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Ethnic Differences in Profiles of Mother–Child Interactions and Relations to Emerging School Readiness in African American and Latin American Children

Nazly Dyer,

School of Behavioral and Brain Sciences, The University of Texas at Dallas, 800 West Campbell Road, GR41, Richardson, TX 75080, USA

Margaret Tresch Owen, and
University of Texas at Dallas

Margaret O'Brien Caughy
University of Texas School of Public Health

Nazly Dyer: nazly@utdallas.edu

SYNOPSIS

Objective—This article examines ethnic similarities and differences in profiles of mother–child interaction qualities for low-income African American and Latin American mothers and associations with preschoolers' emerging school readiness.

Design—Videotaped mother–child interactions were collected at age 2.5 years from a sample of African American ($n = 192$) and Latin American ($n = 210$) families. Profiles of maternal behavior were identified in person-centered within-group analyses of five ratings of maternal behavior from the videotaped interactions. Mothering profile groups were examined for relations to child receptive language, behavior problems, and pre-academic school readiness measured at age 3.5 years.

Results—Latent class analyses yielded three similar profiles in the two ethnicities identified as Child-Oriented, Directive, and Harsh-Intrusive mothering, and a fourth profile of Withdrawn mothering only among the African American mothers. For African American children, Child-Oriented and Directive mothering were each associated with higher pre-academic school readiness and language scores than Harsh-Intrusive or Withdrawn mothering. For Latin American children,

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Child-Oriented mothering was associated with fewer child behavior problems than Harsh-Intrusive mothering, and higher school readiness scores than Directive mothering.

Conclusions—Both similarities and differences were found between African American and Latin American families in observation- based mothering profiles and their linkages with preschoolers' school readiness.

INTRODUCTION

The study of socialization processes across cultural groups within the United States has been motivated in part by questions regarding the qualities of parenting that are associated with ethnic achievement gaps that are unaccounted for by risks associated with income. For example, positive parenting behaviors, often linked with school readiness, were found to be lower for African American and Latin American mothers than for European American mothers in the Early Head Start Research Evaluation Study, with the differences only partially accounted for by other family conditions (Brooks-Gunn & Markman, 2005). It is therefore especially important to understand how parenting practices are associated with variations in children's developing skills pertaining to school readiness among low-income ethnic minority preschoolers. In the current study, we focus on two groups: African American, non-Hispanic children and Hispanic (primarily Mexican-origin) children. Although these groups differ from one another in cultural history and practice, they are the largest minority populations in the United States (U.S. Census Bureau, 2010). As such, it is particularly important to research developmental processes within each of these groups. Moreover, because parenting practices have been found to differ between these ethnicities (Fuligni & Brooks-Gunn, 2013), it is important to examine within-group associations for each population. The current study takes a person-oriented approach to address similarities and differences in profiles of parenting qualities with preschoolers in each ethnic group and relations of the resulting parenting profiles to the children's emerging school readiness skills.

Much of the parenting literature has found that parenting behaviors typically depict two dimensions: supportiveness and intrusiveness. High levels of supportiveness, defined by sensitive responsiveness, positive regard, and minimal intrusiveness, are typically related to better outcomes for children. However, this may not hold true for all cultural groups (McGroder, 2000). For example, although many studies have found that adult-oriented, intrusive parenting is maladaptive for children's development (Kelley & Jennings, 2003), some research has shown that intrusiveness, or directiveness, may be an optimal characteristic for parenting in cultures with minority status (Isapa et al., 2013). Questions have been raised about whether intrusiveness in and of itself is associated with positive outcomes for certain ethnic groups or whether the coupling of warmth and positivity with intrusiveness is required for positive effects, whereas the coupling of negativity with intrusiveness produces negative effects (Tamis-LeMonda, Briggs, McClowry, & Snow, 2009).

A large body of research has shown that mothers' provision of warm, responsive, stimulating engagement with their children is linked to many components of children's

school readiness, including greater emotional competence, fewer behavior problems, larger vocabularies, and better cognitive achievement (e.g., Bornstein & Tamis-LeMonda, 1989; Hart & Risley, 1995; Landry, Swank, Smith, Assel, & Gunnewig, 2006; Landry, Miller-Loncar, Smith, & Swank, 2002; NICHD Early Child Care Research Network [ECCRN], 2001, 2006). Theories of parent socialization (see Maccoby & Martin, 1983) emphasize these dimensions of parenting in characterizing positive, effective parenting qualities. These positive features of parenting are often described as sensitive parenting that is responsive to the child's needs, including both social-emotional needs and cognitive needs for stimulation (e.g., Bornstein & Tamis-LaMonda, 1989; Landry et al., 2006; NICHD ECCRN, 1999). Cross-cultural support for the developmental importance of these characteristics of positive parenting has slowly accrued.

Universality in the meaning and developmental significance of intrusiveness in parenting has been more controversial. Parental intrusive behavior, defined in accordance with Ainsworth, Blehar, Waters, and Wall's (1978) studies of parenting qualities and their associations with attachment qualities, is typically described as directive, controlling, and interfering behavior that emphasizes the parent's agenda over the child's preferences and autonomy. In the research literature based predominantly on European American samples, parental intrusiveness that involves insistence on parental control is generally linked with negative child outcomes (Whiteside-Mansell, Bradley, Owen, Randolph, & Cauce, 2003), particularly so when it is accompanied by harshness and hostility (Frosch & Mangelsdorf, 2001; Lindahl & Malik, 1999). Intrusive parenting is a prominent feature of Baumrind's (1967, 1971) authoritarian parenting style, characterized by low levels of warmth and high levels of control, and linked in much of the developmental and health psychology literature with poorer child outcomes. Although intrusive, controlling parenting behavior is often coupled with hostility (Barnett, Deng, Mills-Koonce, Willoughby, & Cox, 2008), highly directive, intrusive behavior need not be expressed with hostility (Brady-Smith et al., 2013; Ispa et al., 2004, 2013).

