# LEVELS OF LATINO PARENT INVOLVEMENT: DIFFERENCES BY NATIONAL ORIGIN AND SOCIOECONOMIC STATUS

By

Samantha L Perez

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Katharine Donato 4/9/13

Richard Pitt 4/9/13

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#### INTRODUCTION

As immigration has increased since the 1980s, the population of children of immigrants in the United States has reached unprecedented heights. Approximately 1 out of every 4 children in the country is an immigrant or a child of an immigrant, a number that only two decades ago was closer to 13 percent of all children under the age of 18 (Migration Policy Institute 2012). While many of these children are disadvantaged when they enter school compared to peers with native-born parents, certain ethnic groups are disenfranchised to an even greater degree. Latino children, of whom two-thirds are children of immigrants or immigrants themselves, consistently underperform on all measures of educational success, including high school graduation rates and college attendance (Suarez-Orozco & Suarez-Orozco 1995; Suarez-Orozco & Gaytan 2009). This alarming trend is critically important because academic achievement is an important predictor of social mobility and often used as a measure for gauging how quickly different immigrant groups are adapting in the United States (Blau & Duncan 1967; Romo & Falbo 1996). Moreover, some suggest that educational outcomes are now better indicators of U.S. assimilation than labor market outcomes alone (Portes & MacLeod 1996).

Getting parents involved in the schooling of their children is one suggested remedy for underachievement and, in fact, a good deal of research indicates that parent participation is beneficial for children (for reviews, see Fen & Chen 2001; Jeynes 2003). National policies, such as the 2002 No Child Left Behind Act, listed parental involvement as a necessary component for academic success (Domina 2005; Turney & Kao 2009; Marschall, Shah & Donato 2012). For Latino immigrant parents, however, the challenges to involvement are numerous and sometimes daunting. Many have low levels of education, do not speak English well and are unfamiliar with U.S. schools. As a result, school staff and administrators may write off these parents as

indifferent and unreachable. Yet, despite these perceptions of disinterest, immigrant parents have very strong beliefs about the importance of education to their children's future in U.S. society.

The recent push for parental involvement by politicians and educators alike has spurred scholars to study whether and under what conditions parents of different ethnic and sociodemographic backgrounds get involved. Studies have revealed racial and socioeconomic differences in parental involvement (Lareau 1987; Turney & Kao 2009; Hao & Bonstead-Bruns 1998), but far less has been done to unpack group differences within racial/ethnic groupings. As Turney & Kao (2009) suggest, placing various national origin groups into panethnic Asian and Latino groups may mask the heterogeneity within these groups. By presenting aggregate findings for all Latinos and combining national origin groups together, prior studies hinder our ability to understand the factors that determine levels of parental involvement (Suarez-Orozco & Suarez-Orozco 2009). This may be especially problematic for Latinos, for whom every predictor of school success—including socioeconomic status, education, and race—is linked to different U.S. migrant histories and experiences. As such, immigrant parental involvement is also highly related to patterns of assimilation and integration into mainstream U.S. society.

Given the varying migration experiences to and within the United States, this study analyzes differences in parental involvement across three different Latino national origin groups: Mexican, Dominicans and Puerto Ricans. Using data on immigrant parent involvement in three U.S. cities, this paper will answer three distinct questions. First, the study will examine whether there is a difference in the kind of involvement we see between immigrant parents of different nationalities and if so, how these parents vary in both their formal and informal parental involvement practices. Second, given the different migration histories and assimilation trajectories for each national origin group, I explore whether differences remain when we account for variation in

socioeconomic status. Third, I ask how perceived barriers to involvement, perception of the parent -school relationship, school outreach efforts and feelings of self-efficacy help explain some of these differences.

This paper begins by describing the U.S. migration experiences of the three national origin groups and reviewing prior studies about the role of parental involvement in children's education, particularly as it pertains to immigrant and Latino parents. I then investigate whether and how immigrant parent involvement varies by national origin. I estimate regression models that examine these baseline differences and then add other relevant variables to these models.

Among these variables are effects for perceived barriers to involvement as well as parents' perceptions of their relationship to schools. Overall, my findings suggest that important differences do exist in the parental involvement practices of each of the national origin groups and that these are highly influenced by distinct group characteristics.

#### LITERATURE REVIEW

In this section, I attempt to bridge two bodies of work – scholarship on parental involvement and the concept of context of reception. In the first, I review prior studies that have examined variations in parental involvement, including the school and parental factors that may contribute to these disparities. In addition, I look to work that has previously explored how Latino immigrant parental involvement specifically differs from that of their native-born peers. As mentioned previously, many scholars have attempted to unpack the differing practices of parents across race and class but few have begun the work of analyzing inter-group variation. I continue the literature review with a section dedicated to understanding the different contexts of reception for each of the national origin groups in the study. Bridging these two bodies of work

will highlight the importance of contextual factors in determining how immigrant groups are incorporated into the broader society and into its various institutions.

#### **Studies on Parent Involvement**

Studies vary in how they define parent involvement in schools (Fan & Chen 2001).

Broadly speaking, parental involvement is "an umbrella term for different types of activities that depict the involvement of parents in nonacademic and academic activities that may contribute to their children's educational success" (Viramontez Anguiano 2004: 62). These include participation in school events and other formal school-centered activities as well as participation in informal activities outside of the classroom. The meaning given to these practices, however, differs even among the actors involved. In their study of teachers and parents, Scribner, Young & Pedroza (1999) asked each respondent to define what the term parental involvement encompassed for them. Although teachers reported attendance at school functions as one major example of parental involvement, parents favored a definition that included the myriad of ways in which they helped their child at home such as reading together, helping with homework, and making sure children were fed and dressed. As such, any work done around parental involvement is careful to outline what exactly is being examined and what variations may be attributed to.

