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# Socioeconomic Status, Parenting, and Externalizing Problems in African American Single-Mother Homes: A Person-Oriented Approach

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### **Abstract**

African American youth, particularly those from single-mother homes, are overrepresented in statistics on externalizing problems. The family is a central context in which to understand externalizing problems; however, reliance on variable-oriented approaches to the study of parenting, which originate from work with intact, middle-income, European American families, may obscure important information regarding variability in parenting styles among African American single mothers, and in turn, variability in youth outcomes as well. The current study demonstrated that *within* African American single-mother families: (a) a person-, rather than variable-, oriented approach to measuring parenting style may further elucidate variability; (b) socioeconomic status may provide 1 context within which to understanding variability in parenting style; and (c) 1 marker of socioeconomic status, income, and parenting style may each explain variability in youth externalizing problems; however, the interaction between income and parenting style was not significant. Findings have potential implications for better understanding the specific contexts in which externalizing problems may be most likely to occur within this atrisk and underserved group.

#### **Keywords**

African American; single mother; parenting; socioeconomic status; externalizing problems

The majority (67%) of African American youth will reside in a single parent, primarily mother-headed, household at some point during development (The Annie E. Casey Foundation, 2012; Barrett & Turner, 2005). African American youth from single-mother homes are overrepresented in statistics on externalizing problems, relative to European American youth and youth from two-parent homes (Barrett & Turner, 2005; Huizinga, Thornberry, Knight, & Lovegrove, 2007); yet, the focus on race and single-mother status fails to consider parenting variability within African American single-mother homes, the context in which such variability occurs, and how variability relates to child outcomes (see Jones, Zalot, Chester, Foster, & Sterrett, 2007; Murry, Bynum, Brody, Willert, & Stephens, 2001, for reviews). To some extent, historical trends in the study and measurement of

parenting may account for this gap in our understanding of the contextual variability *within* African American single-mother families.

To put the study of parenting in African American single-mother families into historical perspective, it is important to recognize that parenting research originated using a person-oriented approach in which parents were aggregated into classes (i.e., parenting styles) based on similar response patterns to questions about a range of parenting behaviors (see McGroder, 2000 for a review). Using this approach, Baumrind's (1971) seminal work placed parents into three parenting styles using response patterns across a series of items which broadly assessed two constructs (i.e., demandingness and responsiveness): (a) *authoritarian*, or parents who scored high on demandingness and low on responsiveness; (b) *authoritative*, or parents who scored high on both demandingness and responsiveness; and (c) *permissive*, or parents who scored low on demandingness and high on responsiveness (see Power et al., 2013; Trifan, Stattin, & Tilton-Weaver, 2014; Valentino, Nuttall, Comas, Borkowski, & Akai, 2012, for reviews).

As research on parenting evolved, however, the field moved away from a person-oriented to a variable-oriented approach in which caregivers are typically categorized into predetermined parenting styles based on responses to parenting measures (see Mc-Groder, 2000 for a review). Although not inherently problematic, these parenting styles were derived primarily using research with middle-income, European American, and intact families (García Coll et al., 1996; McLoyd, 1990), yet are commonly used to characterize more diverse families, including those who are low-income, African American, and headed by a single mother (e.g., Hill, 2006; Kilgore, Snyder, & Lentz, 2000; McLoyd, 1990; McWayne, Owsianik, Green, & Fantuzzo, 2008). In turn, such work has led to a literature that focuses largely on mean level differences in parenting styles between groups. For example, some research suggests that although African American parents may be more authoritarian (also referred to as harsh parenting in the literature) in their approach to parenting than European American parents (Baumrind, 1972; Baumrind, 1997; Hashima & Amato, 1994; McGroder, 2000), an authoritarian style may lead to relatively less negative or even more adaptive outcomes among African American youth (Baumrind, 1997; Brody & Flor, 1998; Costello, Keeler, & Angold, 2001; Dodge, Pettit, & Bates, 1994; Kilgore et al., 2000; McLoyd, 1990).

One line of thinking behind these findings is that environmental stressors, such as dangerous neighborhoods in which African American families more likely reside than their European American counterparts (Le et al., 2008), may make parenting practices, such as high levels of control, more advantageous within low-income African American samples (Brody & Flor, 1998; García Coll, Meyer, & Brillon, 1995). Consistent with this point, no-nonsense parenting, which was not a parenting style defined in Baumrind's (1971) seminal work, emerged in the literature to reflect a parenting style similar to authoritarian parenting with regard to relatively higher levels of control, but characterized by relatively moderate (rather than low) levels of warmth. no-nonsense parenting has been associated with more youth independence and assertiveness and increased cognitive and social competence (Brody & Flor, 1998) in low-income African American youth. What is less understood, however, is the extent to which there is variability in parenting styles within African American families and the contexts in which such variability in parenting styles may occur. This is particularly

relevant given the number of African American youth who will live in a single-mother home during the course of development. For example, it is true that African American single-mother families are more likely to be of a lower socioeconomic status (SES; income and education) than the middle-income, European American, intact families who characterize the parenting literature (Costello et al., 2001; McLoyd, 1990); however, relatively little attention has been devoted to understanding how variability in SES among African American single-mother families may shape parenting and, in turn, youth outcomes (Le et al., 2008). To this end, many have advocated for a return to a the person-oriented, withingroup approach that provided the early, seminal foundation of the parenting literature to more fully understand the sociocultural context in which the development and relative impact of parenting styles evolves within diverse groups (García Coll et al., 1996; Le et al., 2008; McWayne et al., 2008). Consistent with this aim, the current study used a person-oriented approach to examine parenting styles *within* African American single-mother families, the socioeconomic context in which such variability emerges, and the link between SES, parenting styles, and youth outcomes.

In contrast to the extant variable-oriented, between-groups literature, which tends to highlight the parenting styles more common among African American families relative to European American families (i.e., authoritarian/harsh and No-Nonsense), it is hypothesized that African American single mothers will evidence a broad range of parenting styles, including authoritarian/harsh, no nonsense, and authoritative (also called Positive parenting in the literature; e.g., Darling & Steinberg, 1993; Eisenberg et al., 2005; Smith, Landry, & Swank, 2000). In addition, given that prior research tends to confound race, income, and family structure, such that the literature is characterized by middle or higher income, European American, and intact families compared with lower income, African American, and single-mother families, the role of SES was examined within African American singlemother families (e.g., Hoff, Laursen & Tardif, 2002; McLoyd, 1990; Pinderhughes & Le, 2008). Specifically, it was predicted that the hypothesized variability in parenting style within African American single-mother families would be associated with diversity in family SES, defined here as both income and education, such that lower SES families will be more likely to fall into authoritarian/harsh or no-nonsense parenting styles and higher SES families will be more likely to fall into the authoritative/Positive parenting style. Finally, it was expected that SES, specifically income, would moderate the link between parenting style and externalizing problems. Research suggests that the relatively higher control characteristic of no-nonsense parenting may serve a protective role in more impoverished circumstances, particularly in the context of moderate warmth (Brody & Flor, 1998), but high control with moderate warmth may be detrimental for higher income children. Accordingly, it was expected that the link between no-nonsense parenting and externalizing problems would be stronger in higher, rather than lower, income African American singlemother families.