Consideration of this discrepancy is shown in cross-cultural distinctions made between hierarchical parenting (Lindahl & Malik, 1999) and authoritarian parenting (Baumrind, 1989). Hierarchical parenting, thought to be particularly relevant among Hispanic groups, conveys a style in which the parent is the primary agent of behavior regulation and decision making for the child but without the harsh emotional component that is included among the characteristics of the authoritarian parenting style found among European American parents (Lindahl & Malik, 1999). For example, one study found that a prominent parenting style for Latin American parents was a "protective" parenting style, characterized by high levels of both warmth and demandingness, and low levels of autonomy granting (Domenech Rodriguez, Donovanick, & Crowley, 2009). Other studies have provided evidence of the utility and even positive benefits of authoritarian parenting for some ethnic groups. Authoritarian parenting is generally found more frequently among African American than European American parents, but often without the negative correlates with child behavior and achievement typically found for European American children. For example, Gonzales, Cauce, Friedman, and Mason (1996) found that authoritarian parenting among low-income African American middle school children from risky neighborhoods had a positive influence on grades and academic achievement.

There has been considerable interest in and support for the use of person-oriented over variable-oriented techniques when exploring heterogeneous populations of which little is known about the normative structure of developmental processes in the population (Brady-Smith et al., 2013; Bergman & Magnusson, 1997; Bergman & Trost, 2006; Cook, Roggman, & D'zatko, 2012; Muthén & Muthén, 1998–2006; Von Eye & Bogat, 2006). The current study utilizes a person-oriented approach to identify profiles of parenting qualities defined by different patterns of associations among observational ratings of qualities of mothering. A person-oriented approach is used under the assumption that African American and Latin American populations are heterogeneous entities with respect to their parenting and to explore the types of parenting groups that can be observed in each of these populations.

Several recent studies have utilized a person-oriented approach to examine parenting in low-income, ethnic minority populations across a range of ages within the Early Head Start (EHS) research and evaluation study. Using observational ratings of parenting behavior of the evaluation study's large sample of European American, African American, and Latin American mothers, Cook and colleagues (2012) identified three parenting styles when children were 14, 24, and 36 months of age. "Developmental parenting" described mothers who were rated high on positive parenting qualities of sensitivity, cognitive stimulation, and affection, and rated low on detachment, intrusiveness, and negative regard. "Unsupportive parenting" was categorized by lower levels of positive parenting behaviors and higher levels of detachment, intrusiveness, and negative regard than the developmental parenting group. Mothers in a third "Negative parenting" group scored similarly on parental behaviors to the unsupportive parenting group but were distinguished by their higher scores of negativity with their children (Cook et al., 2012). However, this study did not stratify the profiles by ethnicity, so it is unclear whether these parenting styles adequately describe variations in parenting across the ethnic groups. The current study expands the literature by examining parenting styles within each ethnic group.

Brady-Smith and colleagues (2013) also examined parenting styles from the EHS research evaluation study using a person-oriented approach with its observational ratings of maternal sensitivity, positive regard, cognitive stimulation, intrusiveness, detachment, and negative regard when children were 12 months old. After stratifying by ethnicity, the study found three groups of parenting emerged for European American, African American, and Latin American mothers identified as Supportive, Directive, and Detached. Mothers classified as Supportive displayed high levels of sensitivity, positive regard, and cognitive stimulation, and low levels of intrusiveness, detachment, and negative regard. Directive mothers differed from Supportive mothers in that they exhibited higher levels of intrusiveness. Detached mothers scored high on detachment and low on all other parental indicators. A fourth parenting group, labeled the Harsh group, emerged only for European American and African American mothers and was characterized by high scores on negative regard and intrusiveness and low scores on all other parenting dimensions (Brady-Smith et al., 2013).

The current study is both a replication and extension of the previous multicultural parenting research of the EHS study. We examine profiles of observational ratings of mother-child interactions with their toddlers in a new sample of African American and Latin American children and their families. The profiles are derived from a similar set of maternal behavior

qualities as those rated in the EHS study (e.g., Fuligni & Brooks-Gunn, 2013) as well as in other major studies of parenting (e.g., Newland, Crnic, Cox, Mills-Koonce, & the Family Life Key Project Investigators, 2013; NICHD ECCRN, 1999). The present study also utilizes a person-oriented approach. Unlike Cook and colleagues (2012) but similar to Brady-Smith and colleagues (2013) and Fuligni and colleagues (2013), the present study incorporates a within-ethnic group analysis. In sum, this study can be distinguished from the extensive body of parenting research derived from the EHS data in providing a new sample, using within-ethnic group analyses, focusing on older toddlers, and including multiple dimensions of observed parenting.

The current study has three primary goals. First, we examine whether there are identifiable profiles of mothering behavior that are similar or different across low-income African American and Latin American mothers and their preschoolers. Second, we address how the identified mothering profiles differ by selected maternal and family characteristics that are standard predictors of individual differences in parenting qualities. Last, we assess the relation between the identified mothering profiles and social and cognitive features of the children's school readiness. Examining the relation between person-oriented parenting styles and indicators of school readiness should increase our understanding of potential sources of ethnic disparities in school achievement.

