Practice, 21(3), 298-307. doi:10.1177/1049731510382923

Huang, F. Y., Chung, H., Kroenke, K., Delucchi, K. L., \& Spitzer, R. L. (2006). Using the Patient Health Questionnaire-9 to measure depression among racially and ethnically diverse primary care patients. Journal of General Internal Medicine, 21(6), 547-552. doi:10.1111/j.1525-1497.2006.00409.x

Hurd, N. M., Stoddard, S. A., \& Zimmerman, M. A. (2013). Neighborhoods, social support, and African American adolescents' mental health outcomes: A multilevel path analysis. Child Development, 84(3), 858-874. doi:10.1111/cdev. 12018

Jackson, A. P. (2003). The effects of family and neighborhood characteristics on the behavioral and cognitive development of poor Black children: A longitudinal study. American Journal of Community Psychology, 32(1-2), 175-186. doi:10.1023/A:1025615427939

Jackson, A. P., Choi, J.-K., \& Preston, K. S. J. (2015). Nonresident fathers' involvement with young Black children: A replication and extension of a mediational model. Social Work Research, 39(4), 245-254. doi:10.1093/swr/svv026

Jackson, A. P., Preston, K. S. J., \& Thomas, C. A. (2013). Single mothers, nonresident fathers, and preschoolers' socioemotional development: Social support, psychological well-being, and parenting quality. Journal of Social Service Research, 39(1), 129-140. doi:10.1080/01488376.2012.723241

Jackson, A. P., \& Schemes, R. (2005). Single mothers' self-efficacy, parenting in the home environment, and children's development in a two-wave study. Social Work Research, 29(1), 7-20. doi:10.1093/swr/29.1.7

Jaffee, S. R., Caspi, A., Moffitt, T. E., Taylor, A., \& Dickson, N. (2001). Predicting early fatherhood and whether young fathers live with their children: Prospective findings and policy reconsiderations. Journal of Child Psychology and Psychiatry, 42, 803-815. doi:10.1111/1469-7610.00777

Jaffee, S. R., Moffitt, T. E., Caspi, A., \& Taylor, A. (2003). Life with (or without) father: The benefits of living with two biological parents depend on the father's antisocial behavior. Child Development, 74, 109-126. doi:10.1111/1467-8624.t01-1-00524

Jones, D. J., Forehand, R., Brody, G., \& Armistead, L. (2002). Psychosocial adjustment of African American children in single-mother families: A test of three risk models. Journal of Marriage and Family, 64(1), 105-115. doi:10.1111/j.1741-3737.2002.00105.x

Jones, D. J., Forehand, R., Brody, G. H., \& Armistead, L. (2002). Positive parenting and child psychosocial adjustment in inner-city single-parent African American families: The role of maternal optimism. Behavior Modification, 26(4), 464-481. doi:10.1177/0145445502026004002

Jones, D. J., Forehand, R., Dorsey, S., Foster, S., \& Brody, G. (2005). Coparent support and conflict in African American single mother-headed families: Associations with maternal and child psychosocial functioning. Journal of Family Violence, 20(3), 141-150. doi:10.1007/s10896-005-3650-0

Jones, D. J., Forehand, R., \& Neary, E. M. (2001). Family transmission of depressive symptoms: Replication across Caucasian and African American mother-child dyads. Behavior Therapy, 32(1), 123-138. doi:10.1016/S0005-7894(01)80048-4

Jones, D. J., Shaffer, A., Forehand, R., Brody, G., \& Armistead, L. P. (2003). Coparent conflict in single mother-headed African American families: Do parenting skills serve as a mediator or moderator of child psychosocial adjustment? Behavior Therapy, 34(2), 259272. doi:10.1016/S0005-7894(03)80016-3

Jones, D. J., Zalot, A. A., Foster, S. E., Sterrett, E., \& Chester, C. (2007). A review of childrearing in African American single mother families: The relevance of a coparenting framework. Journal of Child and Family Studies, 16(5), 671-683. doi:10.1007/s10826-006-9115-0

Jordan, L. C., \& Lewis, M. L. (2005). Paternal relationship quality as a protective factor: preventing alcohol use among African American adolescents. Journal of Black Psychology, 31(2), 152-171. doi:10.1177/0095798405274881

Kane, P., \& Garber, J. (2004). The relations among depression in fathers, children's psychopathology, and father-child conflict: A meta-analysis. Clinical Psychology Review, 24, 339-360. doi:10.1016/j.cpr.2004.03.004

Kim, S., \& Brody, G. H. (2005). Longitudinal pathways to psychological adjustment among Black youth living in single-parent households. Journal of Family Psychology, 19(2), 305-313. doi:10.1037/0893-3200.19.2.305

