

Adaptive and Challenged Parenting Among African American Mothers: Parenting Profiles Relate to Head Start Children's Aggression and Hyperactivity

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Abstract:

Research Findings: This study used a within-group research design and person-centered analytic methods to identify multidimensional profiles of parenting styles, parenting practices, and related emotional factors in a sample of 274 African American mothers recruited from Head Start programs in the northeastern and southeastern United States. Interprofile differences in children's behavioral adjustment over time were also examined by measuring preschool children's aggressive and hyperactive behavior at 2 time points during the academic year. The results indicated 3 adaptive parenting profiles and 2 challenged, or less adaptive, profiles among the sample, with a greater proportion of parents represented by the adaptive profiles. Parenting profile membership was significantly associated with child aggressive behaviors at Time 1 and hyperactive behaviors at Time 2. *Practice or Policy:* Implications of these results for fostering healthy parent-child relations during the early childhood developmental period are discussed. Future research is needed to refine a typology of parenting that captures adaptive parenting techniques utilized within African American families.

Keywords: African Americans | Parenting | Head Start Program | Child Behavior | Early Childhood Development

Article:

Economically disadvantaged preschool children are disproportionately at risk for developing *externalizing behavior problems*, often defined for preschool children as problems with hyperactivity and aggression (Campbell, 1995). Aggressive and defiant behavior, in particular, has been consistently linked to harsh, punitive, controlling, or authoritarian styles of

parenting (Cunningham & Boyle, 2002; Rothbaum & Weisz, 1994; Webster-Stratton & Hammond, 1998). In one sample of preschool-age children, parental corporal punishment explained unique variance in behavior problems at 36 months and in first grade, even after other parental and contextual variables were controlled (Mulvaney & Mebert, 2007).

Such harsh parenting has been frequently reported with African American and/or low-income samples (McWayne, Owsianik, Green, & Fantuzzo, 2008). Lower socioeconomic status is associated with authoritarian or permissive parenting styles (Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Steinberg, Mounts, Lamborn, & Dornbusch, 1991), as well as less warmth (Klebanov, Brooks-Gunn, & Duncan, 1994; Pinderhughes, Nix, Foster, Jones, & The Conduct Problems Prevention Research Group, 2001), harsher discipline responses (Straus & Stewart, 1999), and higher levels of parenting stress and negative parenting beliefs (Pinderhughes, Dodge, Bates, Pettit, & Zelli, 2000). African American ethnicity has predicted the use of physical discipline, particularly among low-income mothers (Pinderhughes et al., 2000).

However, critiques of this literature suggest that these existing studies are limited because of an overreliance on (a) between-group comparisons with higher income and/or Euro-American groups, thus precluding insight into the heterogeneity within the population; (b) a focus on parenting deficits, rather than competencies, within the context of poverty (Huston, McLoyd, & García Coll, 1994); and (c) variable-centered analytic approaches, which analyze the relationship between certain variables or traits in isolation from other co-occurring attributes (McWayne, Green, & Fantuzzo, 2009). Variable-centered strategies may assume that relationships between variables are true for all members of a population, or they may not fully capture the impact of other interrelated attributes on the variables or relationships in question (von Eye & Bergman, 2003). Examination of parenting patterns, as opposed to single parenting variables, has identified the strongest association between parenting and child behavior (Rothbaum & Weisz, 1994).

The present study uses a within-group research design and a person-centered analytic approach to examine parenting within low-income, African American communities. A person-centered approach attempts to derive qualitatively different groups of individuals in order to examine different developmental processes or outcomes according to group membership (Keller, Spieker, & Gilchrist, 2005; Magnusson, 1998; von Eye & Bergman, 2003). Because a person-centered approach emphasizes the overall configuration of multiple variables within individuals, such an approach enables the identification of attribute patterns that are relevant for various subgroups of the population. To develop a typology of parenting appropriate for African American mothers, we examined parenting styles, parenting practices, and emotional factors. Constructs under investigation were selected primarily because of empirical evidence from prior research involving African American samples, as well as empirical evidence of relations with child aggression or hyperactivity. We now review the small number of previous studies that have used person-centered techniques with samples of African American parents.

McGroder (2000) examined three broad dimensions of parenting that she first derived empirically by using factor analytic techniques on several measures. Using person-centered analysis on the higher order factors, named Aggravation/Impatience, Nurturance, and Cognitive Stimulation, she produced four parenting patterns called (a) Aggravated but Nurturant, (b) Cognitively Stimulating (low Aggravation and high Cognitive Stimulation), (c) Patient and Nurturant, and (d) Low Nurturance. Among rural African American mothers of elementary school children, Brody and Flor (1998) identified “no nonsense parenting,” a parenting style consisting of high levels of physical discipline and control combined with warmth and affection. No nonsense parenting was described as “a functional adaptation to contexts that are more dangerous than are those that families of higher socioeconomic status inhabit, regardless of their race or cultural affiliation” (Brody & Flor, 1998, p. 813). It is important to note that in a departure from the prior literature, the no nonsense parenting group used physical discipline and was positively associated with child competence (Brody & Flor, 1998).

Although these two studies offer evidence of some dimensions of parenting that show validity for use with African Americans, they are limited in scope. The current study seeks to extend McGroder's (2000) work with parenting and social/cognitive developmental outcomes by investigating the associations of parenting profiles with children's aggression and hyperactivity. We also investigate whether Brody and Flor's (1998) conceptualization of no nonsense parenting might extend to an earlier developmental period, as their study examined parenting with children older than 6 years of age. The present study was set within the context of the Head Start program, which is the nation's largest federally funded early intervention program for low-income preschool children. We recruited African American families from two regions, the Northeast and Southeast, which offers the potential for greater generalizability of the results.