METHOD

Participants

Participants were drawn from a longitudinal cohort of 407 children and their families who were enrolled in the study when the child was 2.5 years old. Families were recruited from a large city in the southwest through a wide range of community-based recruitment strategies including distribution of study information to organizations and agencies serving low-income communities such as WIC clinics, AVANCE, Head Start programs, pediatric clinics, day care centers, community recreational centers, and churches. Additionally, families were recruited at grocery stores, large discount department stores, and by word of mouth. To participate, children must have at least one parent who identified as African American or Latin American. For the current study, the ethnicity of the mother was used in analyses stratified by ethnicity. Families were visited twice in their homes, once when the target child was 2.5 years old and again approximately one year later. Mothering behavior data were not available for five mothers (one African American and four Latin American) due to equipment failure/experimenter error ($n = 2$) or child noncompliance ($n = 3$).

Demographic characteristics of the study sample are displayed in Table 1. Many of these characteristics differed by maternal ethnicity. Slightly more than half ($N = 210$, 53%) were Latin American, and the remainder ($N = 192$, 47%) were African American. The interactions were collected with the child's biological mother or the child's primary caregiver in the household. African American mother figures were more likely than Latin American mother figures to not be the biological mother of the target child, with most of the non-mother mother figures almost evenly split between grandmother (5.5%) and father's (female) partner (4.9%). Only .5% of the Latin American mother figures were grandmother to the

target child, and 1.5% of Latin American mother figures were father's (female) partner. Heretofore, all mother figures will be referred to as the "mother" of the target child.

African American mothers were less likely to be living with a spouse or partner (39.1%) and more likely to be living in extreme poverty (51.4%), as determined by family income less than one-half the federal poverty level for household size, as compared with Latin American mothers (86.1% and 17.1%, respectively). Latin American mothers were more likely to have completed less than a high school education (44.2%) than were African American mothers (15.5%). Over three-quarters of the Latin American mothers were born outside of the United States, predominantly in Mexico. Of the mothers born outside of the United States, 65% came as adults (18+ years old), 22% came when they were teenagers, and only 13% came when they were a young child or infant. Almost 80% of the Latin American mothers completed the home interview in Spanish.

Data Collection Procedures

Families were visited in their home when the target child was 2.5 years old (Time 1) and again approximately one year later (Time 2). A team of two home visitors went on each visit in which one home visitor conducted the parent interview and the other home visitor conducted the child assessments. The average age of the target children at Time 1 was 30 months (range 28–31 months). Of the 402 target children who participated in the first home visit, 354 (90.1%) completed a Time 2 visit. The follow-up rate was higher for Latin American mothers (93.4%) than for African American mothers (86.3%), $\chi^2(1) = 5.35, p < .05$. Those who were lost to follow up did not differ from those who completed the Time 2 visit in terms of level of maternal education, family income, or child gender. Mothers who were lost to follow up were significantly more detached, $t(400) = -2.81, p < .01$, as well as less positive, $t(400) = 2.23, p < .05$, as rated from mother–child interactions than mothers who completed the Time 2 visit. The average age of the target child at Time 2 was 41 months (range 38–46 months).

Measures

Mother–child interactions—Mother–child interaction was video recorded during the Time 1 home visit using a semi-structured 15-min task that was modeled after the "3 Boxes" procedure used at 24 months and 36 months in the NICHD Study of Early Child Care (NICHD ECCRN, 1999; Owen, Ware, & Barfoot, 2000). The toy stimuli were contained in large numbered pillowcase bags rather than boxes. The mother and child were instructed to spend time with the contents of each bag, starting with bag 1 and ending with bag 3. However, the number of minutes that the dyad chose to spend with each bag was left to the discretion of the mother and child. The contents of the three bags for the mother–child interaction were the picture book "Good Dog Carl" by Alexandra Day in bag 1, the Early Learning Centre "First Kitchen" set in bag 1, and the Fisher Price "Discovery Cottage" playhouse in bag 3. These items were chosen because they represent universal themes and were culturally appropriate for both African American and Latin American families. Given the variability of home environments in which the interactions took place, home visitors administered the interaction in the most suitable room within each home (typically the living room) and kept other adults and children occupied during the interaction.

The interactions were independently rated using 5-point global rating scales (1 = *low*; 5 = *high*) that were adapted from the 4-point rating scales used at this age in the NICHD Study of Early Child Care (Owen, Vaughn, Barfoot, & Ware, 1996), measuring the parenting qualities of sensitivity, intrusiveness, detachment, cognitive stimulation, positive regard, and negative regard (Owen et al., 2010). For each parenting dimension, one globally coded item was rated. The English language coding team of two raters included one member who was African American; the Spanish language coding team of three raters included two Latin American coders, and all were fluent in Spanish. Inter-rater reliability was determined by a second coding of 29% of the interactions. To ensure reliability between the English and Spanish coding teams, both groups met together at least biweekly to code an English-speaking dyad. Inter-rater kappa reliability coefficients for the rating scales ranged from .77 to .87. Inter-rater reliability did not differ significantly between African American and Latin American dyads.

Child outcomes—Child competence was assessed at Time 2 in a wide range of domains including behavior problems, school readiness, language, and social competence. Behavior problems were assessed at both time points using parent reports of the preschool version of the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001). A *t*-score for Total Problems was computed, with higher scores indicating more behavior problems. Pre-academic skills were assessed using the School Readiness subscale (SRS) of the Bracken Basic Concept Scale-R (Bracken, 1998). The Bracken SRS assesses knowledge of colors, letter identification, numbers, comparisons, and shapes. Receptive language skills were assessed using the Peabody Picture Vocabulary Test-Revised (PPVT-R; Dunn & Dunn, 1981) for English-speaking children and the Test de Vocabulario en Imágenes Peabody (TVIP; the Spanish version of the PPVT-R; Dunn, Padilla, Lugo, & Dunn, 1986) for Spanish-speaking children. The child received only the version that corresponded with their dominant language as reported by their parent (i.e., children who were predominately Spanish-speaking only received the TVIP and not the PPVT, and English-speaking children only received the PPVT). To avoid misleading comparisons between ethnicities regarding PPVT and TVIP scores, all analyses were conducted within ethnicity. The Bracken SRS and the PPVT/TVIP were direct assessments of the child's abilities.