Kincaid, C., Jones, D. J., Cuellar, J., \& Gonzalez, M. (2011). Psychological control associated with youth adjustment and risky behavior in African American single mother families. Journal of Child and Family Studies, 20(1), 102-110. doi:10.1007/s10826-010-9383-6

Konold, T. R., \& Abidin, R. R. (2001). Parenting alliance: A multifactor perspective.
Assessment, 8(1), 47-65. doi:10.1177/107319110100800105
Kroenke, K., Spitzer, R. L., \& Williams, J. B. W. (2001). The PHQ-9: Validity of a brief depression severity measure. Journal of General Internal Medicine, 16, 606-613. doi:10.1046/j.1525-1497.2001.016009606.x

Langley, C. (2016). Father knows best: Paternal presence and sexual debut in African-American adolescents living in poverty. Family Process, 55(1), 155-170. doi:10.1111/famp. 12125

Lanza, S. T., Rhodes, B. L., Nix, R. L., \& Greenberg, M. T. (2010). Modeling the interplay of multilevel risk factors for future academic and behavior problems: A person-centered approach. Development and Psychopathology, 22(2), 313-335. doi:10.1017/S09545794100000088

Loper, A. B., Phillips, V., Nichols, E. B., \& Dallaire, D. H. (2013). Characteristics and effects of the co-parenting alliance between incarcerated parents and child caregivers. Journal of Child and Family Studies. doi:10.1007/s10826-012-9709-7

Mandara, J., \& Murray, C. B. (2006). Father's absence and African American adolescent drug use. Journal of Divorce \& Remarriage, 46, 1-12. doi:10.1300/J087v46n01_01

Mandara, J., Murray, C. B., \& Joyner, T. N. (2005). The impact of fathers' absence on African American adolescents' gender role development. Sex Roles, 53, 207-220. doi:10.1007/s11199-005-5679-1

Mandara, J., Rogers, S. Y., \& Zinbarg, R. E. (2011). The effects of family structure on African American adolescents' marijuana use. Journal of Marriage and Family, 73(3), 557-569. doi:10.1111/j.1741-3737.2011.00832.x

Marchand-Reilly, J. F. (2012). The role of fathers' depressive symptoms and lax and overreactive discipline in children's externalizing and internalizing behaviors. Journal of Adult Development, 19, 181-189. doi:10.1007/s10804-012-9145-3

Marchand, J. F., \& Hock, E. (1998). The relation of problem behaviors in preschool children to depressive symptoms in mothers and fathers. The Journal of Genetic Psychology: Research and Theory on Human Development, 159(3), 353-366. doi:10.1080/00221329809596157

Martin, J. A., Hamilton, B. E., Osterman, M. J., Driscoll, A. K., \& Mathews, T. J. (2017). Births: Final data for 2015. National vital statistics reports. Retrieved from National Center for Health Statistics: https://www.cdc.gov/nchs/data/nvsr/nvsr66/nvsr66_01.pdf

McBride Murry, V., Berkel, C., Gaylord-Harden, N. K., Copeland-Linder, N., \& Nation, M. (2011). Neighborhood poverty and adolescent development. Journal of Research on Adolescence, 21(1), 114-128. doi:10.1111/j.1532-7795.2010.00718.x

McHale, J. P., \& Irace, K. (2011). Coparenting in diverse family systems. In J. P. McHale \& K. M. Lindahl (Eds.), Coparenting: A conceptual and clinical examination of family systems. (pp. 15-37). Washington, DC US: American Psychological Association.

Merten, M. J., \& Henry, C. S. (2011). Family structure, mother-daughter relationship quality, race and ethnicity, and adolescent girls' health risks. Journal of Divorce \& Remarriage, 52(3), 164-186. doi:10.1080/10502556.2011.556966

Montague, M., Cavendish, W., Enders, C., \& Dietz, S. (2010). Interpersonal relationships and the development of behavior problems in adolescents in urban schools: A longitudinal study. Journal of Youth and Adolescence, 39(6), 646-657. doi:10.1007/s10964-009-9440-
x

Montgomery, L., \& Marinos, D. a. (2016). The influence of potentially traumatic household characteristics on blunt use among Black youth. Journal of Prevention \& Intervention in the Community, 44(2), 101-111. doi:10.1080/10852352.2016.1132827

Mulatu, M. S., Leonard, K. J., Godette, D. C., \& Fulmore, D. (2008). Disparities in the patterns and determinants of HIV risk behaviors among adolescents entering substance abuse treatment programs. Journal of the National Medical Association, 100(12), 1405-1416.

