

#### Article

Family and Teacher
Characteristics as
Predictors of Parent
Involvement in Education
During Early Childhood
Among Afro-Caribbean
and Latino Immigrant
Families

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#### **Abstract**

Parent involvement is a robust predictor of academic achievement, but little is known about school- and home-based involvement in immigrant families. Drawing on ecological theories, the present study examined contextual characteristics as predictors of parent involvement among Afro-Caribbean and Latino parents of young students in urban public schools. Socioeconomic disadvantage was associated with lower home-based involvement. Several factors were associated with higher involvement, including parents' connection to their culture of origin and to U.S. culture, engagement practices by teachers and parent-teacher ethnic consonance

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(for Latinos only). Findings have implications for promoting involvement among immigrant families of students in urban schools.

## **Keywords**

parent involvement, Latino families, Afro-Caribbean families, early childhood

Immigrant students are generally found to outperform their U.S.-born peers across a range of academic outcomes, despite experiencing numerous sociodemographic risk factors (Fuligni, 1997; Glick & White, 2004; Kao & Tienda, 1995). This paradox may be attributable in part to an "immigration ethos," a clear investment by immigrant parents in children's education stemming from the view that academic achievement is the key to social mobility in the United States (Gallimore & Goldenberg, 2001; Garcia Coll et al., 2002; Lopez, Sanchez, & Hamilton, 2000; Lucas, 1997; Peña, 2000; Pérez Carreón, Drake, & Barton, 2005; Trumbull, Rothstein-Fisch, Greenfield, & Quiroz, 2001). Yet, the U.S. immigrant population is heterogeneous on variables such as nativity, age at immigration, and English language proficiency, and not all groups experience these paradoxical protective effects (Simms, 2012). In the present study, we consider group differences in the ways in which immigrant parents invest in their child's education by examining parent involvement, a potential expression of the immigration ethos, and its predictors, among Afro-Caribbean and Latino students attending public school in New York City (NYC). In the NYC public school system, which serves more than 1 million students, a large majority (70%) of the student population is Latino or non-Latino Black, and about half is immigrant (defined here as being foreign-born or having a foreign-born parent). Among immigrant students, the Dominican Republic, Mexico, Jamaica, and Guyana represent 4 of the 5 top countries of origin (New York City Independent Budget Office, 2011), making Afro-Caribbean and Latino groups a high priority for NYC educators.

## **Parent Involvement**

Parent involvement in education, broadly defined as the resources that parents invest in their child's learning experience, plays an important role in children's development (Epstein, 1987a, 1987b, 1991; Fan & Chen, 2001; Grolnick, Benjet, Kurowski, & Apostoleris, 1997; Hill et al., 2004; Jeynes, 2005). As early as pre-kindergarten, parent involvement enhances children's motivation to learn (Christenson, 2000) and promotes social and emotional

competencies, emergent skills that are necessary for later academic success (Pianta, Rimm-Kaufman, & Cox, 1999). The extent to which parents value and get involved in their child's education beginning in preschool has been shown to predict better academic achievement over time (Barnard, 2004; McWayne, Campos, & Owsianik, 2008; Miedel & Reynolds, 1999). These effects may be most pronounced for Black and Latino students, perhaps because of the greater level of risk for underachievement faced by these children (Jeynes, 2005).

Theories of parent involvement identify both home- and school-based involvement strategies as important supports for children's education (Epstein, 1987b). Involvement in the school may manifest as participation in school-based activities and communication with teachers, whereas involvement at home may manifest as engagement in educational activities such as reading with children, taking them to museums or helping them with homework. To date, the literature has focused almost exclusively on school-based activities (Lopez, 2001), a behavioral domain in which immigrant parents may be less involved relative to U.S.-born parents (Ladky & Stagg Peterson, 2008). In the Afro-Caribbean population, for example, parents may be unaccustomed to or uncomfortable with school-based involvement practices, focusing instead on preparing young children for academic success by teaching them foundational pre-academic skills and proper behavior (Clay, 1995; Mitchell & Bryan, 2007; Roopnarine, Bynoe, & Singh, 2004; Roopnarine, Krishnakumar, Metingdogan, & Evans, 2006). Similarly, Latino parents, particularly those who are non English-speaking, may not often attend school events, volunteer in the classroom or communicate directly with school staff (Llagas & Snyder, 2003; Mariñez-Lora & Quintana, 2009; Wong & Hughes, 2006; but see Durand, 2011), but they appear to engage in high levels of home-based involvement by emphasizing educational values, engaging in educationally relevant home-based activities such as monitoring homework and curfews, and providing educational resources and adequate nutrition and rest for their children (Chrispeels & Rivero, 2001; Hill & Torres, 2010; Martinez, DeGarmo, & Eddy, 2004; Niemeyer, Wong, & Westerhaus, 2009; Quiocho & Daoud, 2006; Tang & Kao, 2012).

In a national study of Mexican American high school students, home-based, but not school-based, involvement was associated with academic achievement, and this relation was mediated by increased student engagement in learning (Mena, 2011). Other studies substantiate this finding (Eamon, 2005; Jeynes, 2005) and further suggest that home-based involvement may be protective against behavior problems (DeWit, Adlaf, Offord, & Ogborne, 2000; Hill & Craft, 2003; McWayne, Hampton, Fantuzzo, Cohen, & Sekino, 2004; Prelow & Loukas, 2003). In light of these findings,

researchers caution that the exclusive focus on behavioral measures of school-based involvement fails to capture important predictors of immigrant student achievement.

