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The Role of Coparents in African American Single-Mother Families: The Indirect Effect of Coparent identity On Youth Psychosocial Adjustment

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Abstract

The majority (67%) of African American youth live in single-parent households, a shift in the family structure that has been linked to increased risk for both internalizing and externalizing problems behaviors. Although the majority of single mothers endorse the assistance of another adult or family member in childrearing, relatively little is known about *who* is engaged in this non-marital coparenting role (i.e., grandmother, father/social father, aunt, and female family friend) and how it relates to coparenting quality, maternal parenting, and youth psychosocial outcomes (i.e., internalizing and externalizing problems). This question, which is critical to the advancement of family-focused programming for youth in these families, is addressed in this study. The participants examined in the current study were 159 African American single-mother child dyads. Adolescents' maternal grandmothers constituted the largest proportion of coparents in the sample (37.2%), followed by the mothers' female family friends (22.5%), adolescents' maternal aunts (12.7%), and adolescents' fathers/social fathers (11%). Differences emerged among groups of coparents in support and conflict with the mother. Specifically, grandmothers, aunts, and female family friends provided significantly more instrumental support than fathers. Furthermore, grandmothers and fathers had more conflict with the mother, both generally and specifically in front of the child, than aunts or female family friends. In turn, these differences were associated directly and indirectly through maternal parenting with internalizing and externalizing problems. Clinical implications and future directions are discussed.

Keywords

African American; single-mother families; coparenting; youth internalizing; youth externalizing

The vast majority (73%) of African American youth are born to unwed mothers and most (67%), compared to the general population (23%), will live in a single-parent household at some point during childhood and/or adolescence (Annie E. Casey Foundation, 2011; U.S. Census Bureau, 2009). This shift in the structure of the African American family has been cited as a primary explanation for elevated rates of negative psychosocial outcomes among African American youth (Lipman, Boyle, Dooley, & Offord, 2002), including both internalizing and externalizing problems (e.g., Simons, Chen, Simons, Brody, & Cutrona, 2006), relative to European American youth and youth raised in two parent homes. These findings, however, are difficult to interpret, largely because a focus on marital status alone fails to take into account the long history of extended family involvement in childrearing in the African American community (see Jones & Lindahl, 2010; Jones, Zalot, Foster, Sterrett, & Chester, 2007, for reviews). Accordingly, this study intends to broaden the scope of the literature on African American single mother families by examining youth adjustment in the extended family context.

The family has been identified as a central context for understanding youth problems (e.g., Fauber, Forehand, Thomas, & Wierson, 1990). A principal reason cited for the overrepresentation of negative psychosocial outcomes among African American youth from single mother families is the compromise in maternal parenting that may occur when mothers must balance the competing demands of both work and family. What this explanation fails to take into account, however, is that “single mother” status does not necessarily mean that mothers are the only adults involved in childrearing, particularly in African American families (see Jones & Lindahl, 2010; Jones et al., 2007, for reviews). The important role of the extended family, as well as “fictive kin” or non-relatives who are considered part of the extended family system, in the African American community has been highlighted elsewhere (see Jones et al., 2007, for a review). Importantly, historians point to a connection between the strength of African American extended family networks (which often include not only the nuclear families, but also aunts, uncles, cousins, and grandparents) and African values and customs regarding families (e.g., Johnson & Staples, 2005). The wider inclusion of family members means that more people have a role in the care of individuals, including assuring the health and well being of youth (see Jones et al., 2007; Jones & Lindahl, 2011, for reviews). Consistent with the extended family tradition, the majority of African American mothers who are “single” by definition of their marital status endorse the assistance of another adult or family member with whom they coordinate childrearing responsibilities (i.e., coparenting) (Jones, Forehand, Brody, & Armistead, 2003; also see McHale & Lindahl, 2011, for a review). In prior work with a very low-income sample, for example, some African American single mothers identified the child’s biological father, while others identified aunts, grandmothers, and family friends (Jones et al., 2007). Yet, little is known about the extent to which coparenting processes vary by coparent identity (e.g., grandmothers, fathers, aunts, family friends) or whether such differences are associated with the quality of maternal parenting and subsequent youth adjustment.

The primary purpose of the current study is to test a model of the associations among coparent identity to the child, coparenting relationship quality, maternal parenting, and youth internalizing and externalizing problems (see Figure 1). The mechanisms of influence that can facilitate understanding of the proposed associations in the model are drawn from several theoretical paradigms, including social learning, family systems, and family stress models. Using these theories as a framework, the spillover hypothesis (Erel & Burman, 1995), which has received substantial support (e.g., Benson, Buehler, & Gerad, 2008; see Krishnakumar & Buehler, 2000, for a review), proposes that the interparental dyadic relationship, in this case the quality of the coparenting relationship, “spills over” to influence the mother-child relationship (e.g., less praise or warmth, harsh or inconsistent discipline, or poor monitoring), which, in turn, influences child outcomes (McMahon & Forehand, 2003).