# Method

#### Overview

Analyses were conducted using data from the African American Families and Children Together (AAFACT) Project, which examined the role of extended family in African American single-mother families. African American single mother-headed families with an 11- to 17-year-old adolescent were recruited from counties across central North Carolina. 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).

## **Participants**

Participants were 194 African American single mother-youth dyads (see Table 1) who participated in AAFACT. On average adolescents were 13 years old (SD = 1.59, range = 11–17 years), and gender was about evenly split (54.6% boys). Mothers on average were 38 years old (SD = 6.67, range = 26–64 years). On average, participating mothers reported having 2.26 children (SD = 1.28, range = 1–8). When more than one child fell within the eligible age range (11–17 years), parents were instructed to include the oldest child in the study. Consistent with national trends for African American single-mother families, half the mothers reported that they were "never married" (51%) (The Annie E. Casey Foundation, 2012). Half of the mothers completed some college or vocational school (51%), and the majority (82%) were employed. With regard to income, one family reported a value for annual income (i.e., \$120,000) that was greater than two standard deviations above the next highest income (i.e., \$85,000) for families in the study. In turn, to maintain maximum information and income variability, but to reduce the potential impact of this extreme value, their income was trimmed from \$120,000 to \$85,000 (see Kennedy, Lakonishok, & Shaw, 1992, for precedent).

The resulting adjusted income continued to be relatively diverse (M= \$29,549; SD= \$16,665; range = \$0-\$85,000) in contrast to many studies of African American families, single-mother families in particular, which tend to include very low-income families (e.g., M = \$12,216; range = \$2,532-\$62,412; Brody & Flor, 1998; McLoyd, Jayaratne, Ceballo, & Borquez, 1994). Specifically, approximately 11% of the sample made less than \$10,000 annually, 35% of the sample made between \$10,000-29,999 annually, 45% of the sample made between \$30,000-49,999, and 9% of the sample made more than \$50,000 annually.

#### **Procedure**

The Behavioral Institutional Review Board reviewed and approved all procedures. Mothers and youth provided consent and assent, respectively. Participants decided whether assessments were conducted at community sites or in the home. Interviews were completed on laptop computers using Audio Computer-Assisted Self-Interviewing (ACASI) software to decrease the potential for biased responses and to maximize confidentiality. Respondents listened through earphones to prerecorded questions and recorded their answers via

computer mouse and keyboard. Interviews took approximately 60 to 90 minutes to complete. Families were compensated \$25 for their participation.

#### Measures

**Demographics**—Mothers completed information about themselves (e.g., education and age), their child (e.g., adolescent's age), and their family (e.g., household income). Mothers reported their household income in the past year before taxes and their amount of completed schooling, on a 7-point scale ranging from 1 (less than high school) to 7 (graduate, law, or medical school degree).

**SES**—Mothers reported their education level (i.e., less than high school; some high school; high school diploma/GED; some college or vocational school; college degree; some graduate, law, or medical school; graduate, law, or medical school degree) and household income (i.e., annual income, before taxes).

**Parenting style**—Caregiver-report measures of parenting were selected based on those used in prior research with African American and single-mother families with adequate reliability and validity and in total include a broad range of items thought to be representative of the constructs of warmth/responsiveness and control/demandingness (e.g., Bean, Barber, & Crane, 2006; Kincaid, Jones, Sterrett, & McKee, 2012; Kotchick, Dorsey, & Heller, 2005):

First, the Interaction Behavior Questionnaire (IBQ; Prinz, Foster, Kent, & O'Leary, 1979) includes the 20 items with the highest phi coefficients and the highest item-to-total correlations with the 75 items in the long form IBQ. The short form correlates .96 with the longer version. Sample items (True or False) include, "For the most part, he or she likes to talk to you" and "This child usually listens to what you have to tell him or her." Scores in this study ranged from 0 to 20, with higher scores indicating greater warmth and support. In addition, Stattin and Kerr's (2000) measure includes 9 items on a 5-point scale ranging from 0 (Not at All) to 4 (Always)]. Items assess how much mothers know about "what this child does during his or her free time" and "when this child has an exam or assignment due at school." Higher scores indicate more maternal monitoring. Finally, the Parental Knowledge Scale (PKS; Stattin & Kerr, 2000) includes 3 subscales (Child Disclosure, Parental Solicitation, Parental Control); however, only the 5 items, on a 5-point scale ranging from 0 (Not at All) to 4 (Always), from the Parental Solicitation and Parental Control subscales were combined to create a measure of knowledge. Sample items from Parental Solicitation include, "Do you talk with this child's friends when they come to your home?" and "In the last month, how often have you started a conversation with this child about his or her free time?" Items such as, "Does this child need to ask you before he or she can decide with friends what to do on a Saturday night?" and "Do you require that this child tell you where he or she is at night, whom he or she is with, and what they do together?" measure parental control. Each of the scales had adequate psycho-metrics in this sample (IBQ  $\alpha = .87$ ; Parental Monitoring  $\alpha = .79$ ; PKS  $\alpha = .74$ ); however, item level scores, rather than scale scores, were used in analyses consistent with the person-oriented approach (see Plan of Analyses).

**Youth externalizing**—The Aggression and Conduct Problems subscales of the Child Behavior Checklist (CBCL; Achenbach, 1991) assessed externalizing behaviors in the past 6 months. Mothers completed 32 items, on a 3-point scale ranging from 0 (*not true*) to 2 (*very or often true*), and the two subscales were combined to create a total score with higher scores indicating more aggression and conduct problems ( $\alpha = .86$ ) (Achenbach, 1991).

#### Plan of Analyses

Preliminary analyses examined the association between sociodemographic and outcome variables. Then, to identify the parenting styles that emerged within African American single-mother families, a three-phase process was used.

First, experts in child clinical psychology and/or African American families rated items from parenting measures with the aim of limiting the number of items entered into the person-oriented analyses, to maintain an appropriate participant to variable ratio. The expert panel rated items from the three parenting measures, blind to the participants' responses and the measures. The expert ratings guided a theory-driven and culturally relevant identification of items. Experts reviewed an overview of the parenting literature, including definitions of Baumrind's (1971) constructs (i.e., responsiveness and demandingness) and warmth and control and then decided how well 39 items from these three measures assessed two constructs: warmth/responsiveness and control/demandingness. Experts chose from the following answer options modeled after the methods in Jensen et al. (2007): *0- Definitely not; 1- Probably not; 2- Kind of; more than not; and 3- Excellent match.* These options excluded a middle category to make items easier to rate and improve rater agreement.

Second, latent class analysis (LCA) implemented by the Latent Gold Program (Vermunt & Magidson, 2005) determined which items to retain as indicators for parenting constructs based on the expert ratings. Following the framework initially proposed by McCutcheon (1987) and employed by Jensen et al. (2007), we fit an a priori two-class model to the expert ratings, empirically sorting the items into good indicators of the target construct or not. The LCA grouped the items based on expert ratings of "match to construct," not frequency of endorsement or patterns of covariation in the participant family responses.