When measured broadly, studies of parent involvement also reveal important variations between immigrant groups. In a comparison of immigrant Dominican, Cambodian, and Portuguese parent involvement during elementary school, Garcia Coll and colleagues (2002) examined beliefs about involvement, provision of material resources, home-based involvement (e.g., monitoring children's whereabouts, imposing a curfew) and school-based involvement (e.g., contact with teachers, participation in school events). Using this broader conceptualization than what is typically considered in the parent involvement literature, differences between immigrant groups were found in both the level and pattern of involvement. Specifically, Cambodian parents reported the lowest levels of involvement across all dimensions, Portuguese parents engaged in more school-based than home-based involvement, and Dominican parents engaged in more home-based than schoolbased involvement. Such variations in parent involvement across immigrant groups may be attributable to differences in socioeconomic status (Hill, 2001), but may also stem from cultural differences.

## **Predictors of Parent Involvement**

## Parent Cultural Characteristics

According to empirically supported theoretical models (e.g., Hoover-Dempsey & Sandler, 1997), parent involvement is determined first and foremost by how parents construe their role in children's education. Culture shapes parenting beliefs, attitudes, values, and behaviors (Chao, 2000; Garcia Coll, Meyer, & Brillon, 1994; Li, 2003; Lopez, 2001) and consequently, the way in which parent involvement is defined and expressed. Across cultural groups, parents may believe that it is their responsibility to partner with teachers in their child's education or alternately, that teachers are the sole authority on school-related matters (Garcia Coll et al., 2002; Ramirez, 2003). Similarly, parents may believe in a "concerted cultivation" approach to childrearing that values organized, structured, adult-initiated learning or alternately, in a "natural growth" approach that relies on unstructured, child-initiated learning (Lareau, 2003). Grounded in these cultural repertoires, parents tend to view and manage their involvement in education in diverse ways, though these cultural nuances are not yet well understood.

Given the central role of culture in defining the ways in which parents are involved in their children's education, researchers have highlighted the potential importance of acculturation in the study of parent involvement in immigrant families (Turney & Kao, 2009; Vazquez-Nuttall, Li, & Kaplan, 2006; Waters, 2004). Acculturation refers to the adaptation to mainstream culture (e.g., U.S. American) and enculturation is the parallel construct that refers to the maintenance of a culture of origin (e.g., Dominican, Jamaican). Acculturative status—which simultaneously considers both acculturation and enculturation and comprises one's sense of identity, cultural competence, and language competence (Zea, Asner-Self, Birman, & Buki, 2003)—serves as an indicator of how connected parents are to their culture-of-origin values and beliefs relative to those of mainstream culture. Despite emerging consensus that acculturative status may be a useful construct in the study of parent involvement in education, this question has not been explored in the extant literature.

## Socioeconomic Characteristics

Beyond culture, parent involvement in education may be understood in the context of numerous logistical barriers faced by immigrant families related to their socioeconomic characteristics. Relative to U.S.-born parents, immigrant parents tend to be less educated, hold lower-paying jobs with inflexible schedules, and head families that live in poverty (Shields & Behrman, 2004; Takanishi, 2004), factors that predict lower levels of parent involvement in school-based activities (Green, Walker, Hoover-Dempsey, & Sandler, 2007; Hill, 2001; Kohl, Lengua, & McMahon, 2000). Fear of deportation for immigrants with undocumented status may make parents' involvement in their child's school even less likely. Moreover, immigrant parents face challenges to participating in mainstream institutions, such as schools, due to a lack of familiarity with the new language, customs, and norms (Garcia Coll et al., 2002).

## **Teacher Characteristics**

In the same vein, teachers are often unfamiliar with the cultural norms of immigrant students (Delpit, 1995), posing additional barriers to homeschool partnerships. This cultural gap may be exacerbated by the real and perceived prejudice immigrants experience based on their immigrant, socioeconomic, racial, or ethnic group status. There is evidence that non-Black teachers perceive Black students negatively (Jackson, 2002; Murray, 1996; Oates, 2003), that Black children are less likely to experience supportive relationships with their teachers (Saft & Pianta, 2001), and that teachers report better relationships with White and Latino families than

with Black families (Hughes, Gleason, & Zhang, 2005). To the extent that an anti-Black bias extends to and is perceived by parents, the racial dissonance between teachers and Black families may be an important determinant of parent involvement (Huss-Keeler, 1997; Jackson, 2002; Murray, 1996) and indeed, there is empirical evidence for the relation between parent perceptions of racism and their limited school-based involvement (McKay, Atkins, Hawkins, Brown, & Lynn, 2003). The present study builds on this budding literature by examining parent—teacher ethnic/racial consonance as a predictor of parent involvement.

Teacher attitudes and practices have also been linked with parent involvement. Specifically, parent involvement is higher when teachers feel efficacious in their teaching role (Hoover-Dempsey, Bassler, & Brissie, 1987) and when they have positive attitudes about, and actively engage in, practices that encourage parent involvement (Epstein, 1986; Grolnick et al., 1997). Teacher-initiated communication, such as an explicit invitation to visit the classroom, may be especially likely to engage parents and increase school-based involvement activities (Epstein, 1986; Epstein & Dauber, 1991; Grolnick et al., 1997). Similarly, teachers may serve as an important source of information for how to support children's education through home-based involvement.