Education scholars attributed the variation in the determinants of parents' formal involvement practices to a number of factors. Hoover-Dempsey & Sandler (1995) suggest three such influences: (1) parents' construction of their role in their children's education; (2) parents' sense of self efficacy for helping their children succeed; and (3) parents' reactions to the opportunities for involvement presented by their children and children's school. How parents view their role in their child's education (and the degree to which they believe they can actually

contribute) not only determines the extent to which they are involved but also how they choose to integrate themselves. As will be later discussed, cultural differences can also lead to a mismatch between how some foreign-born perceive their parental responsibilities and how the school understands parental participation. In addition, Hoover-Dempsey & Sandler (1995) assert that "parent, school, child, and societal contributions taken *together* constitute the involvement process" (1995:329), pointing to the necessary collaboration between family and school. Parent participation does not simply encompass an individual decision to get involved; rather, it depends greatly upon a number of important contextual and relational factors. This suggests that parents and schools can together work to overcome some of the potential obstacles that keep some families from fully engaging in their children's education.

A myriad of work has looked to identify the barriers that inhibit parent involvement among particular groups and figure out how parents and schools can get around them. As proposed by Hoover-Dempsey & Sandler (1995), parent participation increases if schools provide the occasions and offer invitations to do so. Describing these opportunities, they explain that these "characteristics presented by schools might be found in a consistently inviting environment (e.g., signs welcome parents into the school, teachers greet them when they pass in the hall) or a regular parent newsletter describing volunteer opportunities" (1995: 316). Effort on the part of schools is increasingly necessary, especially as changing demographics reveal growing numbers of students with foreign-born parents. Although a positive relationship between immigrant parents and schools may be challenging because of barriers that hinder parent ability to communicate, visit or otherwise participate in the formal education of their child, the perception of a welcoming school environment where parents feel included could make a vast difference. For example, Reyes, Scribner & Paredes (1999) found that high performing

schools along the U.S.-Mexico border increased parental involvement by making a concerted effort to cultivate a welcoming environment and effectively push for parent-staff communication. These schools – with a Mexican American population of at least 2/3 of the total student body – created what the authors describe as "communities of learners" and demonstrated the importance of integrating community and family into the learning process, especially among populations that have traditionally been marginalized in this formal institution.

## Latino Immigrant Parent Involvement

One common misconception about immigrant parents is that they are disinterested in their child's education (Floyd 1998). Although foreign-born parents have lower formal involvement rates than U.S. born parents, studies have found that these families do, in fact, care about their children's learning and both parent and child often cite a good education as a way of making it in the U.S. (Chavkin & Gonzalez 1995; De Gaetano 2007; Delgado-Gaitan 1991; Fuligni 1997; Suarez-Orozco & Suarez-Orozco 1995). Previous work has found that immigrant parents actually have high academic aspirations for their children, even among those with lower levels of education (Duran & Weffer 1992; Portes & MacLeod 1996). The experiences of immigrant parents and their offspring, however, are far from uniform and recent work has looked to understand how sociodemographic factors like race may nuance the differences among foreign-born parents.

One of few studies that has attempted to understand the intersection of race and immigration in parent participation, Turney & Kao (2009) reveal a number of factors that hinder or restrict the ability of foreign-born parents to take a more active role in their children's education. Using data from the Early Childhood Longitudinal Study-Kindergarten Cohort, the

authors examine how parental involvement differs by race and immigration status. They find that Asian, Hispanic, and black immigrant groups perceived greater barriers to involvement than their white, native-born counterparts, resulting in lower rates of participation in activities held at their children's school. Among immigrant parents, involvement was strongly affected by the perception of barriers unique to newcomers in the U.S, such as not feeling welcome at their child's school or viewing their lack of English as an impediment to their involvement.

As previously stated, a parents' construction of their role within their child's education is one of several factors that influence their involvement. The culturally-based understandings of what a teacher does among foreign-born parents can greatly shape the interaction between families and schools. Unfamiliarity with U.S. schools often means relying upon previous and culturally specific knowledge of how schools operate. The educational experiences of immigrant parents in their home country, therefore, affect perceptions about their role in the schooling of their children. Teachers in other countries are often revered and to question or otherwise interfere in their teaching is perceived by many immigrants as highly disrespectful. Chavkin & Gonzalez (1995) found that Latino parents perceived teachers and parents in two separate domains. Teachers were regarded as the experts in children's formal education while parents saw themselves as providers and nurturers. In other words, parents deferred authority to the teacher and took a hands-off approach to the formal education of their children. This cultural misunderstanding about parent's role in schooling gets in the way of effective communication between teachers and parents, leading staff and teachers to falsely mistake efforts on the part of families to respect the administration for indifference towards education (Hoover-Dempsey & Sandler 1995).

Despite having strong academic aspirations for their children, minority immigrant parents perceive additional barriers that hinder their ability to contribute to their child's formal education. Tinkler (2002) points to five different dimensions that hinder involvement among Latino parents: (1) school environment; (2) culture and language; (3) educational level of parents; (4) psychological issues; and (5) logistical issues. The environment created by the faculty and staff can greatly motivate (or on the other hand, easily discourage) parents from becoming involved. As many immigrants and minorities already feel disenfranchised when it comes to their children's school, parents who feel unwelcome lose motivation to become involved (Reyes et al 1999). Differences in culture, such as the misunderstanding described previously, may intimidate parents, especially those who do not speak English well. In addition, parents who have low levels of education, and thus do not believe themselves equipped to help their children with homework or answer their questions, may also keep their distance. As Lee and Bowen explain, "involvement at school occurred most frequently for those parents whose culture and lifestyle were most likely to be congruent with the school's culture: parents who were European American, whose children did not take part in the school lunch program and whose educational attainment was higher" (2006: 210). In terms of psychological issues, immigrant parents with prior negative schooling experiences also distance themselves from schools and largely mistrust the institution. Lastly, logistical obstacles found to restrict parental involvement include limited access to reliable transportation, lack of childcare, and the inability to take time off to attend school functions because of work commitments.