Murry, V. M., Bynum, M. S., Brody, G. H., Willert, A., \& Stephens, D. (2001). African American single mothers and children in context: A review of studies on risk and resilience. Clinical Child and Family Psychology Review, 4(2), 133-155. doi:10.1023/A:1011381114782

O'Brien Caughy, M., \& O'Campo, P. J. (2006). Neighborhood poverty, social capital, and the cognitive development of African American preschoolers. American Journal of Community Psychology, 37(1-2), 141-154. doi:10.1007/s10464-005-9001-8

Pan, E. L., \& Farrell, M. P. (2006). Ethnic differences in the effects of intergenerational relations on adolescent problem behavior in U.S. single-mother families. Journal of Family Issues, 27, 1137-1158. doi:10.1177/0192513x06288123

Parent, J., Jones, D. J., Forehand, R., Cuellar, J., \& Shoulberg, E. K. (2013). The role of coparents in African American single-mother families: The indirect effect of coparent identity on youth psychosocial adjustment. Journal of Family Psychology. doi:10.1037/a0031477

Peterson, S. H. (2007). The importance of fathers: Contextualizing sexual risk-taking in 'lowrisk' African American adolescent girls. Journal of Human Behavior in the Social Environment, 15, 329-346. doi:10.1300/J137v15n02_19

Prinz, R. J., Foster, S. L., Kent, R. N., \& O'Leary, K. D. (1979). Multivariate assessment of conflict in distressed and nondistressed mother-adolescent dyads. Journal of Applied Behavior Analysis, 12, 691-700.

Raley, R. K., \& Bumpass, L. L. (2003). The topography of the divorce plateau: Levels and trends in union stability in the United States after 1980. Demographic Research, 8(8), 245-260.

Ricciuti, H. N. (2004). Single parenthood, achievement, and problem behavior in White, Black, and Hispanic children. The Journal of Educational Research, 97(4), 196-206. doi:10.3200/JOER.97.4.196-207

Robin, A. L., \& Foster, S. L. (1989). Negotiating parent-adolescent conflict: A behavioral-family systems approach. New York: Guilford Press

Schroeder, J. F., Hood, M. M., \& Hughes, H. M. (2010). Inter-parent agreement on the syndrome scales of the Child Behavior Checklist (CBCL): Correspondence and discrepancies. Journal of Child and Family Studies, 19(5), 646-653. doi:10.1007/s10826-010-9352-0

Schuldermann, S., \& Schuldermann, E. (1988). Questionnaire for Children and Youth (CRPBI30). Unpublished manuscript, University of Manitoba, Winnipeg.

Shannon, J. D., Tamis-LeMonda, C. S., London, K., \& Cabrera, N. (2002). Beyond rough and tumble: Low-income fathers' interactions and children's cognitive development at 24 months. Parenting: Science and Practice, 2, 77-104. doi:10.1207/s15327922par0202_01

Sharma, V., Zehtabchi, S., Rojas, N., \& Birkhahn, R. (2009). Ethnic variations in quality of life and depressive symptoms among Black Americans with acute decompensated heart failure. Journal of the National Medical Association, 101(10), 985-991.

Shook, S. E., Jones, D. J., Forehand, R., Dorsey, S., \& Brody, G. (2010). The mother-coparent relationship and youth adjustment: A study of African American single-mother families. Journal of Family Psychology, 24(3), 243-251. doi:10.1037/a0019630

Spitzer, R. L., Kroenke, K., \& Williams, J. B. W. (1999). Patient health questionnaire study group. Validity and utility of a self-report version of PRIME-MD: The phq primary care study. Journal of the American Medical Association, 282, 1737-1744. doi:10.1001/jama.282.18.1737.

Spjeldnes, S., \& Choi, J.-K. (2008). Direct and indirect effects of interparental relationship quality on child behavior problems in low-income, Black, single-mother families. Marriage \& Family Review, 44(4), 411-438. doi:10.1080/01494920802453910

Sterrett, E. M., Jones, D. J., \& Kincaid, C. (2009). Psychosocial adjustment of low-income African American youth from single mother homes: The role of the youth-coparent relationship. Journal of Clinical Child and Adolescent Psychology, 38(3), 427-438. doi:10.1080/15374410902851663

Taylor, Z. E., Larsen-Rife, D., Conger, R. D., Widaman, K. F., \& Cutrona, C. E. (2010). Life stress, maternal optimism, and adolescent competence in single mother, African American families. Journal of Family Psychology, 24(4), 468-477. doi:10.1037/a0019870

The Annie E. Casey Foundation (2015). Kids count data book: State profiles of child well-being. Retrieved from
http://www.aecf.org/m/resourcedoc/aecf-2015kidscountdatabook-2015.pdf

Troxel, W. M., Lee, L., Hall, M., \& Matthews, K. A. (2014). Single-parent family structure and sleep problems in black and white adolescents. Sleep Medicine, 15(2), 255-261. doi:10.1016/j.sleep.2013.10.012
U.S. Census Bureau (2016). Families and Living Arrangements: America's Families and Living Arrangements: 2016: Children. Retrieved from https://www.census.gov/hhes/families/data/cps2016C.html.