Demographic variables—Demographic characteristics included maternal age and education, child gender, and family income-to-needs ratio. In addition, we assessed maternal depression using a revision of the Center for Epidemiologic Studies Depression (CESDR) scale (Eaton, Smith, Ybarra, Muntaner, & Tien, 2004). The CESD-R is comprised of 20 items reporting the frequency in which the respondent experienced symptoms on a 5-point scale ranging from 1 (*not at all/less than 1 day in the last week*) to 5 (*nearly every day for two weeks*). Participant responses were used to create a dichotomy of depression based on the typical cut-off score of 16. There was no significant difference between African American and Latin American mothers in terms of prevalence of depressive symptoms (see Table 1).

For Latin American mothers in the sample, we assessed acculturation with two different indices. Nativity was categorized into three groups: U.S. born, Foreign-born/came to United

States as child, and Foreign-born/came to United States as adult. Second, we administered the linguistic proficiency subscale of the Bidimensional Acculturation Subscale for Hispanics (BAS; Marin & Gamba, 1996) to all primary caregivers completing the home interview. The BAS linguistic proficiency subscale is comprised of 12 items that ask the participant to report how well she speaks, reads, writes, and understands both English and Spanish. An average score of 2.5 on a 4-point scale indicates proficiency in that language. Respondents who score 2.5 or higher for English but not Spanish proficiency are classified as U.S.-oriented; those who score 2.5 or higher for Spanish but not English proficiency are classified as Latina-oriented; those who score 2.5 or higher in both English and Spanish are classified as bicultural. Of the 206 Latin American mothers who were the primary caregiver, 127 (60.5%) were Latina-oriented, 62 (29.5%) were bicultural, 12 (5.7%) were American-oriented, 1 (.5%) was neither, and 6 (2.9%) were missing.

Analysis Methods

Latent class analysis (LCA) using MPlus version 6.1 (Muthén & Muthén, 1998–2006) was used to determine if the maternal behaviors coded from the mother–child interaction task clustered into identifiable profile groups. The LCA was stratified by maternal ethnicity. Models with one to five classes were estimated, and model fit was evaluated using the Bayesian Information Criterion (BIC), the Lo, Mendel, Rubin (LMR) statistic (Celeux & Soromenho, 1996; Clogg, 1995; Hagenaars & Halman, 1989; Nylund, 2007), and the bootstrapped likelihood ratio test (LRT; Nylund, 2007). Lower BIC values suggest better model fit, and non-significant LMR and LRT statistics indicate a model with one fewer class preferred. If these indicators were not consistent with regard to the number of classes identified, we also examined the relative entropy. Increasing entropy indicates better model fit (Templin, 2006).

Chi-square analyses were used to compare the profile groups in terms of differences in demographic and other maternal characteristics. Analysis of covariance (ANCOVA) models were used to examine whether differences in child outcomes associated with mothering profiles were consistent for children of both ethnicities and/or gender after adjusting for potential demographic confounders.

RESULTS

LCA Identifying Mothering Profiles

For African American mothers, a four-class model fit best, whereas a three-class model fit best for Latin American mothers. All fit indices were taken into account when deciding the best fitting model within each ethnicity. For African American mothers, the combination of the BIC, LMR, and LTR suggested that the four-class model fit best, whereas entropy and LMR suggested the three-class model fit best for Latin American mothers (see Table 2 for fit indices). In Figure 1, we display the average levels for each of the six maternal behavior ratings for each of the profile groups separately by maternal ethnicity. The first two profile groups were very similar for each ethnic group. We labeled the first profile group “Child-Oriented,” as it was characterized by high levels of sensitivity, cognitive stimulation, and positive regard, and low levels of detachment, intrusiveness, and negative regard. Half of all

Latin American mothers fell into the Child-Oriented group compared to 29% of African American mothers. The second profile group, labeled “Directive,” was also comprised of mothers displaying relatively high levels of sensitivity, cognitive stimulation, and positive regard (although these scores were not as high as the Child-Oriented group), and low levels of detachment and negative regard. Contrary to the Child-Oriented mothers, however, Directive mothers displayed a higher level of intrusiveness. A total of 45% of Latin American mothers and 35% of African American mothers fell into the Directive profile group.

A third profile group was distinguished in both ethnic groups, with high levels of intrusiveness and negative regard; thus, we labeled this group “Harsh-Intrusive.” Approximately 19% of African American mothers and 5% of Latin American mothers fell into this profile group. A fourth profile group was only identified among African American mothers, characterized by high levels of detachment and low levels of all other maternal behaviors. We labeled this group “Withdrawn.” It is important to note that although the mean of intrusiveness in this group was similar to the mean of intrusiveness in the African American Directive group, intrusiveness in the Withdrawn group was coupled with high levels of detachment. When mothers who generally exhibit detachment from their children do interact with their children, the interaction is often intrusive, possibly from a lack of awareness of the child’s needs. Approximately 17% of African American mothers were categorized as Withdrawn.

We compared the average values for the six maternal behavior scales for the three profile groups that were found for both ethnic groups, and the results are displayed in Table 3. There were no significant differences in the six maternal behavior scores between Latin American mothers and African American mothers in the Child-Oriented group. For the Directive group, Latin American mothers displayed significantly higher levels of both positive regard and intrusiveness, and lower levels of sensitivity and negative regard compared to African American mothers in this group. Thus, although “directive” seemed to be an appropriate label for this profile of parenting in both ethnic groups, there were some ethnic differences in this parenting profile. In addition, some ethnic differences were noted in qualities defining the Harsh-Intrusive parenting profile: Latin American mothers in the Harsh-Intrusive group displayed significantly higher levels of intrusiveness and negative regard than African American mothers in the Harsh-Intrusive group.