# The Present Study

Immigrant parents often adhere to an immigration ethos that leads to high aspirations for their children's academic achievement but they also face numerous barriers to school-based involvement in education; the co-existence of these risk and protective factors suggests the need for a more nuanced understanding of what influences immigrant parent involvement. The present study examined predictors of parent involvement among Afro-Caribbean and Latino families during the important transition to school in pre-kindergarten or kindergarten, when academic trajectories begin to take shape. Moving beyond the traditional emphasis on involvement in school-based activities, and consistent with the conceptualization of parent involvement among diverse and marginalized populations (Garcia Coll et al., 2002), we examined parent involvement as a multidimensional construct in recognition of the myriad ways in which parents may support their children's education. Notably, we studied Afro-Caribbean and Latino samples that may experience unique risk (e.g., English language proficiency) and protective (e.g., enculturation) factors, even as they come from similar urban, disadvantaged school communities. A comparison of these two large immigrant groups (that represent a significant portion of the NYC public school population) recognizes the diversity of the immigrant population in the United States (Rumbaut,

1997) and also allows for the disaggregation of immigrant status, acculturative status, and socioeconomic characteristics as predictors of involvement.

Our conceptual framework draws on past parent involvement theories that emphasize the ecological context (Hoover-Dempsey & Sandler, 1997), focusing on three aspects of families' social ecologies that are thought to shape parent involvement and may be especially salient in the lives of low-income immigrant students: socioeconomic characteristics (e.g., education, employment, poverty status), parent cultural characteristics (e.g., the identity, cultural competence, and language competence domains of acculturative status), and teacher characteristics (e.g., teacher racial/ethnic consonance with parent, parent involvement practices). As reviewed above, there is a rich literature on parents' education, employment, and poverty status, and teachers' attitudes and practices, as predictors of parent involvement, but no prior studies have considered parents' acculturative status or parent–teacher racial/ethnic consonance in relation to this important educational construct. While other predictors of parent involvement have been proposed and examined in past studies, we focused on these three domains to (a) address the dearth of studies on cultural characteristics and (b) understand the relative contribution of predictors in these key domains, given the confound between families' socioeconomic and cultural characteristics and teacher characteristics (i.e., students of color tend to live in poverty and attend schools with predominately White teachers with less training on how to engage parents; Eamon, 2005; Prince, 2002).

Findings from the present study may have direct implications for intervention efforts. A wealth of evidence supports the link between parent involvement and academic achievement among students from all backgrounds, including immigrant families, but questions remain regarding how to best promote parent involvement in marginalized populations. A better understanding of predictors for school- and home-based involvement may lead to the identification of (a) specific groups at high risk of low home- and school-based involvement and (b) malleable risk factors (e.g., teachers' parent involvement practices) that may be targeted in intervention programs aimed at supporting Afro-Caribbean and Latino immigrant parents as they raise children in a new cultural milieu.

#### Method

# **Participants**

Participants were Afro-Caribbean and Latino immigrant families who participated in one of two larger studies of young (i.e., 4-5 years) ethnic minority children at school entry. Study 1 was a randomized controlled trial of a

family-focused, school-based universal intervention for all students enrolled in pre-kindergarten programs in urban elementary schools serving ethnically diverse students (n = 1,050; Brotman et al., 2013). The present study included all foreign-born parents from English-speaking Afro-Caribbean countries (n = 464) who had complete data on the study variables (n = 293; 63%). Missing data were largely due to our phased consent procedure (described below) in which parents could enroll children in the study without participating in the parent interview (i.e., 24% of parents did not participate in parent interviews; the remaining 13% had missing data on study variables). Study 2 was a prospective longitudinal study of early childhood development in 412 Latino pre-kindergarten and kindergarten children attending urban, public elementary schools. For the present study, only families of foreign-born mothers (n = 375) with complete data (n = 343; 91%) were included. The final sample included 636 (293 Afro-Caribbean; 343 Latino) immigrant families. Families that were included in the present study did not differ from the larger study samples on demographic characteristics (i.e., education, employment, marital status, gender, child and parent age) or on a standardized test of child school readiness. In the Afro-Caribbean sample, however, families who were included had higher teacher-rated parent involvement at home but similar levels of parent involvement at school.

Table 1 shows the demographic characteristics of foreign-born Afro-Caribbean and Latino families. Afro-Caribbean immigrant parents (88% biological mothers, 9% biological fathers, 2% others) and Latino immigrant parents (100% biological mothers) differed in several ways. For example, compared with Latinos, Afro-Caribbean parents were older, less likely to be married or living with a partner, more likely to have graduated from high school, more likely to be employed, and less likely to be living in poverty. By design, all Afro-Caribbean parents were native English speakers; they were from a variety of Caribbean countries including Jamaica, Grenada, the West Indies, Barbados, and Guyana. All Latino parents were native Spanish speakers and came from Mexico or the Dominican Republic. In Study 1 (with Afro-Caribbean students), pre-kindergarten teachers (n = 27) had an average of 18 years (SD = 11) of teaching experience, about half (53%) were non-Latino White, and 30% were non-Latino Black. In Study 2 (with Latino students), pre-kindergarten and kindergarten teachers (n = 133) had 15 years (SD = 8) of experience, and were 43% non-Latino White and 41% Latino/a.