Researchers have increasingly begun to analyze variations in parental involvement (and have noted meaningful differences) by national origin. Using the NELS 1988, Hao & Bonstead-Bruns (1998) compared the academic achievement of four immigrant (Chinese, Filipino, Korean

and Mexican) and native (Mexican, black and white) groups of parents and their students. Social capital appears to explain much of the achievement differences between the groups, pointing to the indirect effect of parent-child interactions in learning on academic achievement. With more parent-child interactions, educational expectations (as well as agreement in expectations between parent and child) grow. This results in higher academic achievement. Of the groups they examined, Mexican-born parents had the lowest educational expectations for their children, despite their children having relatively high expectations for themselves. This resulted in lower achievement for these students.

In the context of education, the traditional ways of offering support to children may greatly vary for immigrant parents who, perhaps, may not have the same amount of resources as their native-born counterparts. Coleman (1998) explains that, "children are strongly affected by the human capital possessed by their parents. But this human capital may be irrelevant to outcomes for children if parents are not an important part of their children's lives, if their human capital is employed exclusively at work or elsewhere outside the home" (1988: S110). For Portes & Rumbaut (1996), this is greatly tied to the modes of incorporation for individual groups of immigrants. How quickly and easily foreign-born parents adapt to U.S. culture can determine the educational outcomes for their children. Immigrant groups with high levels of language and cultural learning demonstrate consonant acculturation, in which parents and children both assimilate into mainstream culture in the same way. Groups unable to adapt and adopt both the language and cultures of the U.S. often demonstrate dissonant acculturation because parents and children do not appear to assimilate at the same pace. The parent-child relationship thus influences the amount of social capital passed onto children. Even for those with small amounts

of social capital, immigrant parents passing on their capital to children matters more than nativeborn peers (Kao & Taggart Rutherford 2007).

### Effects of Parent Involvement on Achievement

Parent involvement has been cited as a fundamentally important contributor to student success in a variety of ways. When parents emphasize schooling by formally and informally becoming involved, students are likely to internalize their family's value on education (Hoover-Dempsey & Sandler 1995). In addition, parental involvement may reinforce what is learned in school, while also contributing to children's skill building and sense of self-efficacy in and outside of the classroom. By actively participating, parents encourage their children to become confident in his or her school performance (for an extensive analysis of these contributions, see Hoover-Dempsey & Sandler 1995). The most "intuitively appealing" benefit, however, is academic achievement (Fan & Chen 2001). While there are numerous contradictions in work that has attempted to examine the direct link between parent involvement and academic success.

According to Fan & Chen, this is due in large part to the fact that "the operational use of parental involvement has not been clear and consistent...this somewhat chaotic state in the definition of the main construct not only makes it difficult to draw any general conclusion across the studies, but it may also have contributed to the inconsistent finds in this area" (2001: 3).

Despite the ambiguity around its direct effect on academic achievement, parental involvement provides secondary benefits that may indirectly affect academic achievement. Some studies find that parent involvement and perceived parental support are two of several factors that can help foster educationally resilient students and reduce educational risk among certain populations (Arellano & Padilla 1996; Plunkett & Bamaca-Gomez 2003). Hill et al.

(2004) found that for those students with parents of lower education, parent involvement increases educational and career aspirations, although it does not appear to effect academic achievement. Parent involvement at higher educational levels, however, does appear to indirectly influence academic achievement through its negative association with school behavior problems. Using the National Longitudinal Survey of Youth 1979, Domina (2005) corroborates this finding, suggesting that some parental involvement activities seemed to prevent behavioral problems even if not directly related to children's learning. Parent involvement practices like communication and high educational aspiration for children appear to have stable and long-lasting effects on student educational aspiration, which results in higher student academic achievement (Hong & Ho 2005). In sum, while parental involvement may have a central influence on school achievement directly, there are also secondary effects that indirectly contribute to children's academic success.

Portes & MacLeod (1996) analyze the effect of ethnic community and parental SES on the academic performance of second-generation students comparing across Cuban, Vietnamese, Haitian and Mexican communities. Their findings suggest that parental national origin is a significant predictor of academic achievement, which they attribute to the differing modes of incorporation and individual social characteristics. As they explain, "the factors that account for the significant differences among these groups have to do with the human capital that immigrants bring with them from their countries of origin and the social context that receives them and shapes their adaptation in the United States" (1996: 271). This work is a jumping board for beginning to examine the variations in parental involvement between immigrants of different national origins. The ways in which foreign-born parents engage with their children and schools

may very well reflect the varying levels of human capital that immigrants bring with them to the U.S.

## **Different Contexts of Reception**

As described by Portes & Rumbaut (1996), immigrant incorporation depends on the context into which they arrive in the United States. Even for those from the same national origin group, the context of reception can greatly determine the economic and social incorporation of immigrants and their families. Moreover, as Portes & Rumbaut suggest, "the importance of these contextual variables may even extend beyond the first generation to directly affect second-generation outcomes" (2001:49).

Portes & Rumbaut (2001) describe three levels of reception that influence the mode of incorporation for immigrant groups. The first encompasses a continuum of government responses to newcomers that affect the immigration experience, from exclusion to passive acceptance and encouragement. Most recent immigration has occurred under passive acceptance—a neutral stance in which the U.S. government offers immigrants protection under the law but does little else to facilitate their acclimatization. The second level deals with how well newcomers are socially received. Not surprisingly, immigrants who most closely resemble mainstream society, not only in physical appearance but in salient characteristics like language or religion, are more readily accepted and integrated into mainstream society than those whose differences mark them as outsiders. The third type of reception is defined by a community's response to newcomers. A welcoming community may be both a hindrance and benefit to immigrants. For example, educated newcomers are sometimes funneled into low-skilled jobs because of the limits of their community's occupational network. On the other hand, established

and successful ethnic communities offer opportunities for newly arrived immigrants to use their human capital without having to resort to low-paying jobs. Together these three types of reception define the context of reception for immigrants and are critical for understanding why some immigrant groups assimilate quicker than others.