Figure 1 presents the conceptual model of parenting in the preschool period that guided the present investigation. The model has its roots in work by Darling and Steinberg (1993), who identified parenting style and parenting practices as primary components of parenting. *Parenting style* is defined as the “emotional climate” in which parenting practices are expressed. *Parenting practices* are described as “goal-directed behaviors through which mothers perform their parental duties” (Darling & Steinberg, 1993, p. 488). Baumrind's (1967, 1971) influential authoritative–authoritarian–permissive typology of parenting styles, later extended by Maccoby and Martin (1983), was first described in Euro-American, well-educated, middle-class families. Contemporary scholarship has questioned whether these parenting styles operate similarly within African American families (Deater-Deckard, Dodge, Bates, & Pettit, 1996). However, Figure 1 retains parenting styles and practices as traditionally described in the literature.

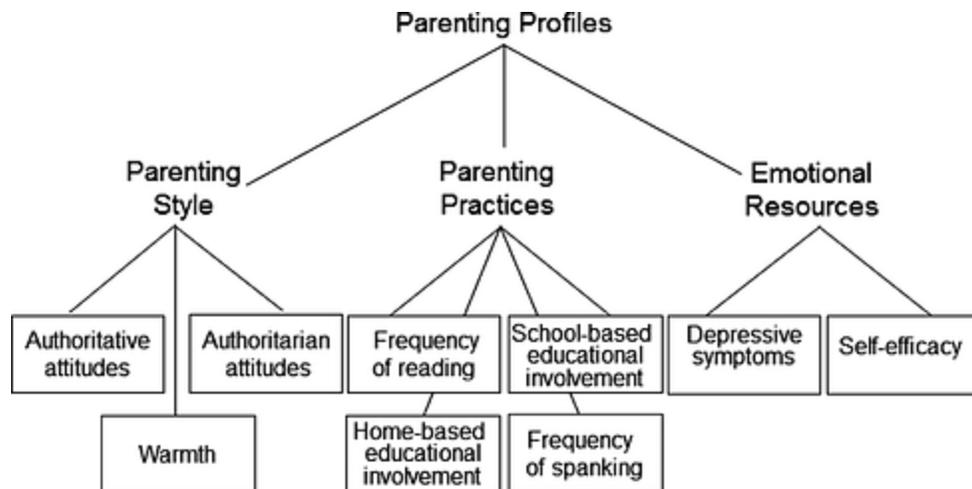


Figure 1. Conceptual model of parenting domains that composed the parenting profiles.

In addition to considering these fundamental aspects of parenting, we broaden our typology to incorporate aspects of parenting that are critically important during children's entry into the preschool setting. In particular, parental involvement in educational activities is a key parenting practice for low-income children attending an early intervention program (Mendez, 2010). Research has documented the role that parent involvement plays in promoting low-income children's academic and behavioral adjustment both during preschool and with the transition to primary school (Marcon, 1999; Reynolds, Mavrogenes, Bezruczko, & Hagemann, 1996). Viewed as multidimensional, parent involvement involves parenting practices in both the home and school settings (Fantuzzo, McWayne, Perry, & Childs, 2004), such as the frequency of shared book reading between parents and children, the ability to provide a stimulating and organized home environment, and involvement at school through the development of a relationship with preschool teachers.

As a complement to Darling and Steinberg's (1993) theoretical model, we also propose considering the emotional resources available to the parent. Two variables of importance with respect to low-income populations in particular are depression and self-efficacy. An extensive literature has associated parental depression with impaired parenting and later maladaptation in children (e.g., Cummings & Davies, 1994; Downey & Coyne, 1990; Goodman & Gotlib, 1999). Moreover, because of the transactional nature of the relationship between parents and children (Sameroff, 2000), stress associated with the context of poverty often further exacerbates the impact of depression on the entire family (Brown & Moran, 1997; Petterson & Friel, 2001). In contrast, *parental self-efficacy*, defined as a parent's sense of being able to influence his or her child's successful development, has been found to be predictive of African American mothers' use of active and successful parenting practices (e.g., Ardel & Eccles, 2001).

In sum, the integration of emotional resources into the conceptual understanding of parenting is novel in the parenting literature, as psychological variables have traditionally been considered to be external factors in conceptualizations of parenting. When emotional resources such as efficacy and depressive symptomatology are included in person-centered models for understanding parenting among high-risk populations, a more comprehensive picture of parenting emerges. This typology, which features emotional resources of the parents, parenting practices (including those related to educational activities), and parenting styles, represents a developmentally appropriate and potentially more valid approach to examining parenting within African American families.

A DEVELOPMENTALLY APPROPRIATE TYPOLOGY OF AFRICAN AMERICAN PARENTING DURING PRESCHOOL

To select specific attributes of parenting consistent with the conceptual model, we examined the literature for measures of parenting that were consistently associated with children's aggressive and/or hyperactive behavior problems, particularly if these studies involved low-income or African American populations. Here we briefly review prior studies documenting the relation between specific parenting attributes and child behavior problems.

Parenting Style

For parenting styles, we selected maternal warmth, authoritative parenting attitudes, and authoritarian parenting attitudes. Parental warmth, in combination with other positive parenting behaviors, has been associated with lower levels of conduct problems in kindergarten and first grade (Patrick, Snyder, Schrepferman, & Snyder, 2005). Moreover, the relation between harsh physical punishment and child externalizing symptoms weakens significantly when mothers are higher in warmth and emotional support toward their children (Deater-Deckard, Ivy, & Petrill, 2006; McLoyd & Smith, 2002). Among African American preschool children, parent-reported child behavior problems are sometimes associated with parents' endorsement of authoritative and authoritarian parenting beliefs, with authoritarian parenting predictive of more child behavior problems (Querido, Warner, & Eyberg, 2002); other studies have failed to find such relations (McWayne et al., 2008).

Parenting Practices

Parenting practices measured in this study include parental involvement in educational activities and the use of physical punishment. Parent involvement in the home setting has been positively associated with multiple aspects of children's school readiness, including language, stronger attention, and low conduct problems (Fantuzzo et al., 2004). The literature also supports the importance of cognitive stimulation (e.g., shared book reading) for low-income populations during early childhood (Bus, van Ijzendoorn, & Pellegrini, 1995), particularly when combined with maternal sensitivity (McGroder, 2000; Raviv, Kessenich, & Morrison, 2004) and the use of nonphysical discipline (Gest, Freeman, Domitrovich, & Welsh, 2004).