#### Measures

Parent involvement in education. Several scales from the INVOLVE (INV-Parent & INV-Teacher; Webster-Stratton, Reid, & Hammond, 2001) were

**Table 1.** Sample Characteristics and Descriptive Results for Study Predictors and Outcomes.

	Afro-Cal immig (n = 2	rants	Latin immigra (n = 3		
	M or %	SD	M or %	SD	Þ
Socioeconomic and demographic char	acteristics				
Parent employed for pay	63.92	_	38.48	_	<.001
Parent graduated high school	45.02	_	25.07	_	<.001
Married or living with partner	53.29	_	78.13	_	<.001
Living in poverty	26.94	_	74.77	_	<.001
Child gender (male)	51.54	_	50.44	_	.78
Parent age	34.49	7.52	32.24	6.65	<.001
Child age	4.15	0.28	4.67	0.57	<.001
Household size (no. of family members)	4.43	1.66	5.15	1.75	<.001
Parent cultural characteristics					
Years of residence in the United States	14.70	8.12	11.00	6.22	<.001
English language competence	n/a	n/a	2.02	0.74	_
U.S. Am identity	3.09	0.70	2.49	0.90	<.001
U.S. Am cultural competence	2.79	0.71	1.85	0.65	<.001
Ethnic identity	3.71	0.42	3.90	0.29	<.001
Ethnic cultural competence	3.05	0.79	2.74	0.73	<.001
Teacher characteristics					
Race	_	_	_	_	<.001
White (non-Latino)	53.33	_	42.74	_	_
Black (non-Latino)	30.00	_	8.87	_	_
Latino	0.00	_	41.13	_	_
Other	16.67	_	7.26	_	_
Parent-teacher racial/ethnic consonance	24.23	_	47.71	_	<.001
Years of teaching experience	18.00	11.30	15.48	8.10	.16
Parent involvement practices	3.00	0.78	3.00	0.72	.99
Self-efficacy in promoting parent involvement	3.67	0.49	3.83	0.54	.13
School-wide support of parent involvement	3.46	0.53	3.96	0.55	<.001
Parent involvement					
School-based involvement (P)	4.36	0.051	4.21	0.55	<.001
Home-based involvement (T)	3.78	18.0	3.76	0.87	.791
School-based involvement (T)	2.12	0.47	2.33	0.55	<.001

Note. Family poverty status based on federal guidelines, with consideration for number of persons living in the home. Am = American. P = parent rating, T = teacher rating.

used to measure parent involvement. The INVOLVE has been used in past intervention trials (Brotman et al., 2011; Webster-Stratton et al., 2001), but little is known about its use with immigrant Afro-Caribbean and Latino parents. In the present study, select items were administered and analyses were conducted to establish the validity of the INVOLVE scales.

Parent-rated school-based involvement. Parents completed a 15-item scale (from the 63-item INV-P) that taps into parents' perceptions and behaviors related to their connection with the school and teacher. To create a Spanish version, the INV-P was translated and back-translated by our research team. Then, to establish construct validity of the measure with Afro-Caribbean and Latino immigrant parents, we used MPLUS (Muthen & Muthen, 2010) to conduct multi-group confirmatory factor analyses (CFA), with a plan for follow-up exploratory factor analyses (EFA) if the original factor structure proposed by the developer was not supported (Crockett, Randall, Shen, Russell, & Driscoll, 2005; Knight & Umaña-Taylor, 2009). In the CFA, we constrained the factor loadings to be the same across samples but allowed means and standard deviations to vary. Results yielded a poor fit of the model and therefore we carried out EFAs using the unweighted least squares method. Results, which were consistent across samples, suggested one 13-item factor ( $\alpha = .92$  and .90 for Afro-Caribbean and Latino samples, respectively). Sample items include "I feel comfortable talking with my child's teacher about my child" and "I ask my child's teacher questions or make suggestions about my child." Items are rated on a scale of 1 to 5 (1 = strongly disagree, 3 = not sure, 5 = strongly agree) and averaged for a scale score.

Teacher-rated school- and home-based involvement. Teachers completed 18 items of the INV-T, a measure of home- and school-based parent involvement. We applied the same approach as above to establish the construct validity of this measure of parent involvement with our immigrant samples. Again, the CFA yielded a poor fit, and a follow-up EFA suggested a two-factor model for both the Afro-Caribbean and Latino samples. The first included six items related to home-based parent involvement such as "How much does this parent do things to encourage the child's positive attitude toward education?" ( $\alpha = .84$  and .79 for Afro-Caribbean and Latino samples, respectively). The second factor included 10 items related to school-based parent involvement such as, "Has this child's parent stopped by to talk to you in the past two months?" and "Has this child's parent visited the school for a special event in the past two months?" ( $\alpha = .79$  and .82 for Afro-Caribbean and Latino samples, respectively). Items are rated on a scale of 1 to 5 (1 = never/not

at all, 3 = every month/somewhat, 5 = more than once per week/very much involved) and averaged for each subscale.

## Predictors of parent involvement in education

Socioeconomic characteristics. Parents reported on their immigrant status, marital status, household size, education level, employment status, and household income.