As Portes & Rumbaut (2001) demonstrate (and as will also be made apparent later on in the paper), Mexicans and Dominicans had similar modes of societal and communal incorporation. Both groups entered the United States during a time of prejudiced societal reception "accorded to nonwhite immigrants and to those with perceived involvement in the drug trade" (Portes & Rumbaut 2001: 51) and have ethnic communities that are predominantly working class and highly concentrated in at least one metropolitan area. Mexicans and Dominicans differ, however, in governmental reception. While early Dominican immigrants arrived to a neutral reception because of their legal status, Mexicans largely received hostile reception because of the suspicion that many were unauthorized. Thus, one expects that this variation in context of reception will likely manifest itself in other social arenas, such that differences between Mexicans and Dominicans will relate back to their distinct migration experiences.

In relation to education, a welcoming (or even neutral) reception should predict successful and quick immigrant integration into U.S. society and, therefore, academic success for the second generation (Portes & MacLeod 1996). However, for immigrant parents (especially immigrant parents of color), the ability to navigate formal settings like schools varies by factors such as English proficiency, familiarity with the U.S. school system and levels of self-efficacy. Furthermore, studies suggest that the U.S. based experiences of Latino groups have become more different than similar (Munoz & Ortega 1997). Therefore, I describe different migratory histories

of Mexicans, Dominicans and Puerto Ricans to offer insight about what impedes or supports parental involvement among these foreign-born parents.

#### **Mexicans**

Mexico is the largest source country for authorized and unauthorized immigration to the United States (Rumbaut 1994). An estimated two-thirds of all Latinos in the U.S. are of Mexican descent (Romo & Falbo 1996; Rong & Pressile 2009; Motel & Patten 2012a). Despite a steady rise of immigrants entering every year, Mexicans have historically had the lowest naturalization rates compared to all other immigrant groups (Durand, Massey & Parrado 1999; Romo & Falbo 1996). In addition, even among those who are documented, Mexican immigrants have remained below the foreign-born average in terms of homeownership, citizenship, occupational prestige and income, suggesting that they are more disadvantaged compared to other immigrants.

The Mexican-U.S. relationship is increasingly complex and highly interdependent. In the 19<sup>th</sup> and early 20<sup>th</sup> centuries, Mexican migration was largely motivated by increased labor demand in railroad and other construction. Given this surge, Gutierrez (2004) estimated that the Mexican population doubled between 1900 and 1929. When the Great Depression hit in 1929, both the U.S. and Mexican governments pushed for repatriation of Mexicans living in *el norte* (the north) and deported and/or encouraged reverse migration back to Mexico. As the U.S. entered World War II, however, the U.S. government established a program with Mexico to permit Mexicans to work as agricultural labors. From 1942-64, various Bracero Accords were signed into law to permit and encourage Mexican laborers to fill the void left by Americans off at war. Estimates suggest that approximately 5 million Mexicans met this demand for work in the United States (Durand, Massey & Parrado 1999; Donato 1994; Gutierrez 2004). Although the

program ended in 1964, Mexico-US migration did not cease or even falter. Some Bracero workers were able to receive permanent residency and sponsored their family members to migrate. Others, however, continued to migrate back and forth across the border to states in the southwestern United States, where many employers largely depended on Mexican labor. As such, there was a shift from a "de jure policy of active labor recruitment to a de facto policy of passive labor acceptance, combining modest legal immigration with massive undocumented entry" which resulted in a swell of both unauthorized and authorized migration (Durand, Massey & Parrado 1999).

The years leading into the 1970s bore witness to economic shifts in both Mexico and the United States. The progression from a manufacturing-based economy to one more reliant upon both a service sector and new technologies resulted in the exportation of many low-skilled jobs. The Mexican economy, on the other hand, experienced significant growth motivated by greater investment in fields like public works, health care and public transit (Gutierrez 2004). This improved standard of living, however, did not extend to all, leading some to migrate to the U.S. in search of work. In addition, the stagnant U.S. economy and the post-1980 economic crisis in Mexico set the stage for the one of the greatest periods of migration in U.S. history. In the years that followed, leading up to 1986, undocumented migration exponentially increased at a much greater rate than authorized migration. The Mexican economic crises, along with U.S. demand for Mexican labor, helped attract numerous immigrants from one side of the border to the other (Rumbaut 1994).

Despite more recent efforts to limit the number of undocumented immigrants entering the country, including the passage of the 1986 Immigration Reform and Control Act (IRCA), evidence suggests that Mexican migration was not halted or reduced post policy implementation

(Donato, Durand & Massey 1992; Durand, Massey & Parrado 1999). Instead of counteracting the steady stream of Mexican migrants into the United States, however, these state-level attempts made border crossing economically and physically riskier and unintentionally created more permanent immigrant communities, despite the fact that many Mexicans had the intention of eventually returning home (Durand, Massey & Parrado 1999). Increased enforcement along the border separating the U.S. from Mexico not only facilitated the criminalization of migrants but also came to symbolize national threat and danger (Durand, Massey & Parrado 1999).

Recent survey data reveals much about the current state of the Mexican and Mexican-American population (Motel & Patten 2012a). Data from the 2010 American Community Survey shows that 36 percent of persons of Mexican background are foreign-born, with two-thirds arriving after 1990. While only 23 percent of Mexican immigrants are U.S. citizens, close to two-thirds of ethnic Mexicans (native and foreign-born) report speaking English proficiently. The median age of those of Mexican background (25) is younger than that of all Latinos (27). Approximately 46 percent of all Mexicans (foreign and U.S.-born) are married, however, 44 percent of all ethnic Mexican women who gave birth in the year prior to the survey are unmarried. In addition, only 9 percent of all people of Mexican background have obtained at least a bachelor's degree, compared to 13 percent of all U.S. Latinos in the U.S. With a median annual income of about \$20,000, 27 percent of Mexicans live in poverty. However, Mexicans and Mexican Americans together have higher homeownership rates than Latinos as a whole, 50 percent vs. 47 percent respectively (Motel & Patten 2012a).