In terms of the effects of physical discipline on children, some studies have not associated physical discipline with behavior problems in African American samples (e.g., Deater-Deckard et al., 1996; Stacks, Oshio, Gerard, & Roe, 2009). However, there is other evidence to suggest that the relationship between harsh punishment and child outcomes is equivalent across ethnic groups and interrelated similarly with other variables (Berlin et al., 2009; McLoyd & Smith, 2002; Whiteside-Mansell, Bradley, Owen, Randolph, & Cauce, 2003). Some research has demonstrated the moderating impact of maternal warmth on the relation between physical punishment and child outcomes (e.g., Smith & Brooks-Gunn, 1997), yet this finding has not consistently held up in recent work (e.g., Berlin et al., 2009; Stacks et al., 2009). Overall, the contradictory nature of the findings involving physical punishment warrants continued study, particularly using within-group designs with African American samples.

Emotional Resources

Parental depression has been linked to lower enjoyment of parenting; less effort put into speaking and responding to children; and hostile, negative, and/or controlling parenting behaviors (Downey & Coyne, 1990; Marchand, Hock, & Widaman, 2002; Parke et al., 2004). Lower levels of maternal depressive symptoms predicted fewer externalizing child behavior problems among a sample of African American mothers of children who attended Head Start (Koblinsky, Kuvalanka, & Randolph, 2006), whereas higher levels of depressive symptoms have been associated with children's risk for attention-deficit/hyperactivity disorder (Cunningham & Boyle, 2002), chronic hyperactive/attention problems (Shaw, Lacourse, & Nagin, 2005), and high baseline conduct problems (Shaw, Gilliom, Ingoldsby, & Nagin, 2003). Among preschool-age children with diagnoses of attention-deficit/hyperactivity disorder, maternal depressive symptoms are predictive of future comorbid conduct problems (Chronis et al., 2007).

Conversely, higher parental self-efficacy is associated with preschoolers' teacher-reported emotional development (Downer & Mendez, 2005); lower levels of children's symptoms of oppositional defiant disorder (Cunningham & Boyle, 2002); and a greater level of parental involvement, particularly in the home setting (Waanders, Mendez, & Downer, 2007). Mothers with lower self-efficacy use coercive discipline (Bondy & Mash, 1999) and harsher discipline practices, even after other parent and child variables are controlled (Sanders & Woolley, 2005).

In sum, this review supports the simultaneous inclusion of parenting styles, practices, and emotional resources in a person-centered investigation of African American parenting of preschool children. To guide the study, we proposed the following hypotheses regarding adaptive and challenged profiles of parenting. Given findings that maternal warmth may moderate the effects of physical discipline, we first anticipated detecting a no nonsense parenting profile similar to Brody and Flor's (1998) conceptualization. We also expected to detect a profile that was high in terms of cognitive stimulation and self-efficacy, consistent with McGroder's (2000) Cognitively Stimulating profile. Lastly, we anticipated that a smaller profile would consist of vulnerable parents with few emotional resources, given the high prevalence of depression among

low-income populations. In terms of interprofile differences over time, we hypothesized that children of parents from adaptive profiles would exhibit fewer aggressive and hyperactive behavior problems, whereas children experiencing challenged parenting at preschool entry would show significantly greater behavior problems over time.

METHOD

Participants

Participants in this study were 274 African American biological mothers of preschool children recruited from six different Head Start centers located in metropolitan and semirural areas of the northeastern and southeastern United States. Mothers' marital status was predominantly either single (67.9%) or married (17.2%); the rest were separated (9.1%) or divorced (5.8%). More than 40% of the mothers had received a high school diploma or general equivalency diploma, an additional 29.6% had attended some college, 19.7% had completed some high school, 3.6% had received a bachelor's degree, and 1.5% had completed some graduate school. Approximately 48% were employed full time, 17.9% were employed part time, 16.1% were looking for work, and 18.2% did not work outside the home. The mean annual income was \$14,499 ($SD = \$11,605$). Child age ranged from 35 to 59 months ($M = 47.5$ months, $SD = 6.9$ months). Females made up 51.1% of the sample ($n = 140$). Children were predominantly of African American ethnicity (97.8%), with other mothers endorsing a multiethnic background.

Procedure

Four Head Start centers managed by the same human resources agency participated in recruitment in the Southeast, and one agency with two Head Start centers participated in the Northeast. Centers were selected because of their willingness to participate in parent involvement research and their enrollment of a high percentage of African American children. All parents, regardless of ethnicity or race, were offered an opportunity during parent orientation to participate in the study of parent involvement in Head Start. Consent and participation rates were relatively comparable across sites (range = 77%–94%) and appropriate for a low-income sample of parents. Mothers completed in-person or telephone interviews during October of the academic year to collect demographic information and parent measures (Time 1). Following the receipt of parental consent, children were assessed for language development at their Head Start center by trained graduate students or trained assessors provided through the National Head Start Quality Research Consortium. Mothers then completed child measures during April of the academic year (Time 2). An examination of potential site differences across the six participating centers showed no significant differences in study measures of parenting or child behavior problems.

Measures

Parenting style

Parental warmth, authoritative parenting, and authoritarian parenting were measured using three scales of a parent interview developed for the congressionally mandated representative study of Head Start children known as the Head Start Family and Child Experiences Survey (FACES; Administration on Children, Youth, and Families [ACYF], 2001). The items were selected for their ability to best capture parenting styles from the Block Child-Rearing Practices Report (Block, 1965) and the Parenting Dimensions Inventory (Power, 1993). The 5-item Parental Warmth scale measured mothers' tendency to be warm, affectionate, and intimate with their children (Cronbach's $\alpha = .54$; ACYF, 2001). The Authoritarian Attitudes scale is a 3-item scale that asks about mothers' ability to allow their child to be angry with them, their beliefs about whether children should be seen and not heard, and their beliefs about the best way of disciplining their children (Cronbach's $\alpha = .55$; ACYF, 2001). The Authoritative Attitudes scale is a 4-item scale that includes questions about consistency of discipline, showing appreciation for children's efforts, and the promotion of children's curiosity (Cronbach's $\alpha = .75$). Although alphas were somewhat low, these measures discriminated among school readiness outcomes in the FACES 2001 study and demonstrated their utility with a Head Start population.