Disruptions in coparenting between the African American single mother and her non-marital coparent may directly impact youth problem behavior by increasing the adolescent's stress and arousal, which in turn heightens the vulnerability for developing emotional and behavioral problems (Bradley, 2000). In addition to the direct effects, disruptions in the coparenting relationship can also “spillover” to influence maternal parenting behaviors, including two critical determinants of youth adjustment, warmth and monitoring (i.e., Krishnakumar & Buehler, 2000 for a review). In turn, disruptions in maternal parenting are associated with increases in externalizing problems through coercive processes (See Granic & Patterson, 2006, for a review) and internalizing problems through withdrawal to avoid the dysregulation that results from insensitive or unresponsive parenting (see McKee, Colletti, Rakow, Jones, & Forehand, 2008, for a review)

Research supports the hypothesized indirect association between coparenting quality and youth internalizing and externalizing problems through maternal parenting disruptions in African American single mother families (e.g., Jones et al., 2005; Shook, Jones, Dorsey, Forehand, & Brody, 2010). Specifically, single mothers who receive more support from and experience less conflict with nonmarital coparents about childrearing evidence more optimal parenting behaviors (i.e., higher levels of monitoring and warmth/support) which, in turn, are associated with lower levels of child maladjustment. With few notable exceptions, however, this past research has not considered the role of coparent identity or its association with these other family processes and outcomes. The literature that does exist largely focuses on one of two groups: the child's maternal grandmother (e.g., Gee & Rhodes, 2003; Sellers, Black, Boris, Oberlander, & Myers, 2011) or the child's biological father (e.g., Choi & Jackson, 2011; Gee & Rhodes, 2003). Although this literature focuses primarily on teen mothers (Jones et al., 2011; Simmons et al., 2006), it provides preliminary evidence in support of the aforementioned theoretical model. The bulk of work on father involvement in particular tends to examine the impact of father-presence or absence alone (Nelson, 2004); however, more process-oriented work clearly suggests that the impact of both grandmother and father involvement, as well as that of father-figures who have received even less attention in this literature, depends on the quality of the coparenting relationship with the single mother (e.g., Gee & Rhodes; Nelson, 2004).

The current study intends to enrich and expand the literature on coparenting by examining a relatively socioeconomically diverse sample of adult African American single mother

families of youth in the early to middle adolescent age range, an inherently vulnerable developmental period (Somerville, Jones, & Casey, 2010). Specifically, this study will examine if coparent identity (e.g., grandmother) is associated with the quality of the nonmarital coparent's relationship with adult African American single mothers. Coparent identity will be expanded from the two groups studied individually in the literature, grandmothers and biological fathers, to include aunts, female family friends, male coparent other (e.g., grandfather, uncle, family male friend, brother, cousin), female coparent other (e.g., sister, cousin, mother's cousin, paternal grandmother, great-grandmother) and a more nuanced father category including biological father, mother's ex-husband (not biological father), and mother's current boyfriend. Furthermore, the current study expands upon previous studies (e.g., Jones et al., 2005) by using a richer assessment of the coparenting relationship: coparenting instrumental support (i.e., coparent involvement in daily childrearing), global coparenting conflict (i.e., overall conflict between mother and coparent), and witnessed coparenting conflict (i.e., conflict in front of the child).

It was hypothesized that coparent identity would be associated with each of the three components of coparenting quality: instrumental support, global coparenting conflict, and coparenting conflict in front of the child. Specifically, as some work suggests that men in general are less engaged and supportive in childrearing (Gee & Rhodes, 2003), grandmothers, aunts, and female family friends were expected to provide more instrumental support than fathers based on the literature previously cited (Sellers et al., 2011). Based on the empirical literature on the role of grandmothers in teen African American mother, grandmothers were expected to have more conflict with the mother around childrearing both globally and specifically in front of the child than other groups of coparents.

Turning to the proposed model (Figure 1), it was hypothesized that coparent identity to the child would be associated with coparenting quality, which, in turn, would be associated with adolescent internalizing and externalizing problems both directly and indirectly through maternal positive parenting. Furthermore, it was hypothesized that coparenting quality and maternal positive parenting would account for the association between coparent identity and adolescent outcomes. Differential associations of coparenting quality and maternal parenting across internalizing and externalizing problems were not proposed as there is little evidence to suggest specificity of family protective or risk factors with child and adolescent psychopathology (see McKee et al., 2008, for a review).

Importantly, findings from the current study have the potential to inform specific targets for intervention targeting single-mother African American families by identifying the role that specific coparents play in these families.

Method

Participants

Data for the current study were from the African American Families and Children Together (AAFACT) Project. African American single-mother families with an 11 to 16-year-old youth were recruited from central North Carolina. The participants were 194 African American mother-adolescent dyads. The mean ages of participating youth and mothers were

13.39 years ($SD = 1.59$; range = 11-16; 55% girls) and 38.05 years ($S.D. = 6.67$; range = 26 – 64 years), respectively. Nearly all of the mothers in the study were the biological mothers of the target child ($N = 183$). Of the remaining mothers, six were adoptive mothers, two were the maternal aunts, and three were maternal grandmothers. Approximately one-half (51%) of the mothers completed some college/vocational school after high school/GED; the majority of mothers (82%) were employed; and household incomes averaged \$29,734 per year ($SD = \$17,457$). It is important to note that, in contrast to many African American samples, this sample is relatively diverse in terms of education and income of the mother.

Procedure

The UNC Behavioral Institutional Review Board reviewed procedures. All participants initially signed consent (mother) and assent (adolescent) forms. Recruitment was conducted through community agencies (e.g., health departments, YMCAs, churches), public events (e.g., health fairs), local advertisements (e.g., university-wide informational emails, bus displays, brochures), and word-of-mouth (e.g., participants telling other families about the project). Families completed the assessment either at a community site or in their home, according to the preferences of each family. Family members completed the assessments on separate laptop computers with headphones and prerecorded interview questions in order to decrease the potential for biased responses and to maximize confidentiality. The mothers and adolescents completed measures assessing a range of variables related to psychosocial functioning, including the variables of focus in the current study. All measures were completed in reference to current behavior. Each interview took approximately 60-90 minutes to complete, and families were compensated \$25 for their participation. Childcare for younger children was provided as needed.

Measures

Demographic Information—Mothers completed a demographic measure about themselves (e.g., maternal age, education, income), their child (e.g., child's age), and their families (e.g., physical address, family income, coparent resided/did not reside in the home). Youth reported on their gender, age, and current grade level in school.