#### **Dominicans**

Currently, Dominicans make up about three percent of the total U.S. Latino population. Despite relatively well-off migration cohorts in the past, the 1990 U.S. Census revealed that the Dominican community had higher levels of poverty, divorce, female-headed households, and unemployment, as well as lower per capita household income and high school completion rates than Whites, Blacks, and Hispanics taken as a whole (Itzigsohn & Dore-Cabral 2000; U.S. Bureau of the Census 2004). Dominicans have low levels of occupational status, education and income, making on average less than all other Latinos. Dominicans also had among the largest percentage of foreign-born individuals, 61 percent vs. 40 percent for Mexicans (U.S. Bureau of the Census 2004). Even with discouraging figures, many Dominicans are successful business owners in their ethnic enclave (Bailey 2001).

Despite a longstanding relationship with the United States, migration from the Dominican Republic did not increase until the 1960s. Dictator Rafael Leonidas Trujillo, who assumed a 30-year presidency in 1930, restricted immigration from the country, believing his opposition was planning his overthrow or funneling information from outside the island (Levitt 2004). After Trujillo's assassination in 1961, the U.S. opened its doors to Dominican immigrants with the hope of avoiding political and economic instability. Between 1961 and 1980, the U.S. government granted more than 100,000 temporary visitor visas to Dominicans each year, second in number only to Mexico. It is estimated that in these two decades, the number of Dominicans (documented and undocumented) and their children in the United States grew to somewhere between 400,000 and 450,000 (Bray 1984). Many sponsored family members, and most concentrated in the New York/ New Jersey area (Hernández & Rivera-Batiz 2003). Therefore, the two decades that followed (1981-1990 and 1991-1998) also witnessed increases in the

number of Dominican immigrants and the Dominican Republic rank among countries sending immigrants rose from 8 in 1961 to 5 in 1998.

Studies on Dominican immigrants are inconsistent with respect to identifying group attributes. For example, although some studies suggest that Dominicans were largely middle class, with high rates of literacy, occupational skill and employment at time of migration, other studies show the opposite, e.g. the majority of migrants were working class (Ugalde, Bean & Cardenas 1979; Bray 1984; Levitt 2004). Economic instability in the Dominican Republic during the 1980s made migration a more attractive option for migrants from all social classes and this perhaps contributes to the varied social backgrounds of migrants (Grasmuck & Pessar 1991).

The contradictory findings for the economic and social state of Dominicans in the U.S. extend into present time, with current survey data painting a picture of a struggling Dominican population. Researchers at the Pew Hispanic Center (Motel & Patten 2012b) analyzed the 2010 American Community Survey and shows that Dominicans and Dominican-Americans are the fifth largest sub-population of Latinos living in the United States, composing 3 percent of all Latinos. Nearly 57 percent of all people of Dominican background were born outside the United States, the majority arriving after 1990 (63 percent). Approximately 47 percent of Dominican immigrants are U.S. citizens. In terms of language use, slightly more than half (55 percent) of Dominicans report speaking English proficiently. The median age of Dominicans is greater than that for Latinos as a whole (29 vs. 27 years, respectively). Dominicans are less likely than other Latinos to be married (36 percent vs. 44 percent) and over half of ethnic Dominican women who gave birth 12 months prior to the survey were unmarried (54 percent compared to a Latino total of 42 percent). Although 15 percent have at least a bachelor's degree (higher than the total for Latinos 13 percent), the poverty rate for Dominicans and Dominican-Americans together is

about equal to that of all Latinos (26 percent). Lastly, homeownership is lower among Dominicans (24 percent) than for Latinos as a whole (47 percent) (Motel & Patten 2012b).

#### Puerto Ricans

Puerto Rico became a U.S. territory following the Spanish-American War of 1898. For much of the 20<sup>th</sup> century, Puerto Ricans were viewed as incapable of maintaining sovereignty of their own nation and in need of U.S. governance. Even with the migration of about half of its population to the mainland, the island has had no shortage of national pride. Despite strong cultural identity, however, Puerto Ricans, given the choice, overwhelmingly prefer to maintain their ties to the United States, with just a small minority in favor of independence (Duany 2003). In 1952, 81 percent of Puerto Ricans voted to become a U.S. Commonwealth and little has changed since in their views on political independence. Researchers, like Jorge Duany, have suggested that Puerto Rico is not a territory but rather a "nation on the move" (2003: 434), one in which migration patterns and community boundaries are unlike those of any other country. Puerto Ricans (currently about 9 percent of the total U.S. Latino population) are U.S. citizens by birth<sup>1</sup> and able to travel to and from the mainland United States with much greater ease than other immigrant groups.

Mass Puerto Rican migration to the mainland began with strong U.S. labor force demand during and following World War II (Rumbaut 1994). These employment opportunities were a stark contrast to the limited work prospects on the island (Ortiz 1986). Due to increasingly cheaper airfare from the island to New York and the opportunity for work within the garment

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<sup>&</sup>lt;sup>1</sup> This is a result of the Johns Act of 1917, which recognized Puerto Ricans has citizens even as the island remained an unincorporated territory of the United States (Duany 2003)

industry, Puerto Ricans became among the first airborne migrants and increasing numbers entered the United States.

Santiago-Valles & Jiménez-Muñoz (2004) identify three eras of Puerto Rican migration. The first, 1898-1944, followed the incorporation of the island as a U.S. territory. The second was 1945-1968, a result of decline in the exportation of island-grown, U.S. controlled sugar and tobacco. Traditional means of making a living, which revolved around agriculture and farming, gave way to export-oriented industries. In addition, Puerto Rican unemployment rates were consistently higher than in the United States. The most recent migration wave came between 1968 and 2000 and was "much more cyclical, extremely variegated, and, hence, considerably more difficult to calculate" (Santiago-Valles & Jiménez-Muñoz 2004: 91). Therefore, migrants from Puerto Rico to the United States have become increasingly diverse, shifting from predominantly working-class to the professional and middle-classes.