Frequency of reading

As part of the FACES study (ACYF, 2001), mothers were asked how often they or others in their family had engaged in reading activities with their child in the past week. Responses were coded, and scores ranged from 0 (not at all) to 7 (daily). As evidence of concurrent validity, Mendez (2010) found that this variable was correlated positively with children's scores on the Woodcock–Johnson Letter-Word Identification subtest and parent reports of home involvement. Frequency of reading showed stability over 6 months ($r = .55, p < .001$).

School- and home-based involvement in child's education

The Family Involvement Questionnaire (Fantuzzo, Tighe, & Childs, 2000) was developed as a multidimensional assessment of parent involvement in Head Start. Mothers report the frequency of 42 involvement behaviors using a 4-point Likert format (1 = rarely, 2 = sometimes, 3 = often, 4 = always). The School-Based Involvement scale (range = 10–40; Cronbach's $\alpha = .80$) consists of 10 items, including such items as “I volunteer in my child's classroom.” The Home-Based Involvement scale (range = 13–52; Cronbach's $\alpha = .78$) measures mothers' behaviors to promote their children's education at home. An example of the scale's 13 items is “I spend time working with my child on number skills.” Higher parent education is associated with greater school involvement, and married mothers engage in more home-based involvement than single mothers (Fantuzzo et al., 2000). Waanders et al. (2007) found that the Family Involvement Questionnaire school-based scale correlated positively with measures of attendance at school events and teacher ratings of a close parent–teacher relationship.

Frequency of physical punishment

Originally included in the ACYF (2001) FACES study, this scale asks mothers to report how often in the past week they have spanked their child. Responses ranged from 0 to 10 times per week ($M = 1.06$, $SD = 1.66$).

Depressive symptoms

The abbreviated Center for Epidemiological Studies–Depression scale (CES-D; Ross, Mirowsky, & Huber, 1983) is commonly used in research examining depression and was empirically derived from the much longer version of the CES-D (Radloff, 1977). The abbreviated measure consists of 12 indicators of depressive symptoms, including mood, sleep and eating, and energy level over the past week. Responses are rated on a 4-point Likert scale, where 0 represents *hardly or never* and 3 represents *most or all of the time*. Scores from the 12 items are summed, with higher scores indicating a report of more severe depressive symptomatology (possible range = 0–36). Cut-scores for determining depression severity are as follows: 0–4 = not depressed, 5–9 = mildly depressed, 10–14 = moderately depressed, and greater than 15 = severely depressed (ACYF, 2001). Internal consistency for this version of the CES-D is high, as demonstrated by Cronbach's alpha estimates from samples of Head Start parents: 162 parents, .83; 250 parents, .85; 299 parents, .87; and 262 parents, .86 (ACYF, 2001). In studies involving African American mothers, the CES-D appropriately discriminated among severe and chronic levels of depression, with mothers who reported the most distress also having more negative parent–teacher relationships (LaForett & Mendez, 2010).

Self-efficacy

The Pearlin Mastery Scale (Pearlin & Schooler, 1978) is a commonly used measure of the amount of control and impact that individuals perceive that they have over their situation. Respondents agree or disagree with statements such as “I have little control over the things that happen to me” using a 4-point Likert scale. Possible scores range from 0 to 21. In the current study, the Pearlin Mastery Scale had adequate internal consistency (Cronbach's $\alpha = .67$). Factor analysis has demonstrated unidimensionality of the scale's items (Seeman, 1991). The Pearlin Mastery Scale also has demonstrated convergent validity through negative associations with measures of depression and economic strain, as well as positive associations with self-esteem, low strain, and low self-denigration in the context of parenting stress (Pearlin, Menaghan, Lieberman, & Mullan, 1981; Pearlin & Schooler, 1978).

Child aggression and hyperactivity

The Child Behavior Checklist by Achenbach (1996) is a widely used parent rating tool for child psychopathology. In order to obtain only those items most relevant to aggression and hyperactivity, ACYF (2001) conducted a discriminant validity study to derive brief assessments of these constructs. As utilized in the FACES parent interview (ACYF, 2001), seven items assessed the frequency of aggressive and hyperactive behavior during past month. The items selected for the measure were those items that were the best at discriminating children receiving

clinical mental health services from those unaffected, including “Has temper tantrums or hot temper” and “Is very restless and fidgets a lot.” Other items assessed hitting and fighting with other children, getting along with others, disobedience at home, sustained attention, and energy level. For this measure, parents are asked whether certain behaviors are “very or often true,” “sometimes true,” or “not true” of their children. The scale yields individual Hyperactive and Aggressive scores with appropriate reliability estimates (Cronbach's α s = .62 and .69, respectively). In this study, parent and teacher ratings on items assessing aggressive and hyperactive behaviors were significantly correlated at Time 1 (r s = .27 and .42, respectively) and Time 2 (r s = .16 and .15, respectively, all p s < .05).

Receptive vocabulary

The Peabody Picture Vocabulary Test–Third Edition (PPVT-III; Dunn & Dunn, 1997) is a widely used measure of receptive vocabulary for Standard American English with strong psychometric properties. Children are required to point to the picture of an orally presented word, given four possible choices. The PPVT-III provides age-based standard scores ($M = 100$, $SD = 15$), and the normative sample shows adequate inclusion of ethnic minority children. The PPVT-III was included as a control variable in order to examine any interprofile differences in children's problem behavior that were independent of language ability.

Statistical Analyses

Data coverage in the current sample ranged from 97% to 100% for parent and child study variables and from 84% to 100% for sociodemographic variables. Statistical power was unaffected by missing data in all principal analyses. Ward's minimum variance clustering method was used to derive parenting profiles. Ward's method is a hierarchical method that maximizes between-group differences and minimizes within-group variability by calculating the sum of squared Euclidean distances from each case in a cluster to the mean of all variables (Everitt, Landau, & Leese, 2001; Ward, 1963). As a result, Ward's method produces solutions with distinct, well-separated profiles (Rapkin & Luke, 1993). Solutions were evaluated based on examination of the R^2 and error statistics, parsimony of description, and conceptual considerations, including class interpretability and the extent to which classes conformed to a priori hypotheses and the extant literature.