Bivariate differences in the distribution of mothering profile groups by maternal characteristics are displayed in Table 4. Among African American mothers, mothering profile group was unrelated to all demographic characteristics except for maternal education. African American mothers with less than a high school education were more likely to be in the Withdrawn group and less likely to be in the Child-Oriented group. Among Latin American mothers, mothering profile groups differed by maternal education and maternal depression. Latin American mothers with more than a high school education were more likely to be in the Child-Oriented compared to the Directive group, and Latin American mothers reporting clinical levels of depressive symptoms were more likely to be in the Harsh-Intrusive group than Latin American mothers reporting below clinical levels of

depressive symptoms. For both ethnicities, parenting profile group membership was unrelated to both family income and family structure.

Differences in Child Outcomes by Mothering Profile Groups

Differences in child outcomes at Time 2 by mothering profile group at Time 1 are displayed in Table 5 by ethnicity. Differences were tested using a series of ANCOVA models. All models were adjusted for effects of maternal education and child gender. Generally, for both ethnic groups, Child-Oriented mothering was associated with more positive child outcomes. For African American children, Directive mothering was also associated with more positive child outcomes. African American children who experienced Child-Oriented or Directive mothering at 2.5 years of age displayed better pre-academic school readiness and language skills one year later compared with African American children who experienced either Harsh-Intrusive or Withdrawn mothering. Additionally, African American children who had Child-Oriented mothers were less likely to exhibit problem behavior at 3.5 years than children who had Harsh-Intrusive mothers. Among Latin American children, those who experienced Child-Oriented mothering at 2.5 years of age displayed lower levels of behavior problems at age 3.5 compared to those who experienced Harsh-Intrusive or Directive mothering, and better language proficiency compared to those who experienced Harsh-Intrusive mothering.

One unexpected finding emerged for our Latin American sample. Latin American children who experienced Harsh-Intrusive parenting performed better in pre-academic school readiness than children who had either Child-Oriented or Directive mothers. However, because of the very small size of the Harsh-Intrusive group among Latin American mothers ($n = 11$) as well as the counter-intuitiveness of the finding, these results should be interpreted with caution.

DISCUSSION

There have been growing efforts to provide culturally sensitive analysis of developmental processes with the acknowledgement that similar behaviors can have different functions across diverse cultures (Bornstein, 1995; Garcia Coll & Magnuson, 1999; Greenfield, Keller, Fuligni, & Maynard, 2003; Whiteside-Mansell et al., 2003). The purpose of this study was to explore normative parenting profiles among low-income African American and Latin American mothers and to examine associations with school readiness in their preschool-aged children.

Person-oriented analyses revealed that a 3-class model of mothering profiles fit best for Latin American mothers, whereas a 4-class model best described African American mothers. Allowing the data to reveal profiles without imposing assumptions of homogeneity showed that a single model did not adequately explain parenting styles across ethnicities. The other reports in the literature using a person-oriented approach to the study of parenting both relied on data from the EHS study, with one stratifying the analysis by ethnicity (Brady-Smith et al., 2013) and the other not stratifying (Cook et al., 2012). The fact that Brady-Smith and colleagues (2013) found a detached or withdrawn group for Latin American mothers where we did not may be a product of sample differences between the two studies.

Although Brady-Smith and colleagues did not report the immigrant status of the mothers in their study, other reports of the EHS data indicate that only about 11% of the caregivers in that study were predominantly Spanish-speaking (Love et al., 2005). The Latin American mothers in the current study were predominantly foreign-born and Spanish-speaking. In other analyses of parenting qualities observed in the EHS study, intrusiveness at 15 months predicted decreases in parent-child mutuality in more acculturated Mexican American families but not in less acculturated Mexican American and African American families (Ispa et al., 2004). An interesting direction for future parenting research would be to conduct similar person-oriented analyses in a sample of Latin American mothers that is more balanced with regard to nativity and stratify by nativity or other measures of acculturation to examine how profiles of parenting behavior might be moderated by acculturation.

Results indicated that Child-Oriented parenting was generally more optimal for both social and pre-academic indicators of school readiness compared with Harsh-Intrusive or Withdrawn parenting in these populations. These findings are consistent with previous research (Brady-Smith et al., 2013; Cook et al., 2012) and provide further support for the concept that parenting characterized by high levels of warmth, sensitivity, and cognitive stimulation, and low levels of negativity produces positive developmental growth for children in low-income African American and Latin American populations.

Although positive child outcomes associated with Child-Oriented parenting were similar for both ethnicities, cultural differences in associations between parenting and outcomes were also observed. For example, Directive parenting was less optimal for Latin American children but not for African American children. One explanation for this finding is that Directive parenting may be adaptive for African American populations given their experiences of discrimination and racism (Ispa et al., 2013; McAdoo, 2002; Ogbu, 1991). Directive parenting, characterized here by elevated levels of intrusiveness accompanied with moderate levels of sensitivity and warmth, may be a form of protection for children in the face of these cultural and ethnic challenges. The Directive parenting group was the largest group among our African American sample, consistent with other research finding high levels of directiveness within African American populations (Holloway, Rambaudo, Fuller, & Eggers-Piérola, 1995; Ispa et al., 2013). This group was also highly prevalent among Latin American mothers (45% of Latin American mothers), consistent with other research finding large proportions of directive (or protective) parenting styles among Latin American families (Brady-Smith et al., 2013; Domenech Rodriguez et al., 2009). Higher levels of intrusiveness found within the Latin American Directive group than the African American Directive group could also explain the positive school readiness outcomes that were associated with Directive parenting for African American but not for Latin American children. It may be that a relatively moderate level, but not a high level, of directiveness is effective in achieving positive child outcomes.