It is the Puerto Rican story that is perhaps most surprising to researchers (Santiago-Valles & Jiménez-Muñoz 2004). Contrary to what assimilation theory would predict, Puerto Ricans became worse off with more time in the United States. Despite their U.S. citizenship, Puerto Ricans are in a worse socioeconomic position than their Latino, Black and Asian counterparts (Bean & Tienda 1987; Santiago-Valles & Jiménez-Muñoz 2004). Even with higher rates of high school completion than Mexicans, Puerto Ricans have higher rates of poverty and unemployment, exceeded only by Dominicans. As their socioeconomic status has worsened, disparities emerged between mainland-born Puerto Ricans and those born on the island (Donato & Cordero-Guzman 1992). Some researchers suggest that Puerto Rico's long-standing, "quasi-colonial" relationship with the United States has largely contributed to the current socioeconomic situation of Puerto Ricans living on the mainland (Suarez-Orozco & Suarez-Orozco 1995; Santiago-Valles &

Jiménez-Muñoz 2004). As Santiago-Valles & Jiménez-Muñoz assert, "the structural disparities which characterize Puerto Ricans were and are still colonial: Boricuas were and are still epitomized by persistent disadvantages in the preparation of the labor force, constrictions in the available sources of employment, and relatively inferior conditions compared to those that exist among the racially dominant sectors of the population within the North American metropole" (2004: 124).

An analysis by researchers at the Pew Hispanic Center (Motel & Patten 2012c) reveals a complex Puerto Rican experience in the United States. Puerto Ricans are the 2<sup>nd</sup> largest Latino subgroup in the United States, with one-third of those living on the mainland born in Puerto Rico. Approximately 82 percent of Puerto Ricans speak English proficiently, in addition to having higher levels of education than Latinos as a whole (approximately 16 percent have at least a bachelor's degree, compared to a Latino average of 13 percent). Puerto Ricans, however, are also less likely to be married than all Latinos (36 vs. 44 percent, respectively), and close to two-thirds of all Puerto Rican women who gave birth in the year prior to the survey were unmarried. While their median annual income was higher than that for all Latinos (\$25,000 vs. \$20,000), the percentage of Puerto Ricans living in poverty was greater than that for all Latinos taken together (27 percent vs. 25 percent, respectively). Given these contradictory statistics, it is not surprising that researchers continue to be puzzled by the Puerto Rican story.

In sum, the migratory experiences of Mexicans, Dominicans and Puerto Ricans suggest very different processes of social integration. In contrast to Mexicans, large numbers of Dominicans are authorized and Puerto Ricans are U.S. citizens by birth. Privilege in legal status, however, does not discount the disadvantages both groups face when it comes to the proportion living in poverty. Despite higher average levels of education, about a quarter of Dominicans and

Puerto Ricans still live below the poverty line (Motel & Patten 2012b; Motel & Patten 2012c). As such, it is difficult to predict how these variations will manifest themselves in other arenas. What is for certain, however, is that these distinctions indicate differences in the overall assimilation processes of these groups. In the following sections, I examine how parental involvement patterns may reflect such variations.

#### **DATA AND METHODS**

Data for this study were collected for the purposes of understanding Latino and Asian parent involvement in their children's schools. In eight neighborhoods in three cities (Chicago, Nashville and New York), immigrant parents of school-aged children between grades 1-9 were randomly sampled and asked about experiences in their children's schools. A total of 1942 parents were interviewed. Unlike larger panel surveys (like the National Education Longitudinal Survey) often used in parental involvement studies, these data gathered information on large numbers of foreign-born parents. Whereas previous studies were limited by their sample size (Turney & Kao 2009; Garcia Coll et al 2002), this project permits me to unpack differences among Latino immigrant parents of different national origins.

For this analysis, I use all Latino parents. Of the 1,261 respondents, 44 percent were Mexican origin, 30 percent were of Dominican origin, 14 percent were Puerto Rican (105 mainland-born, 75 island-born), and 12 percent of respondents were classified as Other Latinos. This latter group was either Latinos born elsewhere or those of mixed ethnicity. All parents in the sample, except for mainland-born Puerto Ricans, were born outside of the United States. Although they are U.S. citizens, I include Puerto Ricans in the analysis because they serve as an

important comparison group and allow for a closer analysis of the potential role of citizenship in parental involvement behaviors.

## **Dependent Variable**

As discussed previously, parental involvement is often defined in a myriad of ways. Lack of consistency in this definition makes it challenging to compare studies and often results in contradictory findings. Despite the differences, most studies now measure parental involvement as an index of related items instead of using just one variable (Fan & Chen 2001; Hong & Ho 2005; Jeynes 2007; Lee & Bowen 2006; Marschall 2006; McNeal 1999; Turney & Kao 2009; Viramontez Anguiano 2004). Therefore, to better capture parent involvement, I use factor analysis to identify the key dependent variables that, together, measure parental involvement.

The survey includes ten different items describing the formal and informal ways in which parents engage with their child's education (see Appendix A). Of the ten measures, I use eight ordinal-level variables to create a parental involvement index. Thinking about the child whose birthday was coming up next, respondents were asked: (a) whether they knew the principal's name; (b) the number of parents in their child's school they talked to about school; (c) the number of PTA/PTO meetings attended over the past year; (d) how often respondent spoke to teachers or administrators in the past year; (e) how often respondent visited the school in the past year; (f) how often respondent read to or with child in the past year; (g) how often respondent helped child with homework in the past year; and (h) whether or not respondent took child to the library or museum in the past year. Note that I did not include the two questions that loaded below a threshold of .3, e.g. how often parent talked with child about schoolwork or grades and

how often parent helped with school fund-raising event or did some volunteer work for their child's school.

Table 1 presents findings from the factor analysis and shows factor loadings of greater than .3 for each of the eight variables, an eigenvalue of 1.609, and an R2 of 20.1 percent. I use .3 as my factor loading cutoff because this criterion is consistent with other studies (Kooij et al. 2005; Streiner 1994). Although standard practice suggests that loadings should be at .7 or higher to show a particular factor represents the items in question, in real life this cut off serves as an arbitrary rule of thumb. Real life data does not always meet this high criterion. As Kim and Mueller explain, "it is important to emphasize...that factor analysis does not tell the researcher what substantive labels or meaning to attach to the factors. This decision must be made by the researcher" (1978: 56). In fact, some work has adhered to the Kaiser criterion determine the number of factors to extract – all factors with eigenvalues greater than 1 are included (Sui-Chu & Willms 1996). As such, informed by my own reading of the literature, I used .3 as the cutoff for the factor loadings in this analysis and included all factors with eigenvalues greater than 1.