Third, cluster analysis, using Hair and Black's (2000) six-stage method, identified homogenous subgroups based on standardized variates made from the participant families' responses, with the goal of maximizing Gower's distance between subgroups and minimizing the variance within subgroups (Hair & Black, 2000). Rather than using LCA for the third phase, cluster analyses were used to take a more exploratory approach given the lack of consensus in the literature and relative dearth of research on African American single-mother parenting. In addition, cluster analysis allowed us to examine levels (e.g., high/low) and shape (e.g., dispersion) of the parenting dimensions (e.g., warmth and control). A combination of hierarchical (i.e., Ward's method; Ward, 1963) and nonhierarchical (i.e., *k* means) analyses empirically derived the clusters. The centroids derived in the hierarchical analysis became seed points in the second (nonhierarchical) cluster analysis, as well as the number of clusters derived by investigating cluster trees and pseudo-*T*-squared coefficients. To derive the final cluster solution, a *k*-means cluster analysis with an a priori three-cluster solution was conducted. Cluster means of the two

constructs (warmth and control) and correspondence with theory guided labeling of the final clusters.

Given the multicategory nominal outcome (parenting style clusters generated), a multinomial logistic regression model tested the hypothesized link between family SES and parenting style. Finally, a multiple regression model tested the moderating effect of SES on the relationship between parenting style and externalizing behavior using the parenting cluster solutions, which were contrast coded to compare each parenting style with the others. Models investigated the overall average associations of parenting style and income on externalizing behavior separately, as well as the relationship between parenting style and externalizing behavior, holding income constant at the mean.

#### Results

## **Preliminary Analyses**

Tables 1 and 2 present the association between sociodemographic and outcome variables. Ninety-two percent of the cases had complete data (i.e., 178 out of 194 cases) on the primary constructs. Single imputation was used implementing the expectation-maximization (EM) algorithm to estimate missing values, because only a relatively small proportion of data was missing (range from 0.01% to 4.00%). Single imputation provides consistent estimates of parameter values, but standard errors may be affected because of overestimation of sample sizes (Schafer & Graham, 2002). Because cluster analyses do not rely on or use precision estimates, the potential standard error biases should not influence results.

### **Identification of Parenting Style**

LCA identified which items the expert ratings showed were clear indicators of the target construct. For this purpose, LCA fits a two-class solution (McCutcheon, 1987). Items from the IBQ (Prinz et al., 1979), a measure of maternal warmth, and from the PKS (Kerr & Stattin, 2000), a measure of maternal knowledge, were identified as part of the maternal warmth construct. Items from both the PKS, as well as a measure of maternal monitoring (Stattin & Kerr, 2000), represented maternal control.

Seventeen of the 39 items were classified as measuring control. Examples of control variates include "You and this child compromise or reach an agreement during arguments" and "This child tells you he or she thinks you are unfair." These variables had at least a 95% probability of being assigned to the control latent class. In addition, 13 items were classified as measuring warmth, with the probabilities of being assigned to the warmth latent class ranging from 77% to 100%. Examples of warmth variates include: "How often do you know whom this child has as friends during his or her free time?" and "How often do you know what this child spends his or her money on?" One item, "In the last month, how often have you started a conversation with this child about his or her free time?" was classified in both the warmth and control clusters; we removed it to increase the differentiation between the two constructs. Therefore, subsequent analyses retained 12 warmth ( $\alpha = .61$ ) and 16 control items ( $\alpha = .96$ ).

Cluster analyses—Ward's method of agglomeration with Gower's distance determined the number of clusters and cluster seeds for the *k*-means analysis of participant families' responses. This procedure focused on the 28 items selected in the expert rating LCAs on two parenting behaviors (warmth and control). Prior to the analyses, scores on the parenting variates were standardized to ensure that classification would not be influenced by differences in scale variability. Because a definitive approach to determining the number of clusters is not agreed upon (Milligan & Cooper, 1985), we used a number of approaches. First, cluster trees and pseudo-*T*-squared coefficients helped determine an appropriate number of clusters. Cluster trees indicated that there were between three and five clusters of African American single-mother parenting styles. When examining the pseudo-*T*-squared coefficients, the number of clusters is determined based on the relative stability in change in the coefficient from one stage to the next (Hair & Black, 2000). Based on this criterion, the three-cluster solution, including the cluster seeds, was carried forward into the nonhierarchical or *k*-means analysis.

Next a k-means cluster analysis with an a priori three-cluster solution used the cluster centroids from the Ward's method analysis as the cluster seeds. To profile the clusters, the average of each construct, warmth and control, was found. The three clusters that emerged were: 1) Cluster 1, labeled *authoritative* (n = 71), characterized by the highest scores on the warmth (M = 0.78, SD = 0.21) and control (M = 0.68, SD = 0.55) constructs; 2) Cluster 2, labeled *permissive* (n = 72), characterized by moderately above average levels of warmth (M = 0.22, SD = 0.38) and moderately low levels of control (M = -0.40, SD = 0.86); 3) Cluster 3, labeled *disengaged*, the least prevalent cluster (n = 51), characterized by relatively low scores on warmth (M = -1.40, SD = 0.83) and moderately low scores on control (M = -0.38, SD = 1.16). Cluster profiles are depicted in Figure 1.

### **Link Between SES and Parenting Styles**

A multinomial logistic regression assessed the relation between maternal education and income (SES) and the empirically derived parenting clusters. Results indicated that when education and income were entered together in the model, there was not a statistically significant relation between these predictors and parenting style,  $\chi^2(4) = 8.29$ , p = .08. In addition, neither education,  $\chi^2(2) = 5.28$ , p = .07, nor income,  $\chi^2(2) = 1.09$ , p = .58, were significant predictors of parenting style. The overall model and the association between education and parenting style, however, approached statistical significance (i.e., p < .10).

To elucidate these marginal patterns, post hoc analyses were conducted to obtain the model-implied probabilities of being classified in each derived parenting cluster. First, nine subpopulations were defined to represent the sample. Values of relatively low, medium, and high income (\$10,000, \$30,000, and \$50,000, respectively) and education (high school/GED, college degree, and more than college degree, respectively) were selected to best capture the majority of the sample and variation within the sample. Second, the parameter estimates from the multinomial logistic regression model were used to calculate the model-implied probability of falling into each parenting style at each unique combination of education and income. The relationships implied by the multinomial logistic regression model parameters suggested that there is a substantial model effect within this sample (see

Table 3). That is, given the parameter estimates from the multinomial logistic regression, at the highest income (\$50,000) and education level (graduate, law, or medical school degree) the likelihood of falling in the authoritative parenting cluster was approximately 80%, whereas at the lowest income (\$10,000) and education level (high school diploma/GED) the likelihood of falling in either of the permissive or disengaged was more than 65%.

#### SES, Parenting Styles, and Externalizing Problems

Finally, a multiple regression model examined the relationship between the empirically derived parenting clusters, maternal SES, and externalizing behavior (see Table 4 for significance levels and t values). The third hypothesis initially pertained to no-nonsense parenting in particular; however, as noted above, this parenting cluster was not obtained. Accordingly, a post hoc decision was made to examine the interrelationship between all of the empirically derived parenting clusters, SES, and externalizing behavior. In addition, both maternal income and education were included in the second analysis to examine the interrelationship of each with parenting styles; however, given that income and education were correlated (r= .44, p< .001), only income, which prior work suggests may be a more powerful indicator of SES than education, was included in this model (Cirino et al., 2002; Duncan, Daly, McDonough, & Williams, 2002).