Another cultural variation we found was the evidence of a Withdrawn style of parenting among the African American mothers but not among Latin American mothers. These results are inconsistent with the parenting groups identified among Latin American, African American, and European American mothers in the EHS study by Brady-Smith and colleagues (2013). Their analyses revealed a Withdrawn parenting profile in all three ethnic

groups from cluster analyses of the observational ratings of mother–child interactions in infancy. However, Withdrawn parenting was characterized largely on the basis of minimal verbal communication of the mothers with their infants, which may be a cultural norm for Latin American parents, particularly during infancy (Brady-Smith et al., 2013). Others have also noted the tendency for Latin American parents not to engage verbally with their infants (Wasserman, Rauh, Brunelli, Garcia-Castro, & Necos, 1990). The lack of evidence in the present study for a Withdrawn parenting group among the Latin American mothers with their 2.5-year-old children may indicate that Latin American parents become more verbally engaged with their children as the children reach toddlerhood and are themselves more verbal.

One counterintuitive finding emerged for the Latin American group. Harsh-Intrusive mothering among Latin Americans was related to children’s higher scores on the Bracken pre-academic school readiness measure. As noted, this was a very small group among the Latin American mothers of this study. We conducted additional analyses to examine whether a few outlier cases were responsible for these counterintuitive results, but this was not the case. Future research must determine if these findings are reliable.

Limitations and Future Directions

One notable limitation to generalizing from the results of the current study was that the Latin American sample predominantly consisted of Mexican American families. Thus, the findings from this study cannot be assumed to apply generally to Latinos from other countries of origin. Further research is needed to address whether the parenting profiles and associations with school readiness found in this study hold for Latin American families in the United States more generally. Likewise, the Latin American mothers in this sample were largely foreign-born and Spanish-speaking. As a result, the vast majority of Latin American mothers in this sample were either Latina-oriented or bicultural in terms of their acculturation status with only a very small proportion classified as U.S.-oriented. This lack of variability limited our ability to examine differences in parenting associated with acculturation, as has been noted in previous research (e.g., Ispa et al., 2004).

Another limitation of the current study is the differential attrition related to parenting profiles. African American mothers classified as Withdrawn were more likely to be lost to follow-up (22%) compared to mothers in the other groups (9% overall). As a result, due to the smaller number of children of Withdrawn mothers having outcome data available, the statistical power for identifying associations with child outcomes was reduced. Nonetheless, among those with follow-up data, we found meaningful associations with this style of parenting, with children of Withdrawn mothers measured to have lower school readiness and receptive language scores one year later. It may be worth noting that in the EHS study, African American dyads were similarly more likely to drop out than Mexican American dyads, and those who dropped out had lower scores on warmth than those who stayed in the study (Ispa et al., 2004).

The current study focuses on the effects of mothering profiles on child outcomes related to school readiness. We recognize that we have not included other important caregiving figures in the children’s lives in this examination. Fathers, in particular, as well as other close

relatives, also play important roles in the children's experiences. It should be acknowledged that two-parent families were much more prevalent among the Latin American children than the African American children of our sample. The greater prevalence of this source of support for the Latin American mothers may have had possible effects on the parenting profiles observed and their distributions across the two ethnicities. The lack of inclusion of fathers' parenting in the present study is clearly a limitation to generalizations that may be derived from this analysis of parenting profiles in these ethnic groups.

Taken together, the findings of this study illustrate several key points. First, when examining populations for which the normative structure of parenting styles is not established, it is important to use a person-oriented approach to identify profiles that would be unknown *a priori* to avoid assumptions that may not be applicable to the population in question. Second, although parenting characterized by high levels of intrusiveness may not be optimal for European families (see Ispa et al., 2013), parental intrusiveness or directiveness coupled with sensitivity and warmth has positive implications for outcomes for African American children. This study provides evidence for both similarities and differences in parenting characteristics across the ethnicities studied in these low-income samples, and provides further evidence that seemingly similar parental behaviors do not necessarily generate similar outcomes for children across ethnicities.

IMPLICATIONS FOR PRACTICE, APPLICATION, AND POLICY

Studies of cultural distinctions in parenting styles and relations to school readiness outcomes for African American and Latin American preschoolers hold important implications for efforts to reduce ethnic disparities in school success. In particular, this study demonstrated that parenting characterized as "child-oriented" for both African American and Latin American mothers, with relatively high scores on positive features and low scores on negative features of parenting, were similarly associated with higher scores on features of school readiness across ethnicities. In contrast, we found positive school readiness outcomes for African American children were also related to a "directive" parenting profile, but this finding did not hold for Latin American children. These findings highlight the importance of considering ethnic similarities and differences in parenting styles and associated child outcomes in efforts to provide developmental guidance and support for culturally diverse families. A growing understanding of the cultural contexts of families' lives should serve to enrich the research basis and effectiveness of intervention efforts to bridge the achievement gap.

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4-Class Solution for African American Mothers

3-Class Solution for Latin American Mothers

FIGURE 1.

Latent class analysis results stratified by ethnicity with categorical indicators.