Parent cultural characteristics. Parents reported on number of years of residence in the United States. In addition, they completed the Abbreviated Multidimensional Acculturation Scale (AMAS; Zea et al., 2003), a self-report measure of acculturative status (i.e., acculturation, enculturation) that was developed in Spanish and English. The AMAS measures three domains: cultural competence, language competence, and identity. The 42 items are rated on a 4-point scale from 1 = not at all to 4 = extremely well. All domains are measured for both the culture of origin (enculturation) and mainstream/"U.S. American" culture (acculturation), allowing for an examination of acculturative status as a bidimensional construct. In Study 1, an abbreviated version of the AMAS that excluded the language scales, the AMAS-10 (Calzada, Brotman, Huang, Bat-Chava, & Kingston 2009), was used, because the sample was English-only speaking. Evidence for the reliability and construct validity of the AMAS-10 was established in a previous study (Calzada et al., 2009). In Study 2, the full AMAS, including the language scales was used, because the sample was Spanish-speaking. Both versions yielded scores on the U.S. American/Ethnic Identity and U.S. American/Ethnic Cultural Competence scales, and CFA results supported these four factors with the English-speaking Afro-Caribbean sample ( $\chi^2 = 72.80$ , p < .001, Comparative fit index (CFI) = 0.94, Root mean square error of approximation (RMSEA) = 0.07) and the Spanish-speaking Latino sample ( $\chi^2 = 459.75$ , p < .001, CFI = 0.91, RMSEA = 0.08). The AMAS used in Study 2 yielded an additional score on the English Language Competence scale. Internal consistencies were adeguate across the two samples for all subscales ( $\alpha = .73-.82$  for Afro-Caribbean, and .88-.94 for Latinos).

Teacher characteristics. The Teacher Support of Parent Involvement Scale (Epstein & Salinas, 1993) is a 21-item measure with three subscales that measure teachers' beliefs and practices related to parent involvement. The *Parent Involvement Practices* scale measures teacher behaviors that promote parent involvement through 8 items ( $\alpha = .77$ ) such as "I ask parents to volunteer in the classroom." The *Self-Efficacy in Promoting Parent Involvement* scale includes 8 items ( $\alpha = .80$ ) on how confident teachers feel in their ability

to involve parents (i.e., "I communicate well with parents"). The *School-Wide Support of Parent Involvement* scale measures teacher perceptions of the importance of parent involvement at the school level (i.e., "This school views parents as important partners") using 5 items ( $\alpha = .71$ ). Items are rated on a 5-point Likert-type scale:  $1 = strongly \ disagree/not \ at \ all/no \ support$ ,  $5 = strongly \ disagree/extremely/strong \ support$ .

Teacher and parent self-reported race were used to create a parent-teacher racial/ethnic consonance variable. Using U.S. Census methodology to determine race/ethnicity, teachers and parents first reported whether they were Latino or not, and then categorized their race as White, Black, Asian, or Other (see Table 1). Any parent who reported being non-Latino and Black was coded as Afro-Caribbean if he or she came from an English-speaking Caribbean country. Any parent who reported being Latina was coded as such, regardless of race. Teachers were coded as consonant with Latino parents if they too were Latino (regardless of their race). Teachers were coded as consonant with Afro-Caribbean parents if they too were non-Latino Black (regardless of their specific ethnicity or immigrant status). Because we did not have data on teacher immigrant status or country of origin, the Afro-Caribbean sample was matched based on race such that teachers who were non-Latino Black, but who may have been African American or Afro-Caribbean, were coded as consonant with Afro-Caribbean parents. While this created matches between individuals who may have been diverse in terms of other characteristics, this Census-based methodology recognizes that the categories of "Black" and "Latino" are socially meaningful in spite of differences in racial, national, or sociocultural origin within Black and Latino groups (http://www.census.gov/population/race/). This approach is also consistent with past studies of teacher and student racial/ethnic matching (Ehrenberg, Goldhaber, & Brewer, 1995).

## **Procedure**

Procedures for recruitment and assessments for Study 1 and Study 2 were similar. Families were recruited through 34 public elementary schools that housed universal pre-kindergarten programs in NYC. In Study 1, schools (n=10) were required to have a pre-kindergarten program with at least two classes and a student population that was >80% Black and >70% low-income (based on eligibility for free lunch); in Study 2, schools (n=24) were required to have a pre-kindergarten program with at least two classes and a student population that was >20% Mexican or Dominican.

Recruitment for Study 1 took place over a 4-year period (2005-2008) at the school's pre-kindergarten orientation, using a phased consent procedure to secure a sample that was representative of the pre-kindergarten population. Phase 1 was a study of child development with school-based assessments (e.g., teacher ratings, testing) and no time demands for parents; Phase 2 involved family assessments by phone. In Phase 1, 88% of the pre-kindergarten student population enrolled; of the parents who enrolled in Phase 1, 79% consented to Phase 2 and completed a phone interview. There were no differences in the demographic characteristics of families who did and did not consent to Phase 2 (p values > .10). Parents who consented to Phase 2 participated in a phone interview conducted in English.

Recruitment for Study 2 took place over a 2-year period (2010-2011) at the beginning of the school year when bilingual research staff were present at school events and daily drop-off and pick-up to inform parents of the study. Parents who enrolled (75% of eligible participants) were asked to consent to a parent interview, child testing and teacher ratings of family and child functioning. Parents participated in an in-person interview in their language of choice (i.e., Spanish or English; 92% chose to be interviewed in Spanish).

Teachers of study children were asked to complete an assessment packet that included self-assessment measures and ratings of parent involvement. In Study 1, 27 pre-kindergarten teachers taught 72 classes of pre-kindergarten students over 3 years; on average, teachers reported on 10.10~(SD=0.45) students in their classroom. In Study 2, 125 pre-kindergarten and kindergarten teachers taught 166 classes over 2 years; on average, teachers reported on 2.37~(SD=1.47) students in their classroom. Nesting of students within classrooms differed across studies because of the larger study design; analyses described below take into account the nested nature of the data. Families with missing teacher data did not differ from other families on any study variables.