Coparent Identity—Identity (e.g., grandmother, father, family friend) of the primary coparent for the target adolescent was reported by the mother. At the time of recruitment, mothers were asked to identify the second most important adult involved currently in daily childrearing. If multiple coparents were identified, mothers were asked to select the coparent who currently assisted the most in daily childrearing activities. All mothers identified a coparent. Responses were subsequently organized into 23 categories, which then were condensed and placed into six composite categories: maternal grandmother of the adolescent, aunt of the adolescent, family female friend, father/social father of the adolescent (biological father, mother's ex-husband, mother's boyfriend), female relative other (e.g., cousin, sister, great aunt, paternal grandmother, great grandmother, mothers mentor), and male other (e.g., male family friend, brother, nephew, grandfather).

Coparenting Quality—Three dimensions constituted coparenting quality: instrumental support (mother report), conflict about childrearing specifically in front of the child (mother

report), and general conflict about childrearing (mother report). Level of instrumental support provided by the coparent in providing care of the adolescent was assessed using the Coparenting Division of Labor Scale (CDLS), a measure adapted from Wood and Repetti's Child Caregiving Involvement scale (2004) for use with non-marital coparents of adolescent children. While the original instrument included 10 items developed for parents of elementary school-age children, the current 13-item questionnaire includes additional questions pertaining to the division of labor regarding monitoring and discipline (e.g., "Monitoring the child's activities, including what friends he or she is hanging around with, what clothes he or she is wearing to school, and how he or she spends free time"); however, the majority of the questions are based on those from the original measure (e.g., "Making sure the child is prepared for school in the morning, such as getting out of bed on time") (Wood & Repetti, 2004).

The same response options used by Wood and Repetti (2004) were utilized. Each mother reported the relative level of contribution of the coparent and herself to each childrearing task using a 5-point Likert scale: (0) My coparent always does this; I never do; (1) My coparent does this more than me; I do it about 25% of the time; (2) We each do this about equally; I do it about 50% of the time; (3) I do this more than my co-parent; I do it about 75% of the time; and (4) I always do this, my coparent never does. Wood and Repetti reported high levels of internal consistency for both fathers' and mothers' reports of child care-giving involvement for themselves and others (2004). The alpha coefficient for the current sample was .89.

In order to achieve a more comprehensive assessment of coparenting conflict, both conflict about childrearing specifically in front of the child and general coparenting conflict about childrearing not specifically in front of the child were utilized. Coparenting conflict over childrearing in front of the child was assessed by the O'Leary-Porter Scale (OPS; Porter & O'Leary, 1980). The OPS is comprised of 10 items which mothers rate on a five-point Likert scale ranging from 0 = *Never* to 4 = *Very Often*, with higher scores indicating more mother-conflict in front of the child. The scale primarily measures the amount of verbal hostility, along with one item assessing physical aggression, between the mother and coparent in front of the child (Porter & O'Leary, 1980). The OPS has demonstrated moderately high concurrent validity (Emery & O'Leary, 1982). When used with married couples, it has a test-retest reliability of .96 and an internal consistency of .86 (Porter & O'Leary, 1980). In the current sample, the alpha coefficient was .82. Items were reverse scored so that higher scores reflect a more positive coparenting relationship.

Two items from the Parenting Convergence Scale (PCS; Ahrons, 1981) were used to assess general conflict over childrearing between the mother and coparent not specifically in front of the child: "When you and this other person (coparent) talk about how to raise this child, how often is the conversation hostile or angry?" and "Do you and this other person (coparent) have big differences of opinion as to how to raise this child?" The two items were rated on a "never" (0) to "often" (3) Likert scale. They were moderately correlated ($r = .41$, $p < .001$), suggesting the items are measuring a common factor about general coparent conflict about childrearing. Both items were reverse scored so that higher score indicated less conflict.

Maternal Positive Parenting—Two variables, both of which were completed by mother and adolescent, constituted the positive parenting construct: Warmth/support and monitoring. The Interactive Behavior Questionnaire (IBQ; Prinz, Foster, Kent, & O'Leary, 1979) assesses warmth and support between mothers and children. Mothers and adolescents completed the short form of the IBQ, which is comprised of the 20 true/false items. Scores can range from 0 to 20, and higher scores indicate higher levels of warmth and support. The IBQ has been utilized extensively in prior research with this population as a measure of warmth and support (e.g., Jones et al., 2003, 2005). Prinz and colleagues (1979) have reported adequate internal consistency and discriminant validity. In the current sample, Cronbach's alpha was .91 and .88 for mother and adolescent report, respectively.

Maternal monitoring was assessed with the monitoring measure developed by Stattin and Kerr (2000). Nine items assessed parental awareness of the adolescent's whereabouts, activities, and relationships. The items are rated on a 5-point scale ranging from "Not at All" (0) to "Always" (4). This measure has demonstrated acceptable reliability data and good test-retest correlations (e.g., Stattin & Kerr, 2000). Higher scores indicate more maternal monitoring. For the current sample, the alpha coefficient for the youth-report and mother-report version of the measure was .85 and .79, respectively.

Adolescent Internalizing and Externalizing Problems—Child internalizing and externalizing problems were assessed by the Child Behavior Checklist (CBCL; mother-report) and the Youth Self-Report (YSR; adolescent-report) (Achenbach & Rescorla, 2001). The Anxious/Depressed, Withdrawn, and Somatic Complaints subscales were used to measure mother and adolescent report of youth internalizing symptoms. Item 91 ("I think about killing myself") was omitted at the request of the Institutional Review Board. Youth and mother-reported externalizing problems were examined using the Aggression and Rule Breaking subscales. Reliability and validity of the CBCL and YSR are well-established for the internalizing and externalizing dimensions (Achenbach & Rescorla, 2001). The alpha coefficients for the CBCL and YSR for the current study were .85 and .89 for internalizing problems, respectively, and .91 and .87 for externalizing problems, respectively.