TABLE 1

Characteristics of Study Sample ($N = 402$)

	Maternal Ethnicity		χ^2
	African American ($N = 192$) N (%)	Latin American ($N = 210$) N (%)	
Family structure			
Nuclear	39 (20.3)	129 (61.4)	165.88***
Nuclear extended	4 (2.1)	49 (23.3)	
Single parent	48 (25.0)	9 (4.3)	
Single extended	44 (23.0)	18 (8.6)	
Single parent plus partner	32 (16.7)	3 (1.4)	
Other	22 (11.5)	2 (1.0)	
Missing/refused	3 (1.6)	0 (0.0)	
Family income			
<50% federal poverty level	97 (50.5)	36 (17.1)	77.58***
50%–99% federal poverty level	28 (14.6)	83 (39.5)	
100%–149% federal poverty level	22 (11.5)	57 (27.1)	
150%–200% federal poverty level	10 (5.2)	18 (8.6)	
>200% federal poverty level	8 (4.2)	3 (1.4)	
Missing/refused	27 (14.1)	13 (6.2)	
Child gender			
Boy	106 (55.2)	111 (52.9)	.64
Girl	86 (44.8)	99 (47.1)	
Child's ethnicity			
African American	169 (88.0)	0 (.0)	353.27***
Latin American	0 (.0)	181 (86.2)	
Multiethnic	23 (12.0)	29 (13.8)	
Mother figure's relationship to child			
Mother	171 (89.1)	206 (98.1)	14.59**
Father's partner	10 (5.2)	3 (1.4)	
Grandmother	10 (5.2)	1 (.5)	
Aunt	1 (.5)	0 (0.0)	
Mother figure's age			
Younger than 20 years	5 (2.6)	9 (4.3)	6.80 ⁺
20 to 29 years	107 (56.0)	108 (52.2)	
30 to 39 years	57 (29.8)	79 (38.2)	
40 years or older	22 (11.5)	11 (5.3)	
Mother's educational attainment ^a			
Less than high school	27 (14.1)	91 (44.2)	40.37***
High school degree/GED	83 (43.5)	74 (35.9)	

	Maternal Ethnicity		χ^2
	African American (<i>N</i> = 192) <i>N</i> (%)	Latin American (<i>N</i> = 210) <i>N</i> (%)	
More than high school	81 (42.4)	41 (19.9)	
Mother's depressive symptoms			
Depressive disorder unlikely	173 (90.1)	182 (87.9)	4.34
Subthreshold depressive disorder	13 (6.8)	18 (8.7)	
Possible depressive disorder	1 (.5)	0 (0.0)	
Probable depressive disorder	1 (.5)	5 (2.4)	
Meets DSM-IV criteria for major depression	4 (2.3)	2 (1.0)	
Latin American mothers only			
Nativity			
Foreign-born	—	162 (77.1)	
U.S.-born	—	48 (22.9)	
Country of origin if foreign-born			
Mexico	—	155 (95.7)	
Central/South America	—	7 (4.3)	
Preferred language			
English	—	44 (21.0)	
Spanish	—	166 (79.0)	

^a Mother's educational attainment, age, and depressive symptoms are only available when mother, grandmother, or aunt is the primary caregiver.

⁺ $p < .10$.

** $p < .01$.

*** $p < .001$.

TABLE 2

Results of LCA Stratified by Ethnicity

Classes	African American Mothers				Latin American Mothers			
	BIC	Entropy	LMR	LRT	BIC	Entropy	LMR	LRT
1	2,938	—	—	—	2,789	—	—	—
2	2,704	.86	.000	.000	2,560	.86	.000	.000
3	2,611	.93	.000	.000	2,499	.94	.000	.000
4	2,580	.93	.009	.000	2,495	.86	1.000	.000
5	2,592	.94	.023	.130	2,513	.84	.550	.040

TABLE 3

Mean Differences in Mother Behavior by Class and Ethnicity

	African American		Latin American		<i>F</i>
	<i>M</i>	<i>SE</i>	<i>M</i>	<i>SE</i>	
Class 1: Child-Oriented					
Sensitivity	4.13	.045	4.11	.041	.506
Cognitive stimulation	3.80	.102	3.92	.074	1.73
Positive regard	4.07	.100	4.05	.067	1.37
Detachment	1.20	.060	1.11	.030	9.77
Intrusiveness	1.93	.086	1.95	.069	.900
Negative regard	1.16	.057	1.08	.030	8.40
Class 2: Directive					
Sensitivity	2.99	.015	2.68	.048	279.21***
Cognitive stimulation	3.03	.084	3.07	.077	1.24
Positive regard	3.02	.097	3.29	.083	3.99*
Detachment	1.66	.093	1.54	.075	.100
Intrusiveness	2.29	.109	3.20	.089	.030***
Negative regard	1.38	.081	1.17	.039	26.731**
Class 3: Harsh-Intrusive					
Sensitivity	1.92	.045	2.00	.135	.118
Cognitive stimulation	2.92	.131	2.55	.207	.001
Positive regard	2.68	.103	2.82	.226	.183
Detachment	1.57	.120	1.91	.315	1.82
Intrusiveness	4.00	.095	4.55	.157	1.41**
Negative regard	2.68	.186	3.55	.207	5.171*

Note. Means are adjusted for family income-to-needs ratio.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