The present study considered baseline data from both larger longitudinal studies and was obtained from parents and teachers in the Fall of the school year.

# Approach to Analyses

The present study aimed to identify ecological predictors of parent involvement using nested data from 636 parents and 152 teachers from 34 schools. We applied liner mixed modeling using SAS PROC MIXED to adjust for nesting in all the analyses. Three sets of analyses were conducted to model parent involvement as a function of three sets of predictors—family socioeconomic and demographic characteristics, parent cultural characteristics, and teacher characteristics—separately for Afro-Caribbean and Latino samples. Analyses of parent and teacher characteristics controlled for family socioeconomic and demographic characteristics.

Prior to model testing, we thoroughly investigated the effects of nesting within school and teacher, including estimating the variance of the random effect and intra-class correlations (ICCs). Whether we considered school or teacher as the unit of nesting (separately in the two samples), we found that ICCs were smaller for parent-rated involvement (school ICC = .03; teacher ICC = .07) than for teacher-rated involvement (school ICC = .16-.17; teacher ICC = .29-.53). We also compared unconditional mean models that considered both school and teacher as random effects (considering school-to-school variance, teacher-to-teacher-within-school variance, and student-to-student-within-teacher variance) as well as models that considered only teacher as a random effect. While the magnitudes of the variances of the random effects changed when the two different clustering structures were imposed (e.g., when a random teacher effect was included, the school-related variance became zero), the inferences regarding the predictors of parent involvement were not affected in any meaningful way. Therefore, all models considered nesting within teacher only.

## Results

## Group Differences in Parent Involvement and Its Predictors

Table 1 presents descriptive statistics and mean-level differences between Afro-Caribbean and Latino families on all study variables. According to teacher ratings, Afro-Caribbean and Latino parents were more involved at home than at school. According to their own self-report, school-based involvement was high for Afro-Caribbean and Latino parents (i.e., both groups had a mean > 4 on a 5-point scale), but ratings were significantly higher for Afro-Caribbean parents. In contrast, Afro-Caribbean parents were less likely than Latinos to be involved in school-based activities according to their child's teachers. There were no significant group differences in home-based involvement, as rated by teachers.

As noted above, Afro-Caribbean and Latino parents differed on a number of family demographic characteristics. In terms of parent cultural characteristics, Afro-Caribbean parents had been living in the United States for slightly longer and they reported a higher American identity, higher American knowledge, and lower ethnic identity. Teachers of Afro-Caribbean and Latino students were similar in their years of teaching experience, their parent involvement practices and their sense of efficacy in promoting parent involvement. However, teachers of Latino students reported a higher level of schoolwide support for parent involvement. Moreover, teachers of Latino students were more likely to be Latino themselves, whereas teachers of Afro-Caribbean students were more likely to be non-Latino Black.

Predictors of parent involvement. Mixed model analyses revealed significant findings for all three sets of predictors in both the Afro-Caribbean and Latino samples (see Tables 2 and 3, respectively). For both groups, more variance was explained in teacher ratings ( $R^2$ s = .13-.23) than in parent ratings of involvement ( $R^2$ s = .06-.07). In addition, more of the variance in teacher ratings of involvement was explained for the Afro-Caribbean sample ( $R^2$ s = .22-.23) relative to the Latino sample ( $R^2$ s = .13-.17).

Several socioeconomic characteristics predicted teacher ratings of home-based involvement (but not parent ratings or teacher ratings of school-based involvement). For both Afro-Caribbean and Latino parents, higher levels of parent education were related to greater involvement. For Afro-Caribbean parents only, parents who were married or living with a partner had greater involvement. For Latino parents only, poverty was related to lower involvement.

Several parent cultural characteristics predicted parent involvement, and there were important group differences in the type of involvement predicted. For Latino parents, both U.S. American cultural competence and ethnic identity were positively associated with parent-rated school-based involvement. For Afro-Caribbean parents, ethnic cultural competence was positively associated with teacher-rated home-based involvement. In addition, length of residence in the United States was positively associated with teacher-rated school-based involvement of Afro-Caribbean parents.

In terms of teacher characteristics, having a teacher who reported using more parent involvement practices was associated with higher teacher-rated school-based involvement among both groups of parents, as well as higher home-based involvement among Afro-Caribbean families. Parent—teacher racial/ethnic consonance was positively related to teacher-rated school-based involvement among Latino parents but not among Afro-Caribbean parents. None of the other teacher characteristics (i.e., teaching experience, self-efficacy, school-wide support for involvement) were significant predictors of parent involvement for either group.