Following the selection of the best solution, the profiles are then examined to see which parenting measures represent the dominant aspects of the profile. This can typically be done by graphing the mean level of each attribute in the profile as compared to the average mean for the entire sample (Mendez, Fantuzzo, & Cicchetti, 2002). To facilitate such comparisons, we standardized parenting measures using z scores, which allowed for an interpretation of the profiles relative to an overall mean and standard deviation for the entire sample. Chi-square analyses were also used to determine whether profiles differed on any major demographic variable, such as geographical region, employment status, educational level, or marital status.

To test for interprofile differences on child behavior problem variables, we conducted multivariate analysis of variance (MANOVA), with multivariate analysis of covariance (MANCOVA) used to test differences in Time 2 outcomes while controlling for Time 1 outcomes. Mixed-model analysis of variance (ANOVA) was used to test for Profile \times Time effects on children's behavior problems. Tukey's honestly significant difference (HSD) test was used for all possible pairwise post hoc tests.

RESULTS

Parenting Analyses

Ward's minimum variance cluster analysis produced a conceptually meaningful solution of parenting profiles. Specifically, the five-profile solution maximized the variance explained (R^2 statistic); minimized the error variance; was psychologically meaningful to interpret; and also was the most parsimonious solution relative to other solutions with identical statistical indices, including variance explained and error variance. Demographic characteristics for each parenting profile are depicted in Table 1. Chi-square analyses revealed no significant differences among the profiles with respect to mothers' geographical region (Northeast vs. Southeast), $\chi^2(4) = 4.57, p > .30$; employment status (working vs. not working), $\chi^2(4) = 3.62, p > .40$; educational level (high school diploma or less vs. higher than high school diploma), $\chi^2(4) = 2.74, p > .60$; or marital status (single vs. married vs. previously married), $\chi^2(8) = 7.25, p > .50$ (all $Ns = 274$). Profiles also had equivalent monthly incomes, $F(4, 263) = 1.6, p > .15$. Table 2 shows the standardized values for the parenting and child variables by profile relative to the overall sample means. Figure 2 depicts the z scores used to interpret each parenting profile.

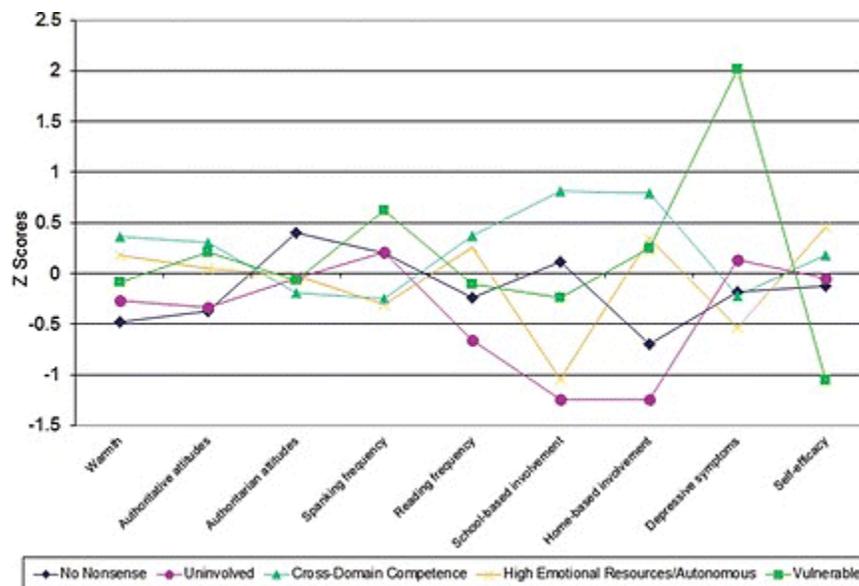


Figure 2. Standardized scores on parenting variables by profile.

Table 1. Demographic Characteristics by Parenting Profile

Characteristic	No Nonsense (<i>n</i> = 64)	Uninvolved (<i>n</i> = 47)	Cross-Domain Competence (<i>n</i> = 109)	High Emotional Resources/Autonomous (<i>n</i> = 31)	Vulnerable (<i>n</i> = 23)
Geographic region (%)					
Southeastern United States	92.2	87.2	94.5	83.9	91.3
Northeastern United States	7.8	12.8	5.5	16.1	8.7
Employment (%)					
Full time	46.9	42.6	56.0	32.3	43.5
Part time	23.4	25.5	9.2	19.4	26.1
Looking for work	21.9	12.8	14.7	16.1	13.0
Not in labor force	7.8	19.1	20.2	32.3	17.4
Marital status (%)					
Married	32.1	15.4	33.0	28.0	33.3
Separated	11.3	12.8	8.8	12.0	0.0
Divorced	3.8	2.6	11.0	8.0	14.3
Widowed	1.9	0.0	2.2	0.0	4.8
Never married	50.9	69.2	45.1	52.0	47.6
Education (%)					
Less than eighth grade	0.0	0.0	0.9	0.0	0.0
Some high school	25.0	27.7	18.3	6.5	13.0
High school diploma	40.6	38.3	41.3	45.2	56.5
Vocational	3.1	0.0	2.8	0.0	8.7

degree					
Some college/AA/AS	26.6	27.7	30.3	41.9	21.7
BA/BS	4.7	2.1	4.6	3.2	0.0
Some graduate school	0.0	2.1	1.8	3.2	0.0
Graduate degree	0.0	2.1	0.0	0.0	0.0

Note. AA/AS = associate's degree; BA/BS = bachelor's degree.