TABLE 4**Differences in Quality of Mothering by Demographic Characteristics**

	African American Mothers				χ^2
	Child-Oriented N (%)	Directive N (%)	Harsh-Intrusive N (%)	Withdrawn N (%)	
Mother's relationship to child					
Mother	46 (26.9)	60 (35.1)	34 (19.9)	31 (18.1)	2.48
Other related/unrelated adult	9 (42.9)	8 (38.1)	3 (14.3)	1 (4.8)	
Father figure presence in home					
No father/father figure in home	22 (28.9)	23 (30.3)	15 (19.7)	16 (21.1)	.95
Father/father figure in home	33 (28.4)	45 (38.8)	22 (19.0)	16 (13.8)	
Family income					
<50% federal poverty level	24 (24.7)	32 (33.0)	21 (21.6)	20 (20.6)	4.80
50%–99% federal poverty level	8 (28.6)	10 (35.7)	5 (17.9)	5 (17.9)	
100%–149% federal poverty level	8 (36.4)	7 (31.8)	4 (18.2)	3 (13.6)	
150%+ federal poverty level	9 (50.0)	6 (33.3)	2 (11.1)	1 (5.6)	
Child gender					
Boy	30 (28.3)	31 (29.2)	24 (22.6)	21 (19.8)	4.97
Girl	25 (29.1)	37 (43.0)	13 (15.1)	11 (12.8)	
Mother's education					
Less than high school	3 (11.1)	6 (22.2)	9 (33.3)	9 (33.3)	13.50*
High school	20 (24.1)	31 (37.3)	18 (21.7)	14 (16.9)	
More than high school	32 (39.5)	30 (37.0)	10 (12.3)	9 (11.1)	
Mother's age					
Younger than 20 years	1 (20.0)	1 (20.0)	0 (.0)	3 (60.0)	9.38
20 to 29 years	27 (25.2)	43 (40.2)	20 (18.7)	17 (15.9)	
30 to 39 years	19 (33.3)	17 (29.8)	11 (19.3)	10 (17.5)	
40 years or older	8 (36.4)	7 (31.8)	6 (27.3)	1 (4.5)	
Mother's psychological status					
Depressive disorder unlikely	51 (29.5)	62 (35.8)	33 (19.1)	27 (15.6)	1.36
Possible depressive disorder	4 (20.1)	6 (31.6)	4 (20.1)	5 (26.3)	

	Latin American Mothers			χ^2
	Child-Oriented N (%)	Directive N (%)	Harsh-Intrusive N (%)	
Mother's relationship to child				
Mother	102 (49.5)	94 (45.6)	10 (9.1)	1.09
Other related/unrelated adult	2 (50.0)	1 (25.0)	1 (25.0)	—
Father figure presence in home				
No father/father figure in home	10 (50.0)	8 (40.0)	2 (10.0)	2.63
Father/father figure in home	94 (49.5)	87 (45.8)	9 (4.7)	—
Family income				
<50% federal poverty level	12 (33.3)	21 (58.3)	3 (8.3)	8.88
50%–99% federal poverty level	42 (50.6)	36 (43.4)	5 (6.0)	—
100%–149% federal poverty level	32 (56.1)	24 (42.1)	1 (1.8)	—
150%+ federal poverty level	14 (66.7)	5 (23.8)	2 (9.5)	—
Child gender				
Boy	55 (49.5)	51 (45.9)	5 (4.5)	.03
Girl	49 (49.5)	44 (44.4)	6 (6.1)	—
Mother's education				
Less than high school	45 (48.9)	42 (45.7)	5 (5.4)	10.69*
High school	35 (46.1)	38 (50.0)	3 (3.9)	—
More than high school	24 (58.5)	15 (36.6)	2 (4.9)	—
Mother's age				
Younger than 20 years	5 (50.0)	5 (50.0)	0 (0.0)	.80
20 to 29 years	53 (49.1)	51 (47.2)	4 (3.7)	—
30 to 39 years	41 (50.6)	34 (42.0)	6 (7.4)	—
40 years or older	5 (45.5)	5 (45.5)	1 (9.1)	—
Mother's psychological status				
Depressive disorder unlikely	95 (51.4)	81 (43.8)	9 (8.1)	9.81**
Possible depressive disorder	9 (40.9)	11 (50.0)	2 (10.0)	—
Nativity				
U.S.-born	24 (50.0)	19 (39.6)	5 (10.4)	2.96

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Foreign-born, in U.S. as child	28 (50.9)	24 (43.6)	3 (5.5)	—	
Foreign-born, in U.S. as adult	52 (50.0)	50 (48.1)	2 (1.9)	—	
Acculturation group					
U.S.-oriented	7 (58.3)	4 (33.3)	1 (8.3)	—	3.26
Latina-oriented	61 (48.0)	62 (48.8)	4 (3.1)	—	
Bicultural	34 (54.8)	23 (37.1)	5 (8.1)	—	

* $p < .05$.
** $p < .01$.

TABLE 5

Differences in Child Outcomes at Age 3.5 in Relation to Quality of Mothering at Age 2.5

	African Americans		
	CBCL total <i>M (SD)</i>	Bracken SRS <i>M (SD)</i>	PPVT <i>M (SD)</i>
Child-Oriented	45.69 _a (9.97)	70.53 _{c,d} (19.17)	81.66 _{e,f} (11.09)
Directive	48.17 (9.65)	64.69 (14.43)	76.82 _g (13.53)
Harsh-Intrusive	50.92 _a (11.41)	58.42 _c (12.32)	72.32 _e (14.77)
Withdrawn	48.69 (11.30)	61.40 _d (12.37)	67.76 _{f,g} (13.47)
<i>F</i>	2.43 [*]	4.19 ^{***}	3.16 ^{**}

	Latin Americans		
	CBCL total <i>M (SD)</i>	Bracken SRS <i>M (SD)</i>	PPVT/TVIP <i>M (SD)</i>
Child-Oriented	48.85 _h (9.49)	84.72 _j (10.91)	91.61 _k (12.86)
Directive	51.64 _{h,i} (10.96)	80.73 _j (11.84)	88.22 _{k,l} (12.13)
Harsh-Intrusive	54.38 _i (11.17)	88.62 (14.49)	88.77 _l (12.34)
<i>F</i>	3.29 ^{**}	3.40 ^{**}	2.11 [*]

Note. All means are adjusted by maternal education and child gender. Numbers with the same subscript are significantly different from one another.

* $p < .05$.

** $p < .01$.

*** $p < .001$.