Overall, parenting style, income, and the interaction between parenting style and income accounted for approximately 32% of the variance in externalizing behavior, F(5, 188) = 17.82, p < .0001. Both parenting style and income were statistically significantly associated with externalizing behavior, however, the interaction was not statistically significant. Given this pattern of findings, we explored main effects in more detail.

Holding income constant at its mean (\$29,549), parenting style was statistically significantly associated with externalizing behavior, R(2, 188) = 37.31, p < .0001. For authoritative parenting the modeled average externalizing score is 3.38, for permissive parenting the modeled average externalizing score is 5.71, and for disengaged parenting the modeled average externalizing score is 12.06. The combined effect of parenting style accounted for approximately 28% of the variance in externalizing behavior. Across parenting clusters, the average association between income and externalizing behavior was -0.79, indicating that a \$10,000 increase in income is associated with a 0.79 unit decrease in externalizing behavior, R(1, 188) = 10.39, p = .002. Maternal income accounted for about 4% of the variance in externalizing behavior. Finally, the overall interaction was not significant, R(2, 188) = 0.36, p = .70.

#### Discussion

This study used a person-oriented approach to examine variability in African American single-mother parenting style and, in turn, the link between variability in derived parenting styles and youth outcomes in the context of SES. Results confirmed the promise of a person-

 $<sup>^1</sup>$ A separate analysis was run with education to ensure that similar associations were found for both income and education. The same pattern of findings emerged, such that the overall model was significant, R(5, 188) = 16.88, p < .0001 and accounted for 31% of the variance in externalizing behavior, parenting style significantly predicted externalizing behavior, R(2, 188) = 32.07, p < .0001, and the interaction was not significant, R(2, 188) = 0.35, p = .70.

oriented approach for potentially capturing richer variability in parenting styles *within* African American single-mother families; however, the empirically derived parenting styles, as well as the links between parenting styles, SES, and externalizing problems, differed to some extent from what was hypothesized.

With regard to parenting style, the majority of mothers reported engaging in relatively high levels of both warmth and control. The finding regarding control is consistent with previous work with both African American and single mothers (e.g., Baumrind, 1997; Brody & Flor, 1998; McLoyd, 1990); however, the relatively high level of warmth reported is inconsistent with previous literature on African American single-mother families that has relied on a variable, rather than person-oriented, approach (e.g., Baumrind, 1972; Baumrind, 1997; Hashima & Amato, 1994). It is important to note that maternal warmth has traditionally been associated with a myriad of positive outcomes for youth, such as academic achievement, less aggression, and social competence (e.g., Deater-Deckard, Dodge, Bates, & Pettit, 1996; Dodge et al., 1994). As such, identifying variability in warmth, as well as that most African American single mothers in this sample engaged in relatively high, rather than low, levels of warmth, may suggest the need to recalibrate the conceptualization of parenting within African American single-mother families (Hill, 2006).

Despite the overall high levels of mother reported warmth and control, cluster analyses highlighted variability in the relative levels of these two domains between families in the sample, resulting in derived categories or styles we labeled: authoritative; permissive; and disengaged. In fact, more than a third of the sample engaged in an authoritative parenting style, which has long been considered optimal for youth outcomes, regardless of sociocontextual variables (e.g., Deater-Deckard et al., 1996; Dodge et al., 1994; McGroder, 2000). Contrary to the literature, the parenting styles considered to be the most prevalent among African American single mothers, authoritarian/harsh, as well as no nonsense, were not derived in the current study (Baumrind, 1972; Baumrind, 1997; Hashima & Amato, 1994).

The discrepancy between the extant literature on African American parenting and the current findings may be due to several factors: (a) research design, (b) definitions of constructs, and (c) sampling strategies (Tamis-LeMonda, Briggs, McClowry, & Snow, 2008). First, the use of an expert panel to identify culturally relevant items from the parenting measures may have led to different and, perhaps, more delineated representations of warmth and control in this population. Previous between-groups research using existing measures of parenting may miss the opportunity to capture the nuances of these constructs across cultures, including race and SES. The differences in parenting previously reported, therefore, may at least in a part be a result of measurement rather than differences in quality of parenting (Tamis-LeMonda et al., 2008; Whiteside-Mansell, Bradley, Little, Corwyn, & Spiker, 2001). Second and relatedly, differences in operational definitions of control across studies may in part lead to the inconsistencies in the literature in terms of parenting typologies, as well as the relationship between certain parenting styles and youth outcomes. For example, the domain of control can be defined by several related yet somewhat distinct constructs, including harsh discipline, monitoring, intrusiveness, and punitiveness (Ispa et al., 2004). The current analyses used items from monitoring and knowledge scales to measure control, because expert ratings identified these items as the most culturally relevant for this population and

these items most closely relate to the original conceptualization of control/demandingness (Baumrind, 1971). It is possible that the inclusion of different items from other measures, including items more explicitly tapping the constructs of harsh discipline and intrusiveness, would have yielded different results that may have been more consistent with the previous literature. Third, consistent sampling biases in the African American and single-mother parenting literature may account for the discrepant findings. Like European American and two-parent-headed households, African American single mothers adjust their parenting practices to match their ecological context, including SES and family structure (Jones, Shaffer, Forehand, Brody, & Armistead, 2003; Tamis-LeMonda et al., 2008). Parenting styles have typically been investigated in very low-income (e.g., \$12,216; range = \$2,532-\$62,412) African American single-mother samples (e.g., Hoff et al., 2002; McLoyd, 1990; Pinderhughes & Le, 2008). Given that the current sample had fewer families falling within this very low-income range (i.e., approximately 25 families), it may have reduced the likelihood that these parenting style clusters would have emerged. More recent work on African American parenting challenges existing classifications of African American and single-mother parenting by accounting for individual contextual factors and including a more diverse sample (Tamis-LeMonda et al., 2008).

Moving beyond the parenting clusters, existing literature tends to focus on marital status and race as predictors of parenting (Baumrind, 1972; Baumrind, 1997; Hashima & Amato, 1994); yet, this study suggests that other contextual variables, primarily SES, may be associated with parenting within this sample of African American single-mother families. When post hoc analyses were conducted to probe the marginal significance of the overall model, the probabilities obtained suggested that as maternal income decreased, the probability of engaging in authoritative parenting decreased, whereas the probability of engaging in both permissive and disengaged parenting styles increased. Consistent with the literature (e.g., Conger & Donnellan, 2007; Hill, 2006; McLoyd, 1990), it is possible that lower income African American single-mother families have more demands, such as more hours at work relative to higher income families that prevent mothers from engaging in parental control, such as monitoring their children after school. It is interesting that as education increased in this dataset, the probability of engaging in authoritative parenting behaviors increased, while the likelihood of engaging in disengaged parenting decreased, and the probability of engaging in permissive parenting did not change. Although levels of maternal control are roughly equivalent between the permissive and disengaged parenting clusters, the level of warmth substantially differed between these two parenting styles (i.e., moderately high warmth for permissive parenting and low warmth for disengaged families). This trend, however, needs to be interpreted cautiously. Previous research suggests that education level in particular may be a better predictor of warmth than income (Davis-Kean, 2005; Klebanov, Brooks-Gunn, & Duncan, 1994). It may be that increased education and, in turn, increased coping strategies may help mothers exhibit warmth even in the face of life stressors, such as financial strain and behavior problems (Judge, 1998; Klebanov et al., 1994; Lee, 2003).