## Discussion

The present study considered contextual predictors of parent involvement in education at school entry among immigrant Latino and Afro-Caribbean students attending public schools in socioeconomically disadvantaged neighborhoods. This study was informed by ecological theories of parent involvement (Hoover-Dempsey & Sandler, 1997) and was designed to inform prevention efforts by identifying subgroups of immigrant parents that may be at especially high risk of low parent involvement, and modifiable factors that

**Table 2.** Predictors of Parent Involvement for Afro-Caribbean Immigrants.

	School-based involvement (P)		School-based involvement (T)			Home-based involvement (T)			
	В	SE	P	В	SE	Þ	В	SE	Þ
Socioeconomic and demographic	(SES) c	haracte	eristic	s					
Parent employed for pay	002	.082	.98	062	.061	.28	191	.117	.11
Parent graduated high school	.133	.079	.10	.072	.059	.23	.286	.115	.01
Married or living with partner	058	.075	.45	.087	.054	.11	.314	.108	.004
Living in poverty	.028	.090	.76	028	.065	.71	137	.130	.29
Child gender	.000	.074	.99	.077	.054	.15	138	.105	.19
Parent cultural characteristics									
U.S. Am identity	014	.054	.79	062	.039	.11	022	.075	.77
U.S. Am cultural competence	114	.063	.07	041	.044	.36	.084	.090	.38
Ethnic identity	103	.097	.29	.003	.069	.97	113	.150	.45
Ethnic cultural competence	.089	.054	.10	.072	.038	.06	.188	.075	.01
English language competence	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Years of residence in the United States	004	.005	.43	.008	.004	.03	003	.007	.63
Teacher characteristics									
Parent-teacher consonance	009	.137	.95	.017	.282	.95	158	.219	.47
Years of teaching experience	.004	.007	.59	008	.015	.58	016	.011	.15
Parent involvement practices	025	.093	.79	.371	.192	.05	.322	.146	.03
Self-efficacy	049	.154	.76	.066	.296	.82	157	.235	.50
School-wide support	.075	.147	.61	096	.259	.71	.271	.226	.23
SES/demo factors R <sup>2</sup>		.02			.03			.11	
Parent factors $\Delta R^2$		.04			.05			.03	
Teacher factors $\Delta R^2$		.01			.13			.06	
Total R <sup>2</sup>		.06			.23			.22	

Note. Three sets of mixed-model analyses were conducted. Analyses for parent cultural and teacher characteristics controlled for family socioeconomic and demographic characteristics. Estimates and standard errors from mixed models are presented. P = parent rating; T = teacher rating; Am = American.

might be targeted by school and family interventions. Findings underscore the role of socioeconomic, cultural, and teacher variables in influencing parent involvement among Latino and Black immigrant families.

Consistent with the literature (e.g., Hill, 2001), parents with higher socioeconomic risk were less involved in education. Specifically, education level (for Latino and Afro-Caribbean parents), single parent status (for Afro-Caribbeans) and poverty (for Latinos) predicted teacher ratings of home-based involvement. In contrast, involvement in school-based

Table 3. Predictors of Parent Involvement for Latino Immigrants.

	School-based involvement (P)		School-based involvement (T)			Home-based involvement (T)			
	В	SE	Þ	В	SE	Þ	В	SE	Þ
Socioeconomic and demographic	: (SES) cl	naracte	eristic	:s					
Parent employed for pay	02 I	.070	.76	038	.060	.53	183	.106	.09
Parent graduated high school	.094	.077	.22	.023	.065	.73	.367	.111	.001
Married or living with partner	.026	.078	.75	062	.065	.34	.158	.114	.17
Living in poverty	.017	.078	.83	087	.062	.16	379	.109	<.001
Child gender	002	.062	.97	.013	.047	.79	085	.084	.31
Parental cultural characteristics									
U.S. Am identity	015	.039	.70	034	.031	.28	022	.059	.71
U.S. Am cultural competence	.174	.080	.03	039	.064	.55	.085	.115	.46
Ethnic identity	.229	.112	.04	09 I	.086	.29	.008	.153	.96
Ethnic cultural competence	.080	.048	.10	.004	.038	.91	.044	.069	.52
English language competence	106	.069	.12	.066	.051	.18	.117	.096	.22
Years of residence in the United States	.011	.006	.07	.000	.005	.92	.003	.009	.73
Teacher characteristics									
Parent-teacher consonance	009	.074	.91	.252	.099	.01	084	.150	.57
Years of teaching experience	.002	.005	.72	.004	.006	.49	.012	.010	.23
Parent involvement practices	.015	.051	.77	.166	.070	.02	.048	.103	.64
Self-efficacy	088	.080	.28	006	.109	.95	.056	.160	.73
School-wide support	.084	.076	.27	003	.098	.98	.175	.144	.23
SES/demo factors R <sup>2</sup>		.01			.01			.10	
Parent factors $\Delta R^2$		.06			.01			.02	
Teacher factors ΔR <sup>2</sup>		.02			.10			.04	
Total R <sup>2</sup>		.07			.13			.17	

Note. Three sets of mixed-model analyses were conducted. Analyses for parent cultural and teacher characteristics controlled for family socioeconomic and demographic characteristics. Estimates and standard errors from mixed models are presented. P = parent rating; T = teacher rating; Am = American.

activities was not related to any socioeconomic risk factor considered in this study. Home-based involvement has been understudied in the literature, despite growing recognition that both home and school-based strategies are important for promoting academic success, especially among immigrant students (Eamon, 2005; Garcia Coll et al., 2002; Mena, 2011). Results suggest that in urban schools serving relatively socioeconomically disadvantaged populations, students with single, less educated and poor Black and Latino immigrant parents may be especially at risk of receiving limited support for learning at home.