TABLE 1
Summary of Factor Analysis Results for Parental Involvement Measure (N=1253)

Item	Factor Loadings	Uniqueness
Knew principal's name	0.383	0.853
# of parents talked to	0.519	0.730
# PTA mtgs attended	0.331	0.891
Spoke to teachers or admin	0.476	0.774
Visited school	0.519	0.731
Read to/with child	0.489	0.761
Helped with homework	0.439	0.808
Went to library/museum	0.395	0.844
Eigenvalues % of variance	1.609 20.10	

From the eight items identified in the previous analysis, I created the parental involvement index by coding the mean response or higher (indicating more frequency of the given activity or practice) as 1 for each of the variables. I coded those who responded below the mean (indicating less frequency of activity or practice) with a 0. The index ranges from 0 to 8, with a score of 0 suggesting no parental involvement and a score of 8 suggesting the highest levels of parental involvement. As a measure of internal consistency, the Cronbach's  $\alpha$  is .65 for the index, a value which is lower than the commonly acceptable .7 or greater standard. As Santos explains, .7 is "an acceptable reliability coefficient but lower thresholds are sometimes used in the literature" (1999). Consistent with this assertion, Turney and Kao (2009) use a parental involvement index with a Cronbach's  $\alpha$  of .59. Although my Cronbach's  $\alpha$  is higher than Turney and Kao (2009), because it is lower than .7, I examine variation in each of separate items that make up the index (see Table 5). Therefore, the parental involvement index is the key dependent variable in my main regression model. (I offer more details about variable definitions in the final table of the Appendix)

## **Independent variables**

I measure national origin in this study with a set of dummy variables, where 1=

Dominican and 0 otherwise, 1= Mexican and 0 otherwise, 1= mainland-born Puerto Rican and 0 otherwise, 1= island-born Puerto Rican and 0 otherwise, and 1= those classified as Other Latinos and 0 otherwise. Because they represent the largest proportion of the overall sample, Mexicans are the reference group.

While national origin is an important independent variable for the purposes of this study, it would be difficult to understand parental involvement without understanding other factors that

influence their participation. In particular, I include two key independent variables: parent perception of parent-school relationship and barriers to involvement. To construct these measures, I perform a second factor analysis to identify additional factors that reflect respondents' perceptions of their child's school. Appendix B lists the 17 items used in this factor analysis.

Table 2 describes two factors that result from this analysis. The first latent factor grouped nine ordinal-level items related to respondents' perceptions of the parent-school relationship: (a) whether he/she feels like the staff understands parents' problems and concerns; (b) whether he/she feels the staff makes him or her feel welcome; (c) whether he/she feels the staff takes a positive interest in students' culture; (d) whether he/she feels the school is providing an excellent education; (e) whether he/she feels the staff greets him or her personally when he or she visits the school; (f) whether he/she feels that school officials do not care about parents; (g) whether he/she feels the teachers know about the issues in their community outside of school; (h) whether he/she ever thinks about moving their child to another school; and (i) whether the school encourages parents and community members to communicate with the principal. To identify the items I use in the index, I adhere to the Kaiser Criterion.

Similar to the parental involvement index, respondents with the mean response or greater (indicating positive perceptions of the school and staff) were coded with a 1 and those below the mean were coded as 0. The index for perceptions of the parent-school relationship index ranged from 0 to 9, with 0 suggesting the least positive perception of the school and a 9 suggesting the most positive perception. The index has an acceptable Cronbach's  $\alpha$  of .75 (Santos 1999).

I interpret the second factor to emerge out of this factor analysis as barriers to involvement. The second column of Table 2 is comprised of five items, with the smallest factor loading at .189. These items refer to perceived barriers to parental involvement and ask whether:

(a) not being able to communicate well in English made it difficult for respondents to be involved in their child's school; (b) problems with childcare made it difficult for respondents to be involved in their child's school; (c) problems with transportation made it difficult for respondents to be involved in their child's school; (d) problems with scheduling made it difficult for respondents to be involved in their child's school; (e) it is difficult to overcome the cultural barriers between teachers and parents. Together, these items yield a Cronbach's  $\alpha$  of .43, suggesting low internal consistency similar to what Turney & Kao (2009) reported. Therefore, I separately examine the five items (see Table 8).

In addition, however, I include the barriers-to- involvement index in the main regression models that predict parental involvement. A score of 0 on the index indicates respondents experienced no barriers, whereas a score of 5 indicates respondents experienced all barriers listed. This measure serves as a count of the number of barriers experienced by respondents, and its inclusion in the parent involvement models reveals how barriers affect levels of parental involvement. Therefore, although both perceptions of parent-school relationship and barriers-to-involvement indices are key independent variables for the main regression model, in separate analyses (included in the Appendix and briefly discussed in the following sections), the two are treated as dependent variables in an effort to unpack their consequences for parental involvement.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup>Note that three items were not included in either of the two indices that emerged from the factor analysis because their factor loadings were well below the thresholds. These were (a) whether respondents agreed that children learn more if their parents are active in the school; (b) whether respondents agreed that at least some teachers at their child's were probably born outside the United States; and (c) whether anything else (not mentioned in the other questions) made it difficult for respondents to be involved with their child's school.