Results also begin to reveal socioeconomic and parenting contexts associated with externalizing behavior. As predicted, results indicate that adolescents with mothers who engage in authoritative parenting were more likely to have below average externalizing

behavior, whereas youth from homes where mothers engage in permissive or disengaged parenting styles were more likely to have externalizing behaviors above the mean. The decreased levels of control in both the permissive and disengaged parenting styles may result in increased levels of acting out or aggressive behavior. It is possible that parents who fall within these two clusters do not exhibit controlling behaviors, such as monitoring, do not set limits on youth behavior, and negatively reinforce externalizing behavior or engage in inconsistent discipline. Moreover, parents who engage in permissive parenting may engage in behaviors that convey warmth, which, in turn, may be slightly more protective than disengaged parenting resulting in relatively lower levels of externalizing behaviors. Alternatively, disengaged parents may lack the supervision or behavioral control necessary to ameliorate or end youth problem behaviors (Baumrind, 1991; Kawabata, Alink, Tseng, van IJzendoorn, & Crick, 2011).

Finally, this study examined the main and interactive effects of income and parenting style on youth externalizing problems. There was a main effect of income on youth externalizing outcomes such that higher levels of income were associated with lower levels of externalizing behavior. This suggests that poverty may be associated with environments, such as homes that are less cognitively stimulating and dangerous neighborhoods, that are detrimental for youth psychological well-being, including increased externalizing behavior (Davis-Kean, 2005; Dearing, McCartney, & Taylor, 2006). Another possibility is that the relationship between income and externalizing behavior operates through compromised parenting (e.g., Conger & Donnellan, 2007; Cook, Roggman, & D'zatko, 2012; Hoff et al., 2002). Although the categorical parenting predictor prevented the examination of mediators, future research should examine parenting and other potential mechanisms. In contrast, income was not a significant moderator of the link between parenting style and externalizing problems. There are several reasons that this relationship might not be significant in this study. First, income may not be a moderator of the relationship between parenting style and externalizing behavior in African American single-mother families. Second, it could be the case that income moderates parenting styles that did not emerge in these analyses, such as no-nonsense parenting (Brody & Flor, 1998). Third, income may moderate this relationship over time, consistent with the family stress theory positing that chronic stressors related to poverty influence parenting and, in turn, child outcomes (e.g., Conger & Donnellan, 2007, Elder, Nguyen, & Caspi, 1985; García-Coll et al., 1996). It is possible that, given the crosssectional nature of the analyses, this relationship did not emerge.

As with all research, this study has limitations. First, as noted above, the cross-sectional nature of the analyses may have precluded the opportunity for income to emerge as a moderator; however, longitudinal research may also reveal the potential for bidirectionality in the links between parenting, SES, and externalizing problems (Bronfenbrenner, 1979; Cook et al., 2012; McLoyd, 1990). In addition, careful attention was given to allowing parenting styles to emerge that were representative of the range found within African American single-mother families, including using measures that have proven reliable and valid with African American single-mother samples and using the person-oriented approach with items from those scale; however, we relied on mother-report measures of parenting, which may be more susceptible to bias than observational measures and may increase the probability of associations given that mother report was also used to assess SES and

externalizing problems (Dishion, Li, Spracklen, Brown, & Haas, 1998; Hawes & Dadds, 2006). Third, confidence in the marginal findings and the empirically driven nature of some of the analyses will be bolstered if the findings are replicated in future work. Finally, given the importance and integral involvement of extended family and nonmarital coparents in African American single-mother child rearing, future research should include fathers and nonmarital coparents (e.g., grandparents and other extended family) in analyses of parenting style and investigate the joint effects of parenting style on youth outcomes (Hoeve, Dubas, Gerris, van der Laan, & Smeenk, 2011; Hoff et al., 2002; Jones et al., 2007; Jones, Forehand, Dorsey, Foster, & Brody, 2005).

This study also has strengths. First, this study focuses on youth between the ages of 11 and 16 years, a relatively understudied age range in the parenting literature, despite that it is critical period for promoting health and well-being in this risky developmental period (Tragesser, Beauvais, Swaim, Edwards, & Oetting, 2007). In addition, this study has focused on African American youth living in single-mother homes, who represent the majority (67%) of African American youth in this country (The Annie E. Casey Foundation, 2012; Barrett & Turner, 2005) and, in turn, has the capacity to inform work on this relatively underrepresented group. Third, the current study included a relatively broad range of SES and, in turn, is more generalizable to families than research that focuses narrowly on low-income families (Brody & Flor, 1998; McLoyd et al., 1994) and/or confounds race and income (e.g., Hoff et al., 2002; McLoyd, 1990; Pinderhughes & Le, 2008). Finally, and perhaps most important, this study reverted back to the person-oriented approach used at the advent of the parenting literature (McGroder, 2000). This approach elucidated variability in African American single-mother parenting styles, which in turn, may better inform family focused interventions targeting this relatively un-derserved group.

In summary, although preliminary, our findings contribute to a growing body of basic and applied research that continues to highlight the need to move away from a one-size-fits-all approach to work with children and families. That is, consistent with calls for a more metasystems approach to children's mental health, our results highlight that youth and family functioning, including the central and proximal role of parenting, must be understood in context (Kazak et al., 2010). In spite of the findings from between-groups and variableoriented approaches, which suggest that one group may be more or less likely to engage in a particular parenting style than another group, our study suggests that it may be equally, if not more, important to measure and understand variability within group. In turn, these findings map onto the evidence-based practice literature that highlights the value of flexible use of treatment manuals or matching of treatment elements to the specific needs of children and families (e.g., Forehand, Miller, Armistead, Kotchick, & Long, 2004; Chorpita, Daleiden, & Weisz, 2005; Forehand, Dorsey, Jones, Long, & McMahon, 2010; Santiago, Kaltman, & Miranda, 2013). Finally, our findings may begin to inform policy. For example, relevant to the relative importance of education versus income in our findings in particular, current welfare policy provides financial support, while providing few incentives for continuing education. This remains the case despite research suggesting small increases in education substantially influence family environment and parenting, and result in more stable financial situations (Davis-Kean, 2005; Klebanov et al., 1994). Creating policies that support

educational growth for African American single mothers may lead to optimal parenting, and, in turn, promote youth well-being in the face of multiple risk factors.