Vespa, J., Lewis, J. M., \& Kreider, R. M. (2013). America's families and living arrangements: 2012 Current Population Reports, 20-570. U.S. Census Bureau, Washington, DC.

Wang, J., Simons-Morton, B. G., Farhart, T., \& Luk, J. W. (2009). Socio-demographic variability in adolescent substance use: Mediation by parents and peers. Prevention Science, 10(4), 387-396. doi:10.1007/s11121-009-0141-1

Wight, R. G., Aneshensel, C. S., Botticello, A. L., \& Sepúlveda, J. E. (2005). A multilevel analysis of ethnic variation in depressive symptoms among adolescents in the United States. Social Science \& Medicine, 60(9), 2073-2084. doi:10.1016/j.socscimed.2004.08.065

Wright, B. R. E., \& Younts, C. W. (2009). Reconsidering the relationship between race and crime: Positive and negative predictors of crime among African American youth. Journal of Research in Crime and Delinquency, 46(3), 327-352. doi:10.1177/0022427809335170

Wu, F., \& Qi, S. (2006). Longitudinal effects of parenting on children's academic achievement in African American families. Journal of Negro Education, 75(3), 415-429.

Wu, L. L., \& Thomson, E. (2001). Race differences in family experience and early sexual initiation: Dynamic models of family structure and family change. Journal of Marriage and Family, 63(3), 682-696. doi:10.1111/j.1741-3737.2001.00682.x

Yoder, J. R., Brisson, D., \& Lopez, A. (2016). Moving beyond fatherhood involvement: The association between father-child relationship quality and youth delinquency trajectories. Family Relations: An Interdisciplinary Journal of Applied Family Studies, 65(3), 462476. doi:10.1111/fare. 12197

Zalot, A., Jones, D. J., Kincaid, C., \& Smith, T. (2009). Hyperactivity, impulsivity, inattention (HIA) and conduct problems among african american youth: The roles of neighborhood and gender. Journal of Abnormal Child Psychology, 37(4), 535-549. doi:10.1007/s10802-008-9296-7

Appendices

## Appendix A: Letter of Invitation

## Letter of Invitation

## Dear Parent:

How important are parents in influencing adolescent behavior? What about parents who don't live with their adolescents? My name is Erica Coates, and I am working on my dissertation, under the guidance of Dr. Vicky Phares, in the Clinical Psychology Program at the University of South Florida (USF). The project is called Adolescent Development And Parenting Techniques (ADAPT). This study will explore the influence that single mothers and noncustodial fathers have on their adolescents' behavior in Black families. Parents who don't live together and have a child aged 12-18 together are invited to participate.

The School District has reviewed our research and agreed to help notify parents of the study by sending home this invitation letter to all students enrolled in HOPE. Since this letter is being provided to all students, the eligibility criteria may not apply to you. If you know anyone who may be eligible to participate in the study, feel free to give them this letter.

Participation is completely voluntary. If you and your child's other parent choose to participate, you will each receive $\$ 20$ for your participation and you can enter into a drawing to win a possible prize, such as a coupon to a local restaurant or place of entertainment, tickets to a sporting event, or a gift card. By participating, you will help us better understand the unique role of parents in influencing adolescents' behavior. All surveys and responses will be kept confidential, and your answers will not be shared with the other parent.

We hope that you will agree to take part in our project. We will be very happy to answer any questions that you may have. If you are interested in learning more about the study, please contact me by phone (813-602-1618) or by email (usfadapt @ gmail.com), and I would be happy to answer questions or provide further information on the study at any time. My advisor, Dr. Vicky Phares, can also be reached by phone (813-974-0493) or email (phares@usf.edu).

Thank you very much for your time and for considering this request.
Sincerely,

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## Appendix B: Recruitment Flyer

# USF ADAPT PROJECT Adolescent Development And Parenting Techniques 

NEEDED Black parents of teenagers (ages 12-18)
PARENTS must live apart
BOTH Parents must complete the survey
EARN \$20 each for completing a 30-minute survey
RESPONSES will be confidential
CONTACT Erica Coates for more information
PHONE 813-602-1618 EMAIL usfadapt@gmail.com
This is an approved research study through the University of South Florida: IRB \# Pro00018182

## Appendix C: Recruitment Newspaper and Online Advertisement

The USF Adolescent Development And Parenting Techniques (ADAPT) Project is seeking Black parents of children between the ages of 12 and 18. Parents must be living apart to participate. Earn $\$ 20$ each, and be entered into a drawing to win a possible prize (e.g., coupons for a local restaurant or place of entertainment, tickets to a sporting event, gift cards), for completing a 30-minute confidential survey about you and your family. Both parents need to complete the survey in order to participate. Call (813-602-1618) or email (usfadapt @ gmail.com) Erica Coates for more information. This is an approved research study through the University of South Florida: IRB \# Pro00018182.