Table 2. Standardized Parenting and Child Variable Means by Parenting Group

Variable	No Nonsense (n = 64)	Uninvolved (n = 47)	Cross-Domain Competence (n = 109)	High Emotional Resources/Autonomous (n = 31)	Vulnerable (n = 23)
Parenting variables (z scores)					
Warmth	-0.48	-0.27	0.36	0.18	-0.09
Authoritative parenting attitudes	-0.38	-0.34	0.31	0.05	0.21
Authoritarian parenting attitudes	0.40	-0.05	-0.19	-0.01	-0.07
Spanking frequency	0.19	0.21	-0.25	-0.31	0.62
Reading frequency	-0.24	-0.66	0.37	0.25	-0.10
School-based involvement	0.11	-1.24	0.82	-1.04	-0.24
Home-based involvement	-0.69	-1.25	0.79	0.34	0.25
Depressive symptoms	-0.19	0.12	-0.22	-0.53	2.02
Self-efficacy	-0.13	-0.04	0.19	0.46	-1.05

Child variables (z scores)					
Time 1 aggression	0.04	0.38 ^a	-0.19 ^b	-0.18	0.31
Time 1 hyperactivity	0.09	0.13	-0.04	-0.19	0.02
Time 2 aggression	0.06	0.29	-0.25 [†]	-0.24	0.54*
Time 2 hyperactivity	-0.09 ^a	0.19	-0.23 ^a	-0.33 ^a	1.20 ^b

a, b Values are significantly different from each other, $p < .05$. [†],*Marginally significant difference, $p = .05$.

Parenting Profile 1 ($n = 64$; 23.4%) had the highest levels of authoritarian parenting in the sample combined with below-average levels of warmth. This trait pattern was similar to one described by Brody and Flor (1998) and thus was named the *No Nonsense* parenting profile to be consistent with their terminology. This profile was characterized by levels of home-based involvement more than 0.5 *SD* below the sample mean.

Parenting Profile 2 ($n = 47$; 17.2%) was named *Uninvolved* and contained mothers who reported low levels of school-based involvement, reading, and cognitively stimulating activities at home with their children. Parenting Profile 3 ($n = 31$; 11.3%) was labeled *High Emotional Resources/Autonomous* because of mothers' endorsement of below-average levels of depressive symptoms and above-average levels of self-efficacy. Mothers in this group also reported extremely low levels of involvement outside of the home; however, reading frequency and home-based involvement were in the average range compared to the rest of the sample.

Parenting Profile 4 ($n = 109$; 39.8%) represented the *Cross-Domain Competence* group. These mothers, who were the largest profile derived, showed the highest levels of warmth, authoritative parenting, reading, and involvement activities as well as the lowest levels of spanking and authoritarian parenting. Mothers in this profile also evidenced average levels of emotional resources. In contrast, Parenting Profile 5 ($n = 23$; 8.4%) was described as *Vulnerable* because of the group's poor emotional resources and coping. Vulnerable mothers reported levels of depressive symptoms that were approximately 2 *SD* above the sample mean and self-efficacy scores that were 1 *SD* below the sample mean. Nearly 83% of mothers in this group had scores that would classify them on the CES-D as having severe depressive symptomatology, and the remaining mothers reported levels of depressive symptomatology in the moderate range. Mothers in the Vulnerable profile had fairly average scores on other parenting variables but did report the most use of spanking compared with parents in all other profiles.

Parenting Profiles and Children's Aggression and Hyperactivity

First we investigated whether parenting profile membership was explained by children's sex, age, or language abilities. Chi-square analysis revealed that mothers of male and female children were not disproportionately represented in any of the profiles, $\chi^2(4) = 2.51, p > .60, N = 274$. One-way ANOVA indicated that the children of mothers in all five profiles had equivalent PPVT scores, $F(4, 264) = 0.65, p > .60$; and were of equivalent age, $F(4, 269) = 0.74, p > .50$.

MANOVA and MANCOVA were conducted to determine whether there were interprofile differences in levels of children's aggressive and hyperactive behavior problems, at both time points. The assumption of homogeneity of variance was upheld for all child outcome variables. Analyses revealed significant main effects for parenting profile on Time 1 aggression, $F(4, 269) = 2.90, p < .05$, and Time 2 hyperactivity after Time 1 hyperactivity was controlled, $F(4, 268) = 5.88, p < .01$. There were no significant differences in levels of Time 1 hyperactivity, $F(4, 269) = 0.63, p > .60$. Time 2 aggression differed significantly by parenting profile, $F(4, 269) = 2.88, p < .05$, but not after Time 1 scores were controlled, $F(4, 268) = 1.33, p > .20$.

All possible pairwise comparisons were conducted using Tukey's HSD test to control Type I error. At Time 1, the Uninvolved profile reported significantly higher levels of aggression in their children compared to the Cross-Domain Competence profile ($p < .05$). At Time 2, the Cross-Domain Competence profile had lower levels of aggression compared to the Vulnerable profile ($p = .05$). At Time 2, the Vulnerable profile had significantly higher levels of hyperactivity in their children compared to the No Nonsense, Cross-Domain Competence, and High Emotional Resources/Autonomous profiles.

Profile \times time analyses

Mixed-model ANOVA revealed a significant Profile \times Time interaction for children's hyperactivity, $F(4, 269) = 3.36, p < .05$, indicating that children's hyperactivity levels over time varied according to the parenting profile. However, this interaction was not significant for children's aggression, $F(4, 269) = 0.26, p > .90$. Post hoc analyses using Tukey's HSD test indicated that children of mothers in the Vulnerable profile showed a significantly greater increase in hyperactivity over time compared to both the Cross-Domain Competence and No Nonsense profiles ($p < .05$). Figure 3 shows levels of children's hyperactivity over time by parent profile. There was a significant effect of time on children's aggression, $F(1, 269) = 4.43, p < .05$, but not on children's hyperactivity, $F(1, 269) = 3.05, p < .10$. Fewer aggressive behaviors were reported at Time 2 compared to Time 1.