Control Variables—Mother age, coparent residence (i.e., living in the same home as the adolescent or not), and mother's education and income were reported by the mother and were used as demographic controls. Mother's education and income were standardized and combined to form a measure of family socioeconomic status (SES) (Ensminger & Forthergill, 2003). Additionally, maternal depressive symptom severity served as a fourth control variable and was assessed by the revised version of the Center for Epidemiologic Studies Depression Scale (CESD-R; Radloff, 1977). Mothers rated each of the 20 items on how often they experienced a particular symptom during the past week. Items were summed with higher scores indicating greater depressive symptom severity. The CESD has established validity and reliability in various ethnic populations (Perreira, Deeb-Sossa, & Harris, 2005). In the current sample, the alpha coefficient was .73.

Maternal age served as a control variable as the literature on adolescent mothers suggests that younger mothers would be more likely to designate their mother as the primary coparent (e.g., Gee & Rhodes, 2003). The coparent's residence served as a control variable as it was

expected that coparents living in the home would have more opportunity to be involved in childrearing daily tasks and conflict with the mother than non-residential coparents. Family socioeconomic status (SES) served as a covariate as Family Stress Theory (Conger, Wallace, Sun, Simmons, McLoyd, & Brody, 2002) suggests that SES may aggravate disruptions in family functioning. Finally, maternal depressive symptoms served as a covariate as they have been related to the coparenting relationship, maternal parenting, and youth outcomes (e.g., Jones et al., 2005).

Data Analytic Plan

Preliminary analysis of demographic and study variables—Initially, number of coparents in each group was determined. Next, a correlation matrix was constructed to examine the relations among the continuous major study variables considered in this study. Additionally, means and standard deviations for the three variables constituting the coparenting quality construct were computed within each coparent identity. Lastly, an analysis of covariance (coparent residence, maternal age, family socioeconomic status, and depressive symptoms served as the covariates) examined differences among these groups (e.g., grandmother, father) on each of the three measures of coparenting quality.

Evaluation of the measurement model—A confirmatory factor analytic measurement model was estimated prior to estimating structural models in order to test the fit of the factor structures under investigation and to determine the factor loadings for each indicator.

Evaluation of the structural model—Structural equation modeling (SEM) using the MLR estimator to adequately account for skewed data, as implemented by Mplus 6.0 software (Muthen & Muthen, 1998-2010), was employed. The use of the MLR estimator requires the use of a scaled chi-square difference test (Satorra, 2000) for making key comparisons among nested models. The following fit statistics were employed to evaluate model fit: Comparative Fit Index (CFI; > .90 acceptable, > .95 excellent), Root Mean Square Error of Approximation (RMSEA; < .08 acceptable, < .05 excellent) and the Standardized Root Mean Square Residual (SRMR; < .08 acceptable, < .05 excellent) (Browne & Cudeck, 1993; Hu & Bentler, 1999). As missing data were less than 1% overall for all core variables, missing data were treated as ignorable (missing at random) and full information maximum likelihood estimation techniques were used for inclusion of all available data.

Although not included in the proposed conceptual model presented in Figure 1, the effects of control variables (coparent co-residence, family SES, maternal age, and maternal depressive symptoms) on the model were examined by running a multiple-indicator/multiple-cause (MIMIC; Muthen, 1989) model in which all major constructs of the final structural model were regressed on the covariates. If paths in the structural model remained significant with the inclusion of these control variables, it was concluded that the control variables did not influence the relationships among variables in the model.

Follow-up analyses of the indirect effect—Although Baron and Kenny's (1986) "causal steps" criteria are the most frequently cited mediation analyses, difficulty arises with multiple intervening and multiple outcome variables (MacKinnon, Lockwood, Hoffman,

West, & Sheets, 2002), as is the case with the current study. As a consequence, to test the significance of the indirect effect, the Model Indirect command in Mplus was utilized to calculate a standardized indirect effect parameter and biased-corrected bootstrap confidence interval. Additionally, the ratio of the indirect effect to the total effect (ab/c ; Preacher & Kelley, 2011) for each significant indirect effect test was calculated.

Results

Preliminary Analyses

Coparent Identity—The number of coparents in each group was as follows: Maternal grandmother ($n = 71$), father/social father ($n = 21$), aunt ($n = 24$), female family friend ($n = 43$), female relative other ($n = 18$), and male other ($n = 14$). The last two categories of coparents were not included in primary analyses due to the small sample size in each category *and* the large range of different coparent identities within each of these categories. Three additional families were excluded due to missing information about the coparent relation to the child. This resulted in a final sample of 159 mother-child dyads whose data were included in analyses. For primary analyses using structural equation modeling, coparent identity was dummy coded such that aunts served as the reference category.

Preliminary analyses with control and study variables—Descriptive statistics and bivariate correlations for control variables (family SES, maternal age, and maternal depressive symptoms) and main study variables are presented in Table 1. The directions of the correlations were all in the expected direction. As coparent residence (a control variable) was a categorical variable, a series of one-way analyses of variance were used to test if it was related to any of the main study variables. Coparent instrumental support differed by residence/non-residence status ($F(1, 90) = 16.43, p < .01; d = .86$); contrary to what was expected, coparents who resided in the home with the adolescent and mother provided *less* instrumental support ($M = 38.96, SD = 7.20$) compared to coparents not living in the home ($M = 45.15, SD = 7.24$). Coparent residence was not related to any other main study variables. Since a significant relation emerged between each control variable and one or more main study variable (see Table 1), maternal age, family SES, coparent residence, and maternal depressive symptoms were controlled for in the primary analyses.