## Local

# A.D.A.P.T. Project Hopes To Promote Positive Father Involvement 

BY LEON B. CREWS Sentinel Staff Writer

Erica Coates is a Clinical Psychology Doctoral student at the University of South Florida. She is collaborating with Dr. Richard Brisco on a project examining the strengths of African American families and protective factors of African American Youth.
"This is my dissertation project that is examining the contributions of both mothers and fathers to adolescent outcomes in African American single-mother families.
"The literature has found that certain aspects of motherhood and mother-child relationship serve as protective factors for youth from singlemother homes that put teenagers at less risk for negative outcomes, such as emotional and behavioral problems, substance abuse, engagement in criminal activity, dropping out of high school, becoming sexually active at a younger age, and teenage pregnancy."

The project is called A.D.A.P.T. (Adolescent Development And Parenting Techniques).

Mrs. Coates involved


ERICA COATES
both biological parents by getting them to complete a $30-$ minute telephone survey at separate times that are convenient for each parent. Each parent was asked questions about their health, parenting style, relationship with their child and co-parent, and different behaviors of their child.
"I started recruiting parents for the project in October 2014. By May 2015, I had four completed families. Recruitment for the study started off slowly, and initially involved sending home fliers to area schools for the students to take home to their parents.
"In May I began posting Craigslist advertisements to
major cities across the United States. Although most of the families that have completed the surveys are callers responding to the ad on Craigslist."

Mrs. Coates said although her father was instrumental in her life, he wasn't around a lot.
"I drew on that experience to help with this dissertation. I discovered that most children who grow up in single parent homes are more at risk.
"More children ( $73 \%$ ) are being born into Black single family homes."

Mrs. Coates said she expects to complete her dissertation in a month, and she said it's important that people know this is a national study, not just local.
"Once I get my doctorate, I hope to join the faculty at USF, or just stay in this line of research.
"I am looking forward to doing outreach services and my specific research will be on the African American population."

Mrs. Coates used a lot of personal contacts in her research, and all were geared toward how fathers are behaving in the lives of their children.

## Appendix E: Demographic Questionnaire

*This survey needs to be completed separately by unmarried parents who have an adolescent child together and who do NOT live together.
*The adolescent must spend the majority of his/her time at the mother's residence.
*If you and the other parent have more than one child together, complete this survey in reference to your oldest child between the ages of 12 and 18.

1. This form is being completed by: $\square$ Mother $\square$ Father
2. How old are you? $\qquad$
3. What is your race/ethnicity? Please select all that apply.
$\qquad$ Black __ White $\qquad$ Latino/Latina $\qquad$ Native American $\qquad$ Asian __ Other: (Specify: $\qquad$ -
$\qquad$
4. Are you currently: Please select all that apply.
$\qquad$ Married Separated

Divorced $\qquad$ Never married
___ Single, not living with partner $\qquad$ Single, living with a partner
___ Other (please specify: $\qquad$ _)
5. Who lives at home with you? Please select all that apply.
$\qquad$ Spouse Biological Sons (how many: $\qquad$ )
___ Boyfriend/Girlfriend
___ Biological Daughters (how many: $\qquad$
___ Mother Partner's Sons (how many: $\qquad$
___ Father Partner's Daughters (how many: $\qquad$ _)
___ Grandparent Sister or Brother
___ Other (please specify: $\qquad$ )
6. How many biological children do you have? $\qquad$
7. How many nonbiological children (stepchildren and others) do you have? $\qquad$
8. Answer the questions for the ADOLESCENT you are completing this survey about. That is, your oldest biological child, between the ages of 12 and 18 who lives primarily with the mother, not father? Both biological parents will complete this survey for the same child. ADOLESCENT's: Age: ___ Gender: ___ Initials: __
9. First and Last Name of the ADOLESCENT's other parent: $\qquad$

## Appendix E (Continued)

10. How often does ADOLESCENT see or talk to his/her father? Please select only one response. (e.g., home visits, phone calls, text messaging, facebook, skype, letters
__ Every day
___ A few (3 or 4) times a month
$\qquad$ Every few years
*These questions are about your adolescent's other parent.
*This should be a person who you do not live with.
*If you and your adolescent's parent have more than one child together, the adolescent should be the oldest child between age 12 and 18.
11. What is your relationship to the ADOLESCENT's other parent?