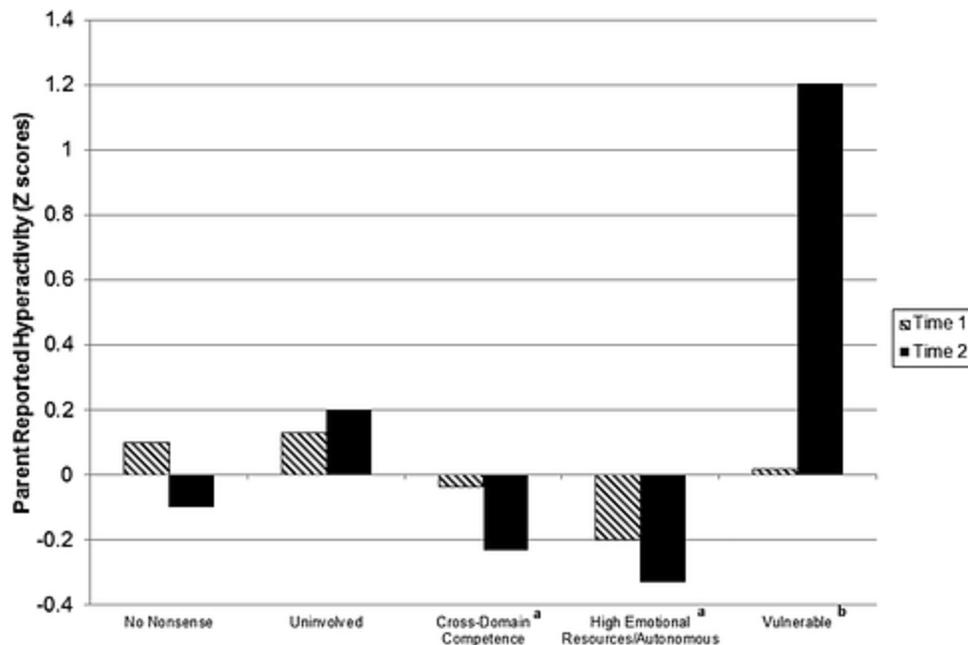


Figure 3. Child hyperactivity scores by parenting profile at Time 1 and Time 2. Parenting profiles with different letter superscripts evidenced significantly different changes in parent-reported hyperactivity over time.

DISCUSSION

The present study derived holistic profiles of parenting among low-income African American mothers and related these profiles to children's hyperactivity and aggression during preschool. Person-centered analyses produced five meaningful parent profiles based on individual differences in parenting style, parenting practices, and emotional resources. This is the first study to integrate emotional resources into an examination of more traditional measures of parenting styles and practices with a high-risk, impoverished sample of ethnic minority parents. Doing so permitted an examination of how psychological factors could interact with other aspects of parenting within the subgroup of the sample most affected by those psychological factors, not just for the sample as a whole. Profile membership was not explained by regional differences, parent demographics, child sex, age, or language ability, which supports the generalizability of the profiles.

We found that three parenting profiles (i.e., No Nonsense, Cross-Domain Competence, and High Emotional Resources/Autonomous) consisted of adaptive parenting approaches, whereas two profiles (i.e., Uninvolved, Vulnerable) contained combinations of specific negative features that likely place children at greater risk for negative outcomes. The concept of equifinality is useful for interpreting how this typology of parenting is associated with adaptive or maladaptive behavioral outcomes of preschoolers over time. Equifinality is discussed in the developmental psychopathology literature as the potential for diverse pathways to lead to the same outcome

(Cicchetti & Rogosch, 1996). The current study's finding of multiple types of challenged parenting is consistent with Baumrind's (1967) conceptualization and Mandara and Murray's (2002) typology of African American families of adolescents, both of which identified two parenting styles associated with negative child outcomes. However, previous parenting typologies in middle-class samples (e.g., Baumrind, 1967; Maccoby & Martin, 1983) have identified only one adaptive parenting type (i.e., authoritative). The results of the current study expand the literature on multiple manifestations of adaptive parenting by African American mothers of preschool-age children.

The largest profile, containing almost 40% of mothers, was the Cross-Domain Competence profile, which most closely resembles Baumrind's traditional description of authoritative parenting. These mothers reported the use of a warm, sensitive parenting style coupled with higher rates of optimal parenting practices, including educational involvement and a low frequency of spanking. This profile also reported fewer depressive symptoms and high rates of self-efficacy. Although the High Emotional Resources/Autonomous and No Nonsense profiles also evidenced adequate levels of emotional health, both of these profiles contained mothers with lower reported levels of warmth than the Cross-Domain Competence group. We adopted the term *Cross-Domain Competence* for this profile from Luthar, Cicchetti, and Becker (2000), reflecting their assertion that resilient individuals are typically able to mobilize competencies in multiple areas in order to meet challenges to their development associated with exposure to risk factors.

The No Nonsense and High Emotional Resources/Autonomous profiles are less prevalent but represent alternative pathways to adaptive parenting, or heterogeneity, among low-income caregivers. In considering the differences among these adaptive profiles, it is possible that these approaches to parenting would not be viewed as adaptive if these attributes were considered in isolation (e.g., authoritarian attitudes, low school-based educational involvement) or if the parenting were embedded in a different context (e.g., middle-class samples). Mothers in the High Emotional Resources/Autonomous profile reported engaging in adequate levels of home-based educational activities, although they had limited interaction with school personnel. Because of their higher levels of self-efficacy and low levels of depressive symptoms, it is possible that these mothers felt autonomous in their ability to have a positive impact on their children's academic competencies without necessarily involving themselves in the school setting. These parenting practices at home may allow mothers and their children to share an emotional connection, which promotes self-esteem and cognitive stimulation for children.

For the No Nonsense mothers, higher levels of authoritarian parenting and the use of physical discipline may take on a different meaning in the context of economic disadvantage or dangerous neighborhoods (Brody & Flor, 1998). Mothers in this group may place particular value on limit setting, vigilant monitoring of their children, and obedience to authority because of safety considerations and/or concerns about their children's futures, should their behavior go unchecked in their early years (Ispa & Halgunseth, 2004). Although No Nonsense mothers reported the

lowest levels of warmth in the sample, their levels of shared reading and school-based educational involvement were average compared with the full sample. These parenting practices may function as a way for mothers to strengthen the home–school connection and express commitment to their children's development in specific academically related activities. One also might expect such mothers to demand appropriate behavior and respect for teachers in a school setting, consistent with a firm control approach to parenting.