Coparenting Quality Differences by Coparent Identity—Means and standard deviations of the coparenting quality variables are presented in Table 2. Coparent support ($F(3, 149) = 3.69, p < .05, \eta_p^2 = .07$), global coparent conflict ($F(3, 149) = 14.11, p < .01, \eta_p^2 = .22$), and coparenting conflict about childrearing ($F(3, 149) = 14.00, p < .01, \eta_p^2 = .22$) were not equivalent across coparent identity groups when controlling for coparent residence (coded as living with or not living with the child), mother's depressive symptoms severity, and mother's age. Pairwise comparisons (see Table 2) indicated that, as hypothesized, grandmothers, aunts, and female family friends provided significantly more instrumental support than fathers. Furthermore, grandmothers and fathers had more conflict with the mother, both generally and specifically in front of the child, than aunts or female family friends. Finally, fathers had more general conflict about childrearing with the mother than did grandmothers.

Primary Analyses

Evaluation of the measurement model—In all models, the first indicator for each latent factor was set at 1.0 to establish the metric, and all factors were allowed to covary freely. Both indicators of the youth reported externalizing problem latent variable (i.e., rule-breaking and aggression) were set to 1.0 to allow for estimation of the measurement model. Standardized factor loadings are reported. Inspection of the initial measurement model suggested that adolescent and mother report of internalizing and externalizing problems were separate constructs (i.e., low factor loadings of youth report problem behavior when mother report was the first indicator); therefore, the measurement model was adjusted such that adolescent and mother report of internalizing and externalizing problems were formed into separate latent variables (four total latent variables) in order to achieve adequate fit. Given that concordance rates for two informants regarding youth psychopathology are generally relatively low (see De Los Reyes & Kazdin, 2005, for a review), especially among informants' ratings of African American children (Youngstrom, Loeber, & Stouthamer-Loeber, 2000), the separation of mother and adolescent report is consistent with previous research (Carter, Garber, Ciesla, & Cole, 2006). Additionally, due to weak factor loadings of adolescent report of warmth and mother report of monitoring for the maternal positive parenting construct, these measures were removed from the model to form a final parenting model of one mother report variable (warmth) and one adolescent report variable (monitoring) to improve fit.

Modification indices suggested two areas for improving fit by freeing the error between three pairs of indicators: (1) adolescent report on the anxious/depressed and withdrawn subscales of the YSR; and (2) adolescent and mother report on the rule breaking subscale of the YSR and CBCL. The above pairings of correlated error were indicators of similar constructs of adolescent psychopathology within the same measurement system (i.e., ASEBA); therefore, there are substantive reasons that the above two pairs would have correlated error. All factor loadings were significant, above .30, and are displayed in Figure 1. The final measurement model demonstrated acceptable fit: $X^2(74, N = 159) = 155.36, p < .05, CFI = .92, RMSEA = .08, 95\% CI .06-.10, SRMR = .05$.

Evaluation of the structural model—The results of the structural model are presented in Figure 2. The proposed model demonstrated acceptable fit ($X^2(116, N = 159) = 196.62, p < .05, CFI = .93, RMSEA = .067, 95\% CI .05-.08, SRMR = .058$). Two of the three coparent identity variables (grandmothers and father/social fathers) were significantly related to coparenting quality. Coparenting quality was significantly related to maternal positive parenting and to mother report of adolescent internalizing and externalizing problems. The direction of the associations indicated that a higher quality coparenting relationship was associated with higher quality maternal parenting and lower levels of youth internalizing and externalizing behaviors. Furthermore, maternal positive parenting was related to mother and adolescent report of adolescent internalizing and externalizing behaviors. Higher levels of maternal positive parenting were related to lower levels of both types of youth problem behavior reported by the mother and adolescent.

Next, nested model comparisons were tested using a series of scaled chi-square difference tests. The first nested model compared the proposed model with a model with added direct paths from the dummy coded coparent identity variables (aunts serving as the reference category) to the maternal positive parenting construct. Model fit was not significantly improved with the inclusion of these paths ($\chi^2(3) = 5.15, p > .10$). The second nested model compared the proposed model to one with added direct paths from the coparent identity construct to both maternal positive parenting and all four adolescent outcomes. Model fit was not significantly improved ($\chi^2(15) = 12.79, p > .10$). Thus, the first model was adopted based on parsimony, overall fit to the data, and theoretical interpretability.

Control Variables—The effects of mother's age, mother's depressive symptom severity, family socioeconomic status, and coparent residence were tested by running a MIMIC model. All the major constructs of the final model, except coparent identity (which did not significantly vary by the covariates, $p > .15$), were regressed on the four control variables. The paths from maternal positive parenting to adolescent internalizing problems and from the coparenting relationship to mother report of adolescent externalizing problems were reduced to marginal significance due to increased standard errors but had a standardized estimate close to original values. All other pathways were unaffected by the inclusion of the covariates in the model.

Follow-up tests of the indirect effect—The mediating effects of coparenting quality and maternal parenting on the association between coparent identity and adolescent adjustment were evaluated by tests of indirect effects using Mplus 6.0 (Muthen & Muthen, 1998-2010). Due to the third coparent identity variable (female family friend vs. aunts) not being significantly related to coparenting quality, analysis of indirect effects involving this variable was not conducted. The findings are summarized in Table 3. The indirect effect from coparent identity to mother report of both adolescent internalizing and externalizing problems through coparenting quality and maternal positive parenting was significant. The indirect effects from coparent identity to adolescent reports of externalizing problems through coparenting quality and maternal positive parenting were also significant. The indirect effects predicting adolescent reports of internalizing problems were not significant. The ratio of the indirect effect to the total effect (ab/c ; Preacher & Kelley, 2011) for each significant indirect effect test is summarized in Table 3. The percent of the total effect from coparent identity to adolescent outcomes that was accounted for by coparenting quality and maternal parenting ranged from 24% to 88%.