| Married | __ Never married | Dating |
| :--- | :--- | :--- |
| __ Deparated | Divorced |  |

__ Other: $\qquad$
12. Were you ever living with, ADOLESCENT's father/mother? $\qquad$
13. How long have you been living apart from ADOLESCENT's father/mother? $\qquad$
14. How would you call your current relationship with ADOLESCENT's father/mother? Romantic/Sexual (e.g., We're dating/seeing each other)
$\qquad$ Friendly/Cordial (e.g., We get along, but are not romantically involved) ___ Hostile/Conflictual (e.g., We fight a lot and are not romantically involved)
$\qquad$ No Relationship (e.g., We do not see or talk to one another)
15. Employment status of ADOLESCENT's mother and father:

Adolescent's Mother


Employed as: $\qquad$
$\square$ Unemployed $\square$Retired $\qquad$
Other: $\qquad$
16. Highest educational level completed for ADOLESCENT's mother and father:

Adolescent's Father
$\square$ Employed as: $\qquad$Unemployed $\qquad$Retired $\qquad$
$\square$ Other: $\qquad$

Middle school
Partial High School
High School Graduate

## Adolescent's Mother <br> Less than $7^{\text {th }}$ grade

Adolescent's Father
Less than $7^{\text {th }}$ gradeMiddle schoolPartial High School
$\square$ High School Graduate

## Appendix E (Continued)

| $\square$ | Partial College | $\square$ Partial College |
| :--- | :--- | :--- |
| $\square$ | Bachelor's Degree | $\square$ Bachelor's Degree |
| $\square$ | Master's Degree | $\square$ Master's Degree |
| $\square$ | Doctorate Degree | $\square$ Doctorate Degree |

*These questions are about your adolescent.
*If you and the adolescent's other parent have more than one child together, the adolescent should be the oldest child between age 12 and 18.
17. How old is ADOLESCENT? $\qquad$ 18. What grade is ADOLESCENT in? $\qquad$
19. Is ADOLESCENT: $\square$ Male $\quad \square \square$ Female
20. What is ADOLESCENT's race/ethnicity? Please select all that apply.
__ Black __ White __ Latino/Latina __ Native American ___ Asian
___ Other: (Specify: $\qquad$
21. Who does ADOLESCENT live with in ADOLESCENT'S main home?
$\qquad$ Biological Mother $\qquad$ Biological Brothers (how many: $\qquad$ _)
Biological Father
$\qquad$ Step Mother or Father's Girlfriend $\qquad$ Nonbiological Brothers (how many:
$\qquad$ _)
$\qquad$ Step Father or Mother's Boyfriend $\qquad$ Nonbiological Sisters (how many:
$\qquad$ )
$\qquad$ Grandmother $\qquad$ Aunts (how many:
$\qquad$
___ Grandfather
___ Uncles (how many:
$\qquad$ ) Other (please specify: $\qquad$
22. How long has ADOLESCENT lived away from father? $\qquad$
23. How many days has ADOLESCENT seen or talked to father during the past 30 days? $\qquad$
24. How much responsibility does father take for raising ADOLESCENT?
$\qquad$ None A Little
___ Some
___ A Lot
25. How much responsibility does father take for making sure ADOLESCENT behaves?
$\qquad$ None
___ A Little
$\qquad$ Some

## Appendix E (Continued)

26. How much does father help provide financially for the ADOLESCENT?
$\qquad$ None A Little
$\qquad$ Some

A Lot
27. Does father pay formal child support to ADOLESCENT's mother? $\square$ Yes
28. Does the ADOLESCENT receive free or reduced priced lunch? : $\square$ Yes No
29. ADOLESCENT'S GPA? $\qquad$
30. How many times has ADOLESCENT been arrested?

## Appendix F: Revised Children's Report of Parental Behavior Inventory - 30

## (Protected by Copyright)

Two Sample Items:

1. As a parent, I am a person who makes my child feel better after talking over his/her worries with me.
2. As a parent, I am a person who smiles at my child very often.

## Appendix G: Interaction Behavior Questionnaire

## (Protected by Copyright)

Two Sample Items:
3. My child is easy to get along with.
4. For the most part, my child likes to talk to me.