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#### References

- Achenbach, TM. Manual for the Youth Self-Report and 1991 profile. Burlington: Department of Psychiatry, University of Vermont; 1991.
- The Annie E. Casey Foundation. Kids count data book: State profiles of child well-being. Baltimore, MD: Author; 2012. Retrieved from http://www.kidscount.org
- Barrett AE, Turner RJ. Family structure and mental health: The mediating effects of socioeconomic status, family process, and social stress. Journal of Health and Social Behavior. 2005; 46:156–169. http://dx.doi.org/10.1177/002214650504600203. [PubMed: 16028455]
- Baumrind D. Current patterns of parental authority. Developmental Psychology. 1971; 4:1–103. http://dx.doi.org/10.1037/h0030372.
- Baumrind D. An exploratory study of socialization effects on black children: Some Black–White comparisons. Child Development. 1972; 43:261–267. http://dx.doi.org/10.2307/1127891. [PubMed: 5027666]
- Baumrind D. The influence of parenting style on adolescent competence and substance use. The Journal of Early Adolescence. 1991; 11:56–95. http://dx.doi.org/10.1177/0272431691111004.
- Baumrind D. Necessary distinctions. Psychological Inquiry. 1997; 8:176–182. http://dx.doi.org/10.1207/s15327965pli0803\_2.
- Bean RA, Barber BK, Crane DR. Parental support, behavioral control, and psychological control among African American youth: The relationships to academic grades, delinquency, and depression. Journal of Family Issues. 2006; 27:1335–1355. http://dx.doi.org/10.1177/0192513X06289649.
- Brody GH, Flor DL. Maternal resources, parenting practices, and child competence in rural, single-parent African American families. Child Development. 1998; 69:803–816. http://dx.doi.org/10.1111/j.1467-8624.1998.tb06244.x. [PubMed: 9680686]
- Bronfenbrenner U. Contexts of child rearing: Problems and prospects. American Psychologist. 1979; 34:844–850. http://dx.doi.org/10.1037/0003-066X.34.10.844.
- Chorpita BF, Daleiden EL, Weisz JR. Modularity in the design and application of therapeutic interventions. Applied & Preventive Psychology. 2005; 11:141–156. http://dx.doi.org/10.1016/j.appsy.2005.05.002.
- Cirino PT, Chin CE, Sevcik RA, Wolf M, Lovett M, Morris RD. Measuring socioeconomic status: Reliability and preliminary validity for different approaches. Assessment. 2002; 9:145–155. http://dx.doi.org/10.1177/10791102009002005. [PubMed: 12066829]
- Conger RD, Donnellan MB. An interactionist perspective on the socioeconomic context of human development. Annual Review of Psychology. 2007; 58:175–199. http://dx.doi.org/10.1146/ annurev.psych.58.110405.085551.
- Cook GA, Roggman LA, D'zatko K. A person-oriented approach to understanding dimensions of parenting in low-income mothers. Early Childhood Research Quarterly. 2012; 27:582–595. http://dx.doi.org/10.1016/j.ecresq.2012.06.001.

Costello EJ, Keeler GP, Angold A. Poverty, race/ethnicity, and psychiatric disorder: A study of rural children. American Journal of Public Health. 2001; 91:1494–1498. http://dx.doi.org/10.2105/AJPH.91.9.1494. [PubMed: 11527787]

- Duncan GJ, Daly MC, McDonough P, Williams DR. Optimal indicators of socioeconomic status for health research. American Journal of Public Health. 2002; 92:1151–1157. http://dx.doi.org/ 10.2105/AJPH.92.7.1151. [PubMed: 12084700]
- Darling N, Steinberg L. Parenting style as context: An integrative model. Psychological Bulletin. 1993; 113:487–496. http://dx.doi.org/10.1037/0033-2909.113.3.487.
- Davis-Kean PE. The influence of parent education and family income on child achievement: The indirect role of parental expectations and the home environment. Journal of Family Psychology. 2005; 19:294–304. http://dx.doi.org/10.1037/0893-3200.19.2.294. [PubMed: 15982107]
- Dearing E, McCartney K, Taylor BA. Within-child associations between family income and externalizing and internalizing problems. Developmental Psychology. 2006; 42:237–252. http://dx.doi.org/10.1037/0012-1649.42.2.237. [PubMed: 16569163]
- Deater-Deckard D, Dodge KA, Bates JE, Pettit GS. Physical discipline among African American and European American mothers: Links to children's externalizing behaviors. Developmental Psychology. 1996; 32:1065–1072. http://dx.doi.org/10.1037/0012-1649.32.6.1065.
- Dishion, TJ.; Li, F.; Spracklen, KM.; Brown, G.; Haas, E. Measurement of parenting practices in research on adolescent problem behavior: A multimethod and multitrait analysis. In: Ashery, RS.; Robertson, E.; Kumpfer, KK., editors. Drug abuse prevention through family interventions. Rockville, MD: National Institute on Drug Abuse; 1998. p. 260-293.(NIH Publication No. 99– 4135)
- Dodge KA, Pettit GS, Bates JE. Socialization mediators of the relation between socioeconomic status and child conduct problems. Child Development. 1994; 65:649–665. http://dx.doi.org/ 10.2307/1131407. [PubMed: 8013245]
- Eisenberg N, Zhou Q, Spinrad TL, Valiente C, Fabes RA, Liew J. Relations among positive parenting, children's effortful control, and externalizing problems: A three-wave longitudinal study. Child Development. 2005; 76:1055–1071. http://dx.doi.org/10.1111/j.1467-8624.2005.00897.x. [PubMed: 16150002]
- Elder GH Jr, Nguyen TV, Caspi A. Linking family hardship to children's lives. Child Development. 1985; 56:361–375. http://dx.doi.org/10.2307/1129726. [PubMed: 3987413]
- Forehand R, Dorsey S, Jones DJ, Long N, McMahon RJ. Adherence and flexibility: They can (and do) coexist! Clinical Psychology: Science and Practice. 2010; 17:258–264. http://dx.doi.org/10.1111/j. 1468-2850.2010.01217.x.
- Forehand R, Miller KS, Armistead L, Kotchick BA, Long N. The Parents Matter! Program: An introduction. Journal Of Child And Family Studies. 2004; 13:1–3. http://dx.doi.org/10.1023/B:JCFS.0000010508.98909.47.
- García Coll C, Lamberty G, Jenkins R, McAdoo HP, Crnic K, Wasik BH, Vázquez García H. An integrative model for the study of developmental competencies in minority children. Child Development. 1996; 67:1891–1914. http://dx.doi.org/10.2307/1131600. [PubMed: 9022222]
- García Coll, CT.; Meyer, EC.; Brillon, L. Ethnic and minority parenting. In: Bornstein, MH.; Bornstein, MH., editors. Handbook of parenting, Vol. 2: Biology and ecology of parenting. Hillsdale, NJ, England: Lawrence Erlbaum Associates, Inc; 1995. p. 189-209.
- Hair, JF.; Black, WC. Cluster analysis. In: Grimm, LG.; Yarnold, PR., editors. Reading and understanding MORE multivariate statistics. Washington, DC: American Psychological Association; 2000. p. 147-206.
- Hashima PY, Amato PR. Poverty, social support, and parental behavior. Child Development. 1994; 65:394–403. http://dx.doi.org/10.2307/1131391. [PubMed: 8013229]
- Hawes DJ, Dadds MR. Assessing parenting practices through parent-report and direct observation during parent training. Journal of Child and Family Studies. 2006; 15:554–567. http://dx.doi.org/ 10.1007/s10826-006-9029-x.
- Hill NE. Disentangling ethnicity, socioeconomic status, and parenting: Interactions, influences and meaning. Vulnerable Children and Youth Studies. 2006; 1:114–124. http://dx.doi.org/10.1080/17450120600659069.