Discussion

Numerous studies have established the importance of nonmarital coparents in African American single-mother families (see Jones & Lindahl, 2011; Jones et al, 2007, for reviews). Previous research with African American single mothers has included coparents who have a number of different relations to the child (e.g., Jones et al., 2003) but have not examined if coparent identity influences coparenting quality, maternal parenting, and youth adjustment (Jones & Lindahl, 2011). In the current study 23 different categories of coparent identity were identified ranging across five generations of family and including non-biologically related coparents (e.g., family friend, mother's mentor). To our knowledge, this

is the first study to examine the association between *who* coparents in African American single mothers families (e.g., grandmother, father/social father, aunt, and female family friend) and the link to coparenting quality, parenting, and youth psychosocial outcomes.

The findings indicate that coparenting quality (i.e., support and conflict) differed by coparent identity such that grandmothers, aunts, and female family friends provided significantly more instrumental support than fathers. Furthermore, grandmothers and fathers had more conflict with the mother, both generally and specifically in front of the child, than aunts or female family friends. These findings replicate prior research by highlighting the roles of grandmothers and biological fathers in African American families and also extend this work by including other nonmarital coparents and examining their roles in these families.

With the exception of youth report of internalizing problems, structural regression coefficients and bootstrapped indirect effects supported the proposed association between coparent identity and youth internalizing and externalizing problems via coparenting quality and maternal parenting. Specifically, after preliminary analyses indicated that coparent identity was associated with coparenting quality, the latter construct was associated with adolescent internalizing and externalizing problems both directly (based on mother report) and indirectly through maternal positive parenting. Consistent with prior literature (e.g., Shook et al., 2010) and the spillover hypothesis (Erel & Burman, 1995), a higher quality relationship between African American single mothers and nonmarital coparents was associated directly with lower levels of adolescent internalizing behaviors and indirectly through higher levels of maternal positive parenting with lower levels of adolescent internalizing and externalizing behaviors.

The models tested in the present study used maternal report of adolescent internalizing and externalizing behavior problems as well as adolescents' self-report, and they yielded different results. Although coparent identity was indirectly associated with youth externalizing problems regardless of reporter, the indirect association between coparent identity and youth internalizing problems was only significant for mother report. Additionally, coparenting quality was only directly associated with youth outcomes for mother, not youth, report. These differential findings across reporters may be the result of shared method variance when mother report of youth outcomes is utilized: mothers reported not only youth outcome but also coparenting quality. Beyond the shared-method variance interpretation, however, differential findings as a function of reporter are consistent with the growing literature on discrepancies in informant ratings (see De Los Reyes & Kazdin, 2005, for a review) and emphasize the importance of obtaining multiple reporters of adolescent psychopathology. Each family member brings a unique perspective that can be utilized by clinicians to help meet the needs of individual families, children, and parents (Achenbach, 2011).

One unexpected finding is worth attention. That is, although the current study did not include specific predictions about residential status of the coparent due to sample size and power limitations, residential status was examined as a covariate. Findings revealed that co-resident coparents engaged in less instrumental child support than non-residential coparents.

Although these results at first may seem counterintuitive, there are at least two existing literatures that may help to understand and contextualize this pattern of findings. One potential explanation can be borrowed from the “gatekeeping” literature (see Cannon et al., 2008). Typically, the concept of maternal gatekeeping, or the extent to which mothers limit or regulate a coparent's time and activities with a child, has been used to describe relationships between mothers and fathers in both intact and divorced families; however, the construct also seems more broadly relevant regardless of coparent identity. That is, when a coparent resides in the home with the mother and child, the mother may simply have more opportunities to facilitate or, in the case of the current pattern of findings, inhibit the coparent's involvement with childrearing, potentially yielding less motivation on the part of the coparent to provide instrument support. In addition to maternal gatekeeping, a second possibility can also be drawn from the mother and father literature. That is, even in married dual-earner families, mothers report higher levels of involvement in housework and childcare than fathers (see Offer & Schneider, 2011, for a review). Therefore, the obtained pattern of findings in the current study may simply reflect a more general pattern of findings between mothers and their residential coparents regardless of coparent identity. In contrast, when the coparent does not reside with the mother-youth dyad, but is still involved in daily childrearing activities as we have defined a non-marital coparent in this study, a mother may not only have fewer opportunities to regulate involvement but may also simply need to be more deliberate about delegating childrearing activities. Of course, these explanations are merely hypotheses as the data were not available to allow us to disentangle these issues, suggesting the importance of further research in this area.

There are several limitations of the current study that should be noted. First, the data are cross-sectional, raising questions about the direction of causal effects and temporal precedence that are better addressed by longitudinal designs. For example, perceptions of externalizing problems of the adolescent may cause a mother to request additional support from a coparent or, alternatively, increase conflict with the coparent over childrearing, leading to decreases in maternal positive parenting. Caution should be used when interpreting causal pathways in the current model and future research examining similar questions should utilize longitudinal designs. Second, the current study lacked the power to test hypotheses regarding moderating roles of youth gender and age. Furthermore, the current study did not have sufficient power to examine if coparent identity moderated associations in the model. Future research with larger sample sizes could examine if the associations among coparenting quality, maternal parenting, and adolescent outcomes are moderated by coparent identity and/or whether they vary by gender or age of the child. Third, only one current coparent was included in the current study. Future research would benefit from a better understanding of whether some mothers identify multiple coparents and, if so, who the relations with these multiple coparents interact in ways that are more or less beneficial or detrimental for youth outcomes. Fourth only mother report measures on coparenting quality were used in the current study. As this is a potential issue of shared method variance, the use of both adolescent and coparent report on coparenting quality could strengthen confidence of findings in future work. Fifth, in the current study the mother-coparent relationship, but not the potential important role of the youth-coparent relationship, was assessed in the model. Future research should examine the influence of

coparent identity on the youth-coparent relationship and if such an influence affects youth outcomes.