## Appendix H: Parent Health Questionnaire - 9

|  | Not At All | Several Days | More Than Half the Days | Nearly Every Day |
| :---: | :---: | :---: | :---: | :---: |
| 1) Little interest or pleasure in doing things | O | O | O | O |
| 2) Feeling down, depressed, or hopeless | O | O | O | O |
| 3) Trouble falling or staying asleep, or sleeping too much | $\bigcirc$ | O | O | $\bigcirc$ |
| 4) Feeling tired or having little energy | $\bigcirc$ | $\bigcirc$ | O | $\bigcirc$ |
| 5) Poor appetite or overeating | O | O | O | O |
| 6) Feeling bad about yourself -- or that you are a failure or have let yourself or your family down | O | $\bigcirc$ | $\bigcirc$ | O |
| 7) Trouble concentrating on things, such as reading the newspaper or watching television | O | $\bigcirc$ | O | O |
| 8) Moving or speaking so slowly that other people could have noticed? Or the opposite -being so fidgety or restless that you have been moving around a lot more than usual | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 9) Thoughts that you would be better off dead or of hurting yourself in some way | O | O | O | O |

## Appendix I: Parenting Alliance Measure

## (Protected by Copyright)

Two Sample Items:
5. My child's other parent makes my job of being a parent easier.
6. When there is a problem with our child, we work out a good solution together.

## Appendix J: Child Behavior Checklist/6-18

## (Protected by Copyright)

Two Sample Items:

1. Gets in many fights.
2. Cries a lot.

## Appendix K: Child Behavior Checklist/6-18 School Competence

## (Protected by Copyright)

Two Sample Items:
3. Performance in academic subjects.
4. Has your child repeated any grades?

## Appendix L: Economic Hardships

|  | Yes | No |
| :---: | :---: | :---: |
| 1. Was there any time in the past 12 months when you did not pay the full amount of the rent or mortgage? <br> (1) | $\bigcirc$ | $\bigcirc$ |
| 2. In the past 12 months were you evicted from your home or apartment for not paying the rent or mortgage? (2) | $\bigcirc$ | $\bigcirc$ |
| 3. In the past 12 months, did you not pay the full amount of the gas, oil, or electricity bill? (3) | $\bigcirc$ | O |
| 4. In the past 12 months, was there anyone in your household who needed to see a doctor or go to the hospital but couldn't go because of the cost? (4) | $\bigcirc$ | O |
| 5. In the past 12 months, did you receive free food or meals? (5) | $\bigcirc$ | O |
| 6. In the past 12 months, did you move in with other people even for a little while because of financial problems? (6) | $\bigcirc$ | O |
| 7. In the past 12 months, did you ever stay at a shelter, in an abandoned building, an automobile or any other place not meant for regular housing even for one night? | O | O |
| 8. In the past 12 months, did you borrow money from friends or family to help pay bills? (8) | $\bigcirc$ | O |
| 9. In the past 12 months, were you ever hungry but didn't eat because you couldn't afford enough food? <br> (9) | $\bigcirc$ | $\bigcirc$ |
| 10. Was your gas or electric service ever turned off because there wasn't enough money to pay the bills? (10) | $\bigcirc$ | O |

## Appendix M: Telephone Introduction Script

Hi [Parent]:
My name is Erica Coates. I am working on my dissertation, under the guidance of Dr. Vicky Phares, in the Clinical Psychology Program at the University of South Florida (USF). It is called Adolescent Development And Parenting Techniques (ADAPT). It will explore the influence that single mothers and fathers that don't live with their children have on their adolescents' behavior.

I am looking for parents of adolescents who are not living together to participate in the study. The child must be between the ages of 12 and 18 . Although to participate, the child will need to live primarily with the mother, the child must have communication with the father at least every few months to participate. Very importantly, I need both the mother and the father to participate in the study. Would you be a good person to have complete the survey?

Great! I would like to invite you, along with your child's other parent, to take part in the project. Participation is completely voluntary. If you and your child's other parent choose to participate, you will receive $\$ 20$ each for your participation. By participating, you will help us better understand the unique role of parents in influencing adolescents' behavior. All surveys and responses will be kept confidential, and your answers will not be shared with the other parent.

If you are interested in hearing more about the study, I would like to go over it with you in some detail. I want to make sure that you have all the information that you need to help you decide whether you would like to participate, and I would like to give you a chance to ask any questions that you may have about the project.

Would you like to hear more about the study?

Appendix N: Informed Consent

> Informed Consent

The following information is being presented to help you decide whether or not you want to be a part of a minimal risk research study. Please read/listen carefully. If you do not understand anything, ask me to clarify.

Title of Study:
Principal Investigator:
Study Location(s):
IRB Number:
Sponsor:

Adolescent Development and Parenting Techniques
Erica Coates, M.A. \& Vicky Phares, Ph.D.
University of South Florida
Pro00018182
American Psychological Foundation/Council of Graduate Departments of Psychology (APF/COGDOP)

Why am I being asked to take part in this study?
You are being asked to take part in this study because you have a child between the ages of 12 and 18. This is an important time to learn about how parents influence adolescent behavior.

How long will the study last?
The survey will take about 30 minutes to complete.