Moreover, consistent with past research (Epstein, 1986; Epstein & Dauber, 2001), teacher practices in promoting parent involvement were predictive of school-based involvement in that teachers who rated themselves as using more strategies to engage parents reported having students whose parents were more involved in school. Measures of teacher efficacy and school-level support for parent involvement, in contrast, did not predict parent involvement. Together, these findings suggest that school-wide family engagement efforts and policies may not matter in the absence of classroom-level efforts. Thus, supporting teachers in finding tangible and effective ways of communicating and partnering with immigrant families may be an important element of broader school-wide policies and practices intended to increase parent involvement.

The present study also considered a range of cultural factors to understand home and school-based involvement among immigrant parents. It appears that parents who are connected to both U.S. American mainstream culture and their culture of origin are the most likely to be involved in home- and school-based activities that promote educational outcomes. That is, both acculturation (i.e., American cultural competence for Latinos; longer residence in the United States for Afro-Caribbeans) and enculturation (i.e., ethnic identity for Latinos; ethnic cultural competence for Afro-Caribbeans) predicted higher parent involvement. Conceptually, biculturalism should promote parent involvement (Delgado-Gaitan, 1994a, 1994b), given that acculturation would imply increased knowledge of and facility with U.S. American school systems (Turney & Kao, 2009) and enculturation would imply a stronger immigration ethos consistent with an increased emphasis on educational achievement. Paralleling an approach to prevent behavior problems among Latino youth (Szapocznik et al., 1986), encouraging biculturalism among immigrant families may be an effective strategy for promoting parent involvement and ultimately promoting academic achievement.

Among students from Latino families, parent involvement at school was higher when teachers were also Latino. There is some evidence that cultural incongruence is associated with lower parent involvement because of parent dissatisfaction with the cultural incompatibility between their family and the school (Valenzuela, 1999; Villanueva, 1996). A parent–teacher match may facilitate communication by breaking down language barriers and eliminating cultural misunderstandings. Moreover, teachers who are themselves Latino may serve as cultural brokers who can help parents understand the goals, norms, and expectations of the U.S. school system. Some studies show that efforts to introduce cultural brokers who serve as liaisons between parents and schools improve parent engagement (Cooper, Denner, & Lopez, 1999). Parent–teacher racial/ethnic consonance did not, however, predict

involvement of Afro-Caribbean parents, who were "matched" with all non-Latino Black teachers, some of whom were African American. If cultural brokering is one important mechanism through which consonance promotes parent involvement, Afro-Caribbean parents may not have experienced these benefits because Afro-Caribbean and African American cultures are quite distinct in spite of a shared racial background. Future studies should examine whether it is racial or ethnic consonance (or shared language) that matters most for parent involvement.

With the exception of parent-teacher racial consonance, there were no clear differences in predictors of parent involvement between Afro-Caribbean and Latino parents. Although the groups differed significantly in their level of school-based parent involvement, and in socioeconomic, cultural, and teacher characteristics, socioeconomic disadvantage was associated with lower parent involvement and a profile of biculturalism was associated with higher parent involvement for both groups. The consistency of findings across these two different immigrant groups, obtained from two larger samples, is rather striking and suggests that there may be universal factors that predict parent involvement among immigrant families regardless of specific country of origin.

There are several limitations to the present study. First, although the study design allowed for the measurement of parent involvement from parents and teachers and across home and school settings, we did not consider parent ratings of their own home-based involvement activities. The finding that parent socioeconomic characteristics were related to teacher ratings of home-based involvement in both immigrant groups suggests that this measure tapped into some meaningful aspect of parent involvement. Still, it will be important to replicate predictors of home-based involvement by parent report and to examine more nuanced aspects of home-based involvement that can only be obtained based on parent reports or direct observations of the home. Second, the predictors explained only a modest amount of variance in the parentreport measure used in the present study. We found more significant predictors for and explained more of the variance in teacher ratings, especially teacher report of home-based involvement. Thus, it will be important to consider other factors that may be associated with involvement (e.g., parental efficacy, community or family support, parental stress or depression) in future studies. It would also be useful to explore whether these factors interact to moderate their respective effects on involvement. Third, longitudinal data that examine parent involvement over time and in relation to immigrant student outcomes is needed. Finally, the sample was diverse in terms of country of origin, precluding the consideration of specific ethnic group differences within Latino or Black immigrant groups.

Despite these limitations, the present study is consistent with theories that highlight ecological characteristics as key determinants of parent involvement and identified specific risk and protective factors for home and school-based involvement of immigrant parents that have implications for educational policies and practices. Results underscore the importance of a diverse teaching staff who engage in specific outreach efforts to families of students in the early years and a bicultural parent body as cultural factors that may help to increase school-based involvement. Policies that place ethnically matched parent liaisons in schools may lead to higher parent involvement. Programs that offer support and skills to help parents navigate the U.S. educational system, and those that help schools and teachers build cultural competence seem warranted, especially in public schools systems serving large numbers of immigrant families. Teacher programs should focus directly on clear and effective communication and engagement strategies with parents from diverse backgrounds. Parenting programs should target knowledge and skills needed to engage in both home-based and school-based activities, particularly among parents at highest risk of low involvement (i.e., parents who have limited formal education, who are living in poverty and who serve as single head of household). When offered during early childhood, such programs can build on the natural enthusiasm that comes from beginning formal schooling in prekindergarten and kindergarten, particularly given that parent involvement decreases over time (Izzo, Weissberg, Kasprow, & Fendrich, 1999). Innovative strategies that build on the motivation among parents for whom access to formal schooling served as an impetus for immigration offer promise for educational success among the next generation of immigrant children.

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