Lastly, although both positive (instrumental support) and negative (conflict over childrearing) aspects of coparent quality were assessed in the current study, other important aspects of coparenting were not assessed, such as parenting practices congruence, emotional support for coping with parenting stressors, and mother-coparent communication quality. Future research would benefit from a more comprehensive multi-dimensional assessment of coparenting.

The current study also had several significant strengths that should be noted. First, multiple informants were utilized to assess maternal positive parenting and adolescent behavior problems, affording the opportunity to examine differential patterns of associations. The use of statistical procedures that model measurement error was also a particular strength of the current study. Third, using a multiple-indicator/multiple-cause (MIMIC; Muthen, 1989) model, mother's age and depressive symptoms, family SES, and coparent residence were statistically controlled and did not significantly alter the relations among the latent variables in the final structural model.

Another strength of the current study is that the sample is relatively diverse in terms of education and income of the single mothers. Much of the previous research on African American single mothers, including research on non-marital coparenting (e.g., Jones, Forehand, et al., 2003; Jones et al., 2005; Shook et al., 2010), focuses exclusively on very low-income families. Such an approach limits the generalizability of findings to only the most vulnerable youth and families, affording less information regarding the broader cohort of African American youth being raised in single-mother homes. This more representative approach becomes increasingly salient with the growth of single parent families in the middle class, as well as calls to disentangle race from other contextual variables associated with family functioning (see Le, Ceballo, Chao, & Hill, 2008; Marsh et al., 2007, for reviews). A final, and likely the most important, strength was that the current study was the first to examine the association between *who* African American single mothers identify as their non-marital coparents and the link between coparent identity, family processes, and youth psychosocial outcomes.

In the current study, with the exception of youth report of internalizing problems, coparent identity was related to youth externalizing and internalizing problems *through* the quality of the coparenting relationship and maternal parenting. The clinical implications of this study are important for prevention and intervention programs targeting single-mother African American families. The findings emphasize the potential value of including non-marital coparents in such programs, which have traditionally focused on mothers with less attention to fathers, let alone non-marital coparents (see Jones & Lindahl, 2011; Jones et al, 2007, for reviews). Our findings suggest that health care professionals working with African American youth evidencing or at risk for internalizing or externalizing problems should carefully assess the structure and functioning of each family. That is, to define a family by marital status alone may overlook important intervention opportunities for involving non-marital coparents in clinical work. Targets of such family-focused interventions may include

enhancing the coparenting relationship with particular focus on reducing conflict between mothers and grandmothers and/or fathers/social fathers, increasing father/social father instrumental support, and careful consideration of how the coparenting relationship has spillover effects on maternal parenting and youth adjustment.

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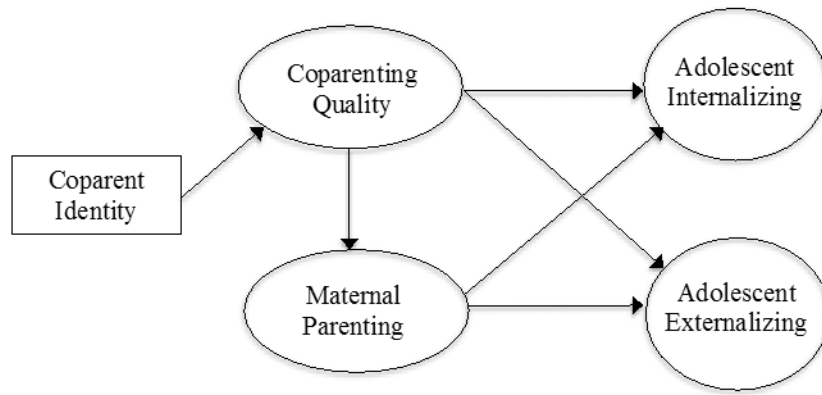


Figure 1.
Conceptual Model.

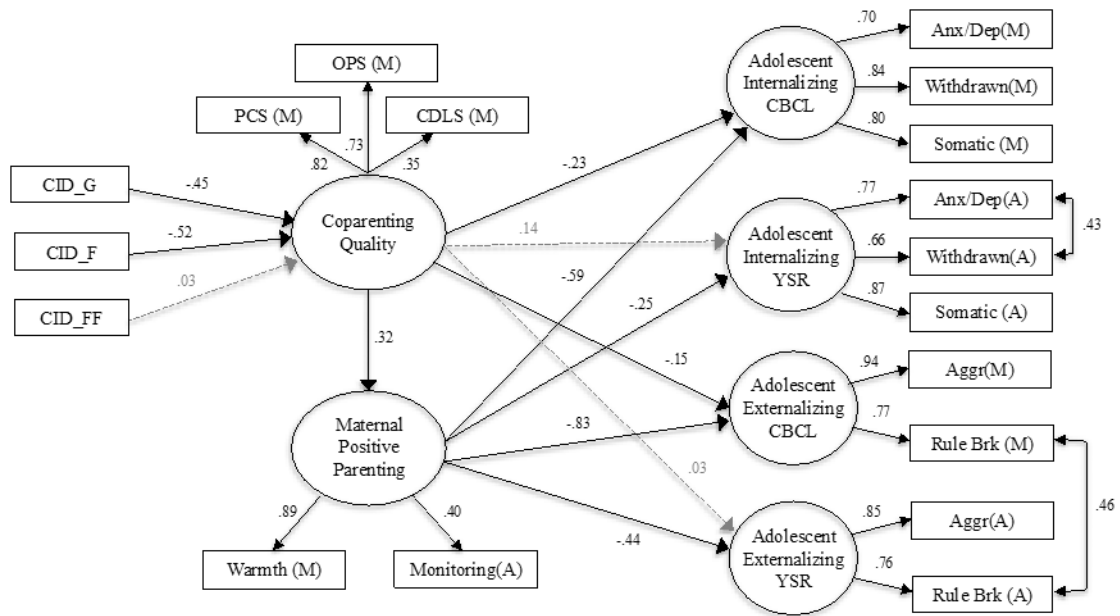


Figure 2. Structural Model

Note: $\chi^2(116, N = 159) = 196.62, p < .05, CFI = .93, RMSEA = .067, SRMR = .06$.