## What will happen during this study?

You will be asked to answer questions about yourself, your child, and your child's other parent.
What are the benefits that I will receive if I take part in this study?
While you will not benefit directly, your participation may increase our knowledge of how parents influence adolescents' behavior and achievement.

What are the risks of participating in this study?
There are no known risks to parents who take part in this study.

## Will I be paid for participation?

Yes. You will receive $\$ 20$ upon completion of the survey. If you do not complete the study, you will receive a prorated amount based on the time you volunteered (i.e., you will receive $\$ 10$ if you volunteer for at least 15 minutes). You may also elect to be entered into a drawing to win a possible prize, such as coupons for a local restaurant or place of entertainment, tickets to a sporting event, or a gift card.

What will you do to keep my study records from being seen by others?
All information gathered from you will be assigned a code number. Hard copies of the data will be kept in a locked cabinet in a locked room. Electronic data will be kept on a password protected computer in a locked room. Personally identifying information will be removed from the survey responses and stored separately. Federal law requires us to keep your study records private. This means that no one other than me or the study staff will know how you answered.

However, certain people may need to see the study records. By law, anyone who looks at these records must keep them private. The only people who will be allowed to see these records are:

- The study staff
- People who make sure that we are doing the study in the right way. They also make sure that we protect you and your child's rights and safety:
- The University of South Florida's Institutional Review Board (IRB), its staff, and any other individuals acting on behalf of USF
- The United States Department of Health and Human Services (DHHS)
- We will provide findings of this report to the School District. We may also publish what we find out from this study. In either case, we will not use your name or anything else that would let people know who you are.


## What if I decide not to take part in the study?

Nothing will happen. This study is completely voluntary.
How do I provide my informed consent?
If you complete the survey in over the telephone or in person you are providing your informed consent to participate in the study.

## You can get answers to your questions!

If you ever have any questions about this study, please call Erica Coates at (813) 602-1618. If you have questions about your rights as a person who is taking part in this study, call the University of South Florida's Division of Research Integrity and Compliance at (813) 974-5638. I appreciate your time today. If you ever need to reach me, please do not hesitate.

Erica Coates, M.A.
Clinical Psychology Doctoral Student
Department of Psychology
University of South Florida
(813)602-1618
usfadapt@gmail.com

Vicky Phares, Ph.D.
Professor
Department of Psychology
University of South Florida
(813)974-0493
phares@usf.edu

## Appendix 0: Referral List

## MENTAL HEALTH RESOURCES

If you or your child have had any suicidal thoughts, please call the following number immediately: 1-800-273-TALK (8255)

Crisis Center of Tampa Bay:
Crisis Hotline: 2-1-1
Counseling Services: 813-964-1964
Adult Emergency Services
813-272-2958

Camelot Community Mental Health 813-635-9765

Catholic Charities
813-631-4370

Children's Crisis Center
813-272-2882
Life Center of the Suncoast
813-237-3114
Northside Mental Health Center
813-977-8700

Tampa Jewish Family Services
813-960-1848
Veterans Counseling Program
813-238-8557

## Appendix P: Institutional Review Board Approval Letter

RESEARCH INTEGRITY AND COMPLIANCE
Institutional Review Boards, FWA No. 00001669
12901 Bruce B. Downs Blvd., MDC035 • Tampa, FL 33612-4799
(813) $974.5638 \bullet$ FAX (813) $974-7091$

8/16/2016

Erica Coates, M.A.
Psychology
4202 E Fowler Avenue, PCD4118G
Tampa, FL 33620

## RE: Expedited Approval for Continuing Review

IRB\#: CR2_Pro00018182
Title: Nonresident Paternal Factors and the Psychosocial Adjustment of Black Youth from Single Mother-Households

## Study Approval Period: 9/15/2016 to 9/15/2017

Dear Mrs. Coates:
On 8/15/2016, the Institutional Review Board (IRB) reviewed and APPROVED the above application and all documents contained within including those outlined below.

## Approved Item(s):

Protocol Document(s):
Protocol, Ver\#1, 9.8.14
Waiver of documentation of consent has been renewed.
The IRB determined that your study qualified for expedited review based on federal expedited category number(s):
(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

As the principal investigator of this study, it is your responsibility to conduct this study in accordance with USF HRPP policies and procedures and as approved by the USF IRB. Any changes to the approved research must be submitted to the IRB for review and approval by an amendment. Additionally, all unanticipated problems must be reported to the USF IRB within five (5) calendar days.

## Appendix P (Continued)

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,


John Schinka, Ph.D., Chairperson
USF Institutional Review Board


[^0]:    ${ }^{1}$ African American and Black will be used interchangeably to refer to individuals of African descent living in the United States of America.