Hoeve M, Dubas JS, Gerris JRM, van der Laan PH, Smeenk W. Maternal and paternal parenting styles: Unique and combined links to adolescent and early adult delinquency. Journal of Adolescence. 2011; 34:813–827. http://dx.doi.org/10.1016/j.adolescence.2011.02.004. [PubMed: 21397317]

- Hoff, E.; Laursen, B.; Tardif, T. Socioeconomic status and parenting. In: Bornstein, MH., editor. Handbook of parenting: Vol. 2. Biology and ecology of parenting. Mahwah, NJ: Erlbaum; 2002. p. 231-252.
- Huizinga, D.; Thornberry, T.; Knight, K.; Lovegrove, P. Disproportionate minority contact in the juvenile justice system: A study of differential minority arrest/referral to court in three cities. A report to the Office of Juvenile Justice and Delinquency Prevention. Washington, DC: U. S. Department of Justice; 2007.
- Ispa JM, Fine MA, Halgunseth LC, Harper S, Robinson J, Boyce L, ... Brady-Smith C. Maternal intrusiveness, maternal warmth, and mother-toddler relationship outcomes: Variations across low-income ethnic and acculturation groups. Child Development. 2004; 75:1613–1631. http://dx.doi.org/10.1111/j.1467-8624.2004.00806.x. [PubMed: 15566369]
- Jensen PS, Youngstrom EA, Steiner H, Findling RL, Meyer RE, Malone RP, ... Vitiello B. Consensus report on impulsive aggression as a symptom across diagnostic categories in child psychiatry: Implications for medication studies. Journal of the American Academy of Child & Adolescent Psychiatry. 2007; 46:309–322. http://dx.doi.org/10.1097/chi.0b013e31802f1454. [PubMed: 17314717]
- Jones DJ, Forehand R, Dorsey S, Foster S, Brody G. Coparent support and conflict in African American single mother-headed families: Associations with maternal and child psychosocial functioning. Journal of Family Violence. 2005; 20:141–150. http://dx.doi.org/10.1007/ s10896-005-3650-0.
- Jones DJ, Shaffer A, Forehand R, Brody G, Armistead LP. Coparent conflict in single mother-headed African American families: Do parenting skills serve as a mediator or moderator of child psychosocial adjustment? Behavior Therapy. 2003; 34:259–272. http://dx.doi.org/10.1016/ S0005-7894(03)80016-3.
- Jones DJ, Zalot A, Foster S, Sterrett E, Chester C. Childrearing in African American single mother families: A coparenting framework. Journal of Child and Family Studies. 2007; 16:671–683. http://dx.doi.org/10.1007/s10826-006-9115-0.
- Judge SL. Parental coping strategies and strengths in families of young children with disabilities. Family Relations. 1998; 47:263–268. http://dx.doi.org/10.2307/584976.
- Kawabata Y, Alink LRA, Tseng W, van IJzendoorn MH, Crick NR. Maternal and paternal parenting styles associated with relational aggression in children and adolescents: A conceptual analysis and meta-analytic review. Developmental Review. 2011; 31:240–278. http://dx.doi.org/10.1016/j.dr. 2011.08.001.
- Kazak AE, Hoagwood K, Weisz JR, Hood K, Kratochwill TR, Vargas LA, Banez GA. A meta-systems approach to evidence-based practice for children and adolescents. American Psychologist. 2010; 65:85–97. http://dx.doi.org/10.1037/a0017784. [PubMed: 20141264]
- Kennedy D, Lakonishok J, Shaw WH. Accommodating outliers and nonlinearity in decision models. Journal of Accounting, Auditing, & Finance. 1992; 7:161–190.
- Kerr M, Stattin H. What parents know, how they know it, and several forms of adolescent adjustment: Further support for a reinterpretation of monitoring. Developmental Psychology. 2000; 36:366–380. http://dx.doi.org/10.1037/0012-1649.36.3.366. [PubMed: 10830980]
- Kilgore K, Snyder J, Lentz C. The contribution of parental discipline, parental monitoring, and school risk to early-onset conduct problems in African American boys and girls. Developmental Psychology. 2000; 36:835–845. http://dx.doi.org/10.1037/0012-1649.36.6.835. [PubMed: 11081706]
- Kincaid C, Jones DJ, Sterrett E, McKee L. A review of parenting and adolescent sexual behavior: The moderating role of gender. Clinical Psychology Review. 2012; 32:177–188. http://dx.doi.org/10.1016/j.cpr.2012.01.002. [PubMed: 22366393]
- Klebanov PK, Brooks-Gunn J, Duncan GJ. Does neighborhood and family poverty affect mothers' parenting, mental health, and social support? Journal of Marriage and the Family. 1994; 56:441–455. http://dx.doi.org/10.2307/353111.

Kotchick BA, Dorsey S, Heller L. Predictors of parenting among African American single mothers: Personal and contextual factors. Journal of Marriage and Family. 2005; 67:448–460. http://dx.doi.org/10.1111/j.0022-2445.2005.00127.x.