Standardized path coefficients and factor loadings are presented. A = adolescent report, M = mother report; Non-significant paths are dashed and significant paths are solid and bold. CID = Coparent identity. For the dummy coded coparent identity variable, aunts served as the reference category. PCS = general conflict as measured by the conflict subscale of the parenting convergence scale; OPS = O’Leary-Porter Scale which measures coparent conflict over childrearing; CDLS = instrumental support as measured by the Coparenting Division of Labor Scale.

Table 1
Descriptive Data and Bivariate Correlations Among Study Variables

Variables	M(SD)	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Family SES	--	.08	-.14*	.23**	.09	.02	.10	-.07	.20**	.16*	-.21**	.03	-.24**	.03
2 Maternal Age	37.42 (6.17)	---	-.02	.11	.12	.11	.03	-.03	-.06	-.03	-.10	-.25**	-.08	-.05
3 CESD ¹	20.15 (6.52)	---	---	.03	.31**	-.10	-.27**	-.03	-.13	-.02	.45**	.09	.32**	.04
4 CDLS ²	44.52 (6.92)	---	---	---	.23*	.32**	.02	.01	.32**	.12	-.09	-.04	-.42**	.00
5 PCS ³ (R)	3.96 (1.46)	---	---	---	---	.59**	.33**	-.02	.12	.12	-.40**	.04	-.42**	-.15
6 OPS ⁴ (R)	34.25 (5.12)	---	---	---	---	---	.15*	.04	-.05	.02	-.20**	.04	-.23**	-.03
7 Warmth/support ⁵ (M)	16.13 (4.69)	---	---	---	---	---	---	.42**	.33**	.33**	-.54**	-.17*	-.72**	-.32**
8 Warmth/support ⁵ (A)	16.29 (4.53)	---	---	---	---	---	---	---	.13	.39**	-.21*	-.33**	-.30**	-.40**
9 Monitoring ⁶ (M)	30.97 (3.70)	---	---	---	---	---	---	---	---	.28**	-.29**	.01	-.45**	-.24**
10 Monitoring ⁶ (A)	26.28 (7.25)	---	---	---	---	---	---	---	---	---	-.22**	-.13	-.32**	-.40**
11 Internalizing ⁷ (M)	5.26 (4.78)	---	---	---	---	---	---	---	---	---	---	---	.72**	.30**
12 Internalizing ⁸ (A)	9.62 (7.64)	---	---	---	---	---	---	---	---	---	---	---	.12	.48**
13 Externalizing ⁷ (M)	7.58 (7.46)	---	---	---	---	---	---	---	---	---	---	---	---	.45**
14 Externalizing ⁸ (A)	10.85 (7.42)	---	---	---	---	---	---	---	---	---	---	---	---	---

Note:

* $p < .05$

** $p < .01$; R = reverse scored; M = mother report, A = adolescent report; N = 159

¹ Center for Epidemiologic Studies Depression Scale (Eaton, Muntaner, Smith, Tien, & Ybarra, 2004)

² Coparenting Division of Labor Scale

³ The Conflict subscale of the Parenting Convergence Scale (Ahrons, 1981)

⁴ O'Leary Porter Scale (Porter & O'Leary, 1980)

⁵ the Interactive Behavior Questionnaire (Prinz, Foster, Kent, & O'Leary, 1979)

⁶ Monitoring Scale (Stattin & Kerr, 2000)

⁷ CBCL (Achenbach, 1991) sum of three subscales

⁸ YSR (Achenbach, 1991) sum of two subscales.

Table 2

Descriptive Data by Coparent identity and Pairwise Comparison Between Coparent Groups.

Coparent Relation to Child	CDLS ¹ M (SD)	PCS ² M (SD)	OPS ³ M (SD)
Grandmother	43.97 ^a (6.85)	3.60 ^a (1.47)	32.57 ^a (4.75)
Father/Social Father	40.71 ^b (6.84)	2.81 ^b (1.21)	31.00 ^a (6.54)
Aunt	47.63 ^a (4.37)	4.77 ^c (1.15)	36.54 ^b (3.11)
Female FF	44.46 ^a (6.97)	4.67 ^c (1.19)	37.41 ^b (3.71)

Note: N = 159; Means with different superscripts differed significantly ($p < .05$).

¹ Coparenting Division of Labor Scale, higher scores indicated more instrumental support.

² The Conflict subscale of the Parenting Convergence Scale (Ahrns, 1981) with higher scores being less conflict

³ O'Leary Porter Scale (Porter & O'Leary, 1980) with higher scores indicating less conflict. FF = female family friend.

Table 3

Summary of Indirect Effects Tests.

	β	S.E.	95% CI	<i>p</i>	ab/c
CBCL-Internalizing					
Grandmothers	.09	.04	-.008 - .164	.03	.35
Fathers/Social Fathers	.10	.05	-.001 - .188	.03	.37
CBCL-Externalizing					
Grandmothers	.12	.05	.022 - .220	.02	.65
Fathers/Social Fathers	.14	.06	.029 - .250	.01	.88
YSR-Internalizing					
Grandmothers	.04	.03	-.014 - .087	.16	--
Fathers/Social Fathers	.04	.03	-.015 - .099	.15	--
YSR-Externalizing					
Grandmothers	.07	.03	.001 - .129	.05	.24
Fathers/Social Fathers	.08	.04	.003 - .146	.04	.26

Note: ab/c is the ratio of the indirect effect to the total effect. For the dummy coded coparent identity variables: aunts served as the reference category.