Equifinality can also be seen in the emergence of two profiles of mothers who appeared to be more challenged in their parenting, Uninvolved mothers and Vulnerable mothers. The Uninvolved profile (17.2%) reported the lowest levels of reading and educational involvement in the sample and low levels of authoritative parenting attitudes and warmth. It is interesting that mothers in the Uninvolved profile reported only mild levels of depressive symptomatology, an unusual finding given much-reported associations between parental depression and uninvolved parenting (Downey & Coyne, 1990). This result highlights how person-oriented analyses often reveal subgroups of populations in which well-established correlations do not hold true. As Mandara (2003) noted, obtaining a relation between a parenting construct (e.g., depression) and a child outcome (e.g., hyperactivity) indicates something about the relation across all families generally but does not necessarily reveal enough about a particular parent or subgroup of parents to predict which children will exhibit the expected outcome.

The Vulnerable profile (8.4%) contained a small but meaningful number of mothers of Head Start children experiencing significant emotional distress. Consequently, these mothers may be at risk for further decline in their parenting ability. Given such severe depressive symptomatology and low self-efficacy, it is noteworthy that mothers in this Vulnerable profile did report engagement in educational activities. Indeed, the Vulnerable profile may be similar to a subgroup of depressed mothers described as able to regulate their affect when engaging with their children (Campbell, Cohn, & Meyers, 1995). However, these mothers also reported using the highest levels of physical punishment of the sample. It may be that this profile relied more on physical punishment because of the strain involved in parenting in the context of significant depressive symptomatology. Also, because of the transactional nature of parent–child relations (Sameroff, 2000), children's behavioral problems could be further exacerbating depressive symptomatology over time.

In terms of profile validity, we replicated some aspects of McGroder's (2000) work on parenting typologies. The Uninvolved profile partially corresponds to the group in McGroder's study with the lowest levels of nurturance, although levels of cognitive stimulation and home-based involvement were much lower in the Uninvolved profile. The High Emotional Resources/Autonomous profile from the current study, though distinguished by higher levels of home-based educational activities, did not have the highest levels of cognitive stimulation in the sample. Instead, the mothers in the Cross-Domain Competence group showed the highest levels of cognitive stimulation co-occurring with above-average warmth and authoritative parenting.

This pattern represents a departure from the highly nurturant group in McGroder's study, which evidenced below-average cognitive stimulation.

Our No Nonsense profile involving preschool parents closely resembles the no nonsense parenting construct identified by Brody and Flor (1998) with elementary-age children, as both studies established a relation between the use of a more authoritarian parenting style and children's appropriate behavior and lack of aggression. However, levels of warmth were lower among the No Nonsense parents in the current study than those described by Brody and Flor. This discrepancy could be attributable to measurement differences in the parenting constructs, as well as the samples' contextual differences (i.e., rural vs. metropolitan/semirural). Given that no nonsense parenting was originally identified by Brody and Flor in samples of older children, it is possible that the specific attributes that help define a no nonsense African American parent present differently across children's developmental stages, although this is a question for future research. The No Nonsense parents identified in the present study also seem comparable to McGroder's parenting profile with above-average levels of both aggravation and nurturance. Our results match the Brody and Flor study, showing no nonsense parenting to be associated with adaptive child outcomes. More work studying this particular profile during the early childhood period from toddlerhood through elementary school would inform understanding of the use of a no nonsense parenting style.

The practical utility of the person-centered approach is that it offers a different lens through which to view parenting as influencing child behavior. Therefore, a key contribution of this research was to determine how person-centered profiles were predictive of children's behavioral outcomes, which had not been previously studied by McGroder (2000) or other preschool researchers. The findings reveal that differences in levels of aggressive and hyperactive behavior problems were predicted by parent profile membership. At both time points, the Vulnerable and Uninvolved groups had the highest levels of child aggression, which remained fairly stable over the course of the school year. Compared to the Cross-Domain Competence profile, Time 1 aggression was significantly higher in the Uninvolved profile, whereas at Time 2, aggression was highest for the Vulnerable profile.

In terms of child hyperactivity, parenting profile membership did not differentiate hyperactivity at Time 1. However, by the end of the school year, hyperactivity among children of Vulnerable mothers was significantly higher than that among children with parents in any of the three adaptive parenting profiles. Moreover, the worsening in hyperactive symptoms over a 6-month period was significantly greater for the Vulnerable group than for the No Nonsense and Cross-Domain Competence groups. Given the low levels of emotional resources available to mothers in this group, these mothers likely had difficulty setting effective limits without the use of physical punishment, a necessary parenting skill in managing overactivity during the preschool years. The striking difference in hyperactivity among children with mothers in the Vulnerable profile also suggests that the effects of ineffective parenting may have the capacity to lie dormant initially and compound over time. The increase in problem behaviors may coincide with increased

demands being made on the child associated with his or her development, in both home and school settings, for which the child is not prepared.

This investigation is the first to definitively show equifinality in terms of both challenged and adaptive parenting of preschool children attending Head Start. Our findings suggest that uninvolved mothers may benefit from psychoeducation on the important benefits of parent involvement, whereas vulnerable mothers may need concurrent mental health treatment and parent training. The results also support the need for parenting programs to reduce the long-term negative impact of depression, low self-efficacy, and child behavior problems on future development. This research has several limitations. First, we did not use a random sample of African American mothers, so generalizability may be affected. Second, this typology of parenting may be unique to African American mothers of preschool children; future work should continue in this tradition and examine parenting across developmental stages. Third, the data did not permit the direct inference of a causal relationship between profiles of parenting attributes and children's outcomes. Indeed, it is likely that a transactional relationship occurs between mothers and children, such that parenting characteristics both influence and are influenced by children's characteristics (Sameroff, 2000). Fourth, this study relied on self-reports, which may have been subject to potential social desirability bias; future studies should utilize observations of parent-child interactions to supplement self-report instruments. In sum, taking a within-group view of parenting with this population is a useful direction for future research.

Notes

Note. AA/AS = associate's degree; BA/BS = bachelor's degree.

^{a, b} Values are significantly different from each other, $p < .05$.

†*Marginally significant difference, $p = .05$.

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