- Le HN, Ceballo R, Chao R, Hill NE, Murry VM, Pinderhughes EE. Excavating culture: Disentangling ethnic differences from contextual influences in parenting. Applied Developmental Science. 2008; 12:163–175. http://dx.doi.org/10.1080/10888690802387880. [PubMed: 24043923]
- Lee K. Maternal coping skills as a moderator between depression and stressful life events: Effects on children's behavioral problems in an intervention program. Journal of Child and Family Studies. 2003; 12:425–437. http://dx.doi.org/10.1023/A:1026064007253.
- McCutcheon, AL. Latent class analysis. Vol. 64. Thousand Oaks, CA: Sage; 1987.
- McGroder SM. Parenting among low-income, African American single mothers with preschool-age children: Patterns, predictors, and developmental correlates. Child Development. 2000; 71:752–771. http://dx.doi.org/10.1111/1467-8624.00183. [PubMed: 10953941]
- McLoyd VC. The impact of economic hardship on black families and children: Psychological distress, parenting, and socioemotional development. Child Development. 1990; 61:311–346. http://dx.doi.org/10.2307/1131096. [PubMed: 2188806]
- McLoyd VC, Jayaratne TE, Ceballo R, Borquez J. Unemployment and work interruption among African American single mothers: Effects on parenting and adolescent socioemotional functioning. Child Development. 1994; 65:562–589. http://dx.doi.org/10.2307/1131402. [PubMed: 8013240]
- McWayne CM, Owsianik M, Green LE, Fantuzzo JW. Parenting behaviors and preschool children's social and emotional skills: A question of the consequential validity of traditional parenting constructs for low-income African Americans. Early Childhood Research Quarterly. 2008; 23:173–192. http://dx.doi.org/10.1016/j.ecresq.2008.01.001.
- Milligan GW, Cooper MC. An examination of procedures for determining the number of clusters in a data set. Psychometrika. 1985; 50:159–179. http://dx.doi.org/10.1007/BF02294245.
- Murry VM, Bynum MS, Brody GH, Willert A, Stephens D. African American single mothers and children in context: A review of studies on risk and resilience. Clinical Child and Family Psychology Review. 2001; 4:133–155. http://dx.doi.org/10.1023/A:1011381114782. [PubMed: 11771793]
- Pinderhughes EE, Le HN. Introduction to excavating culture, [Special issue]. Applied Developmental Science. 2008; 12:161–162. http://dx.doi.org/10.1080/10888690802387765.
- Power TG, Sleddens EF, Berge J, Connell L, Govig B, Hennessy E, ... St George SM. Contemporary research on parenting: Conceptual, methodological, and translational issues. Childhood Obesity. 2013; 9:87–94.
- Prinz RJ, Foster S, Kent RN, O'Leary KD. Multivariate assessment of conflict in distressed and nondistressed mother-adolescent dyads. Journal of Applied Behavior Analysis. 1979; 12:691–700. http://dx.doi.org/10.1901/jaba.1979.12-691. [PubMed: 541311]
- Santiago CD, Kaltman S, Miranda J. Poverty and mental health: How do low-income adults and children fare in psychotherapy? Journal of Clinical Psychology. 2013; 69:115–126. http://dx.doi.org/10.1002/jclp.21951. [PubMed: 23280880]
- Schafer JL, Graham JW. Missing data: Our view of the state of the art. Psychological Methods. 2002; 7:147–177. http://dx.doi.org/10.1037/1082-989X.7.2.147. [PubMed: 12090408]
- Smith KE, Landry SH, Swank PR. The influence of early patterns of positive parenting on children's preschool outcomes. Early Education and Development. 2000; 11:147–169. http://dx.doi.org/10.1207/s15566935eed1102\_2.
- Stattin H, Kerr M. Parental monitoring: A reinterpretation. Child Development. 2000; 71:1072–1085. http://dx.doi.org/10.1111/1467-8624.00210. [PubMed: 11016567]
- Tamis-LeMonda CS, Briggs RD, McClowry SG, Snow DL. Challenges to the study of African American parenting: Conceptualization, sampling, research approaches, measurement, and design. Parenting: Science and Practice. 2008; 8:319–358. http://dx.doi.org/10.1080/15295190802612599.
- Tragesser SL, Beauvais F, Swaim RC, Edwards RW, Oetting ER. Parental monitoring, peer drug involvement, and marijuana use across three ethnicities. Journal of Cross-Cultural Psychology. 2007; 38:670–694. http://dx.doi.org/10.1177/0022022107308585.

Trifan TA, Stattin H, Tilton-Weaver L. Have authoritarian parenting practices and roles changed in the last 50 years? Journal of Marriage and Family. 2014; 76:744–761. http://dx.doi.org/10.1111/jomf. 12124.

- Valentino K, Nuttall AK, Comas M, Borkowski JG, Akai CE. Intergenerational continuity of child abuse among adolescent mothers: Authoritarian parenting, community violence, and race. Child Maltreatment. 2012; 17:172–181. http://dx.doi.org/10.1177/1077559511434945. [PubMed: 22287568]
- Vermunt, JK.; Magidson, J. Technical guide for Latent GOLD 4.0: Basic and advanced. Belmont, MA: Statistical Innovations; 2005.
- Ward JH Jr. Hierarchical grouping to optimize an objective function. Journal of the American Statistical Association. 1963; 58:236–244. http://dx.doi.org/10.1080/01621459.1963.10500845.
- Whiteside-Mansell L, Bradley RH, Little TD, Corwyn RF, Spiker D. An examination of cross-racial comparability of mother–child interaction among African American and Anglo American families. Journal of Marriage and Family. 2001; 63:767–778. http://dx.doi.org/10.1111/j. 1741-3737.2001.00767.x.

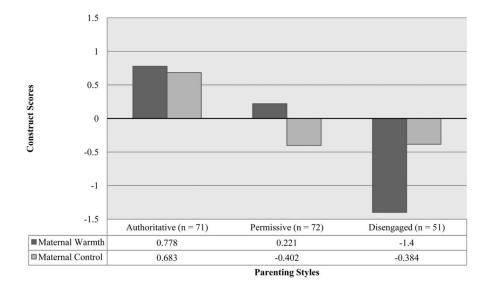


Figure 1. Three clusters of parenting styles in the full sample (N= 194).

Table 1

Demographics (N = 194) for the Overall Sample

		Mothers			Youth	
Variable	M	as	%	M	as	%
Age (years)	38.05	6.67		13.00	1.59	
Gender						
Female %			100.00			45.40
Male %			0.00			54.60
Education						
Less than high school			0.50			
Some high school			5.20			
High school or GED			8.80			
Some college			51.00			
College degree			20.10			
Some graduate school			6.20			
Graduate school			8.20			
Employment status $^a$			82.00			
Annual income	\$29,549	\$16,665				
Number of children	2.26	1.28				

Percentage employed.

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Table 2

Descriptive Statistics and Correlations Among Main Study Variables	ics and C	orrelatio	ns Among N	1air	Study	Variabl	es	
Variables	M	as	Range 1 2	_	2	8	4	w
1. Maternal warmth	14.34	2.94	4–18		0.51 **	0.14	0.21 **	0.51** 0.14 0.21** -0.56**
2. Maternal control	57.64	5.63	23–60			0.20**	0.24 **	0.24** -0.41**
3. Maternal income	\$29,549	\$16,665	\$29,549 \$16,665 \$0-\$85,000				0.44	-0.22
4. Maternal education								-0.25 **
5. Youth externalizing	6.49	09.9	0–35					

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 Table 3

 Modeled Probability (%) of Being Assigned to a Cluster Based on Maternal Education and Income

Predictors		Parenting style clusters				
Education	Income	Authoritative $(n = 71)\%$	Permissive $(n = 72)\%$	Disengaged $(n = 52)\%$		
HS/GED	10	34.37	22.36	43.27		
College	10	50.46	21.71	27.83		
More than college	10	65.53	18.65	15.83		
HS/GED	30	42.89	3.34	53.77		
College	30	62.48	3.22	34.30		
More than college	30	78.46	2.68	18.87		
HS/GED	50	44.30	0.41	55.29		
College	50	64.40	0.40	35.20		
More than college	50	80.42	0.33	19.25		

Note. Income is in the \$10,000. HS/GED = High school diploma or GED; College = college degree; More than college > graduate, law, or medical school degree.

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 Table 4

 Multiple Regression Analyses Predicting Youth Externalizing Behaviors

Variable	R <sup>2</sup>	Total R <sup>2</sup>	β	t
Parenting style	0.28 ***	0.28		
Authoritative			3.38	
Permissive			5.71	
Disengaged			12.06	
Average maternal income	0.03 **	0.32	-0.79	3.22**
Parenting Style $\times$ Maternal Income	0.00	0.32		

*Note.* Regression coefficients for each parenting style represent average predicted externalizing scores holding income constant at the mean; however, these coefficients are not associated with inference statistics. (i.e., no significance test).

<sup>\*\*</sup> p < .01.

<sup>\*\*\*</sup> p<.001.