TABLE 2
Summary of Factor Analysis Results for Parent Perception of School Measure (N=1261)

	actor Loadings	Factor Loadings	Uniqueness
Teachers greet you	0.386	-0.135	0.833
Children learn more when parents are involved	0.162		0.971
School encourages parents to communicate with principal	ate 0.524	-0.115	0.712
Teachers try to understand parents' conce	erns 0.643		0.580
Teachers make you feel welcome	0.496	-0.124	0.738
Teachers show positive interest in culture	e 0.530	-0.142	0.699
Teachers know about issues concerning y	your 0.481	-0.178	0.737
It's difficult to overcome cultural barrier	s -0.212	0.366	0.821
Events are scheduled during work/sleep l	hrs	0.189	0.959
Childcare problems		0.385	0.849
Transportation problems		0.467	0.780
Not able to communicate well in English		0.493	0.756
Any other obstacle	-0.156		0.974
School is providing an excellent education	on 0.558	-0.176	0.658
School officials don't care about you	0.457	-0.243	0.732
You think about moving to another school	ol 0.410	-0.130	0.815
Eigenvalues % of variance	2.393 14.10	1.010 0.059	

Note: Factor loadings in the first column compose the "Perception of Parent-school relationship" index. Factor loadings in the second column compose the "barriers to involvement" index

## **Control variables**

Given previous research that has noted that factors like SES can attenuate the effects of race or immigration status on parental involvement, I include a number of important control variables related to attributes of parents, children, households and schools.

With respect to parents' attributes, I control for several sociodemographic characteristics, including sex (0=male, 1=female), age in continuous years (ranging from 18 – 72), home ownership (0=does not own home, 1=owns home), and marital status (0=not currently married, 1=currently married). In addition, two out of the three socioeconomic (SES) variables refer to parental attributes: whether they had at least a high school education (1=high school education or more, 0=no high school education), and the whether they spoke English during the interview (1=- spoke English during interview, 0=did not speak English during interview).

As has been well documented, immigrant parents of higher SES and levels of human capital can offer their children greater resources to help them better adapt and be successful (Portes & Rumbaut 2001). Immigrant parents' education greatly contributes to the academic achievement of their children (Fuligni 1997). Parent education is a known a predictor of parental involvement – those with greater levels of education are more involved in school-based activities (Stevenson & Baker 1987). Moreover, those with more education may feel better equipped to contribute to the learning process and experience higher levels of self-efficacy. English ability is also an important marker of SES, with those who are able to communicate well possibly perceiving fewer institutional barriers. Furthermore, English acquisition is a necessity for immigrant upward mobility (Bean & Steven 2003).

Because Hoover-Dempsey & Sandler (1995) show that it greatly motivates parents to act, I also include a measure of self-efficacy. If respondents report that feeling like he or she cannot make a difference always makes it difficult to be involved with their child's school, they are coded with a 0. Respondents who are sometimes or often kept from being involved because they feel they cannot make a difference are coded 1 and 2, respectively. In other words, a code of 0

indicates high self-efficacy, a code of 1 indicates medium self-efficacy, and a code of 2 indicates low self-efficacy.

I include one attribute of the child about whom parents respond: the mean grade level (ranging from 1-10). This is necessary because prior work reveals that the older the child, the less likely parents are to engage in school-based activities (Stevenson & Baker 1987).

With respect to household attributes, I include two variables in the models. The first, the number of children under 18 in the household (ranging from 0 – 9), is included because parents with more children are less likely to be involved than those with fewer children. On the other hand, parents with more children (especially if many of them go to the same school) may experience greater contact with teachers and administrators. The second control is another SES variable that indicates whether respondents have Internet and/or a computer at home (1=has internet and computer at home, 0=does not have internet and computer at home). As technology becomes increasingly present in the daily lives of students in the United States (100 percent of public schools have at least one instructional computer with Internet access (Gray, Thomas & Lewis 2010), the digital divide between those who have Internet and a computer in the home and those who do not suggests differences in access to vital information. In 2011, higher rates of Internet use and home Internet access were linked to higher levels of education and income, suggesting that access to technology is indeed another marker of SES (Livingston 2011).

Related to school attributes, I include a single dummy variable indicating whether the child's school had a parent liaison. As Tinkler describes, the presence of a parent-school coordinator or liaison is "another strategy found to be successful in creating a welcoming atmosphere and developing a communication network" (2002: 14). Furthermore, parent liaisons that represent a population of the school that may often be underrepresented or excluded can help

bridge the cultural gap that prevents some parents from engaging with staff and faculty (Scribner et al 1999).

## Variables not Included in the Main Regression Model

Several indicators are not included in the models due to high correlation with other variables. For example, because it is highly correlated with education, income is not included in this this study. Family income does not always reflect the educational attainment of many immigrants, who may be discriminated against in the labor market regardless of education or experience in their country of origin (Buzdugan & Halli 2009). Parents with more education, however, have the necessary skills to aid their children in ways that are not simply financial. Additionally, because citizenship was highly correlated with English usage, I also left it out of the model. Note, however, that I did include it in descriptive tables to compare legal status across national origin groups. Furthermore, similar to Turney & Kao (2009), although I expected to include whether respondents were the mother in the model, it was too highly correlated with respondent's sex to be included in the multivariate models. Like English usage, it only appears in the descriptive tables.

## **Missing Data**

I used conditional mean substitution to recover missing data for a number of key variables, including citizenship (15 percent missing), age (3.8 percent missing), child's grade (6.3 percent missing), and parent liaison in the school (7.7 percent missing). Conditional mean imputation regresses variables with missing data on all other independent variables. As Allison describes, "using the estimated equation, we generate predicted values for the cases with missing

data on X. These are substituted for the missing data and analysis proceeds as if there were no missing data" (2002: 11). Although not without limitations, including an assumption of no error and a reduction of variance (Allison 2002), conditional mean substitution allows us to maintain the sample observations that would have otherwise been lost.

## **Hypotheses**

Drawing on the literature reviewed above, I derive the following hypotheses: First, because of lower levels of education, English proficiency, and higher likelihood of being unauthorized, I expect that Mexicans (the reference group) will have lower levels of parental involvement than the other national origin groups. As such, I also hypothesize that Mexicans will experience greater barriers to involvement and will perceive a more negative parent-school relationship than their peers.

Second, I hypothesize that both mainland-born and island-born Puerto Ricans will score higher on the parental involvement index than Mexicans by virtue of their citizenship and high levels of English proficiency. Puerto Ricans will also perceive fewer obstacles than Mexicans for these same reasons. However, given their low status in the United States despite citizenship (Santiago-Valles & Jiménez-Muñoz 2004), I also hypothesize that Puerto Ricans will score lower on perception of parent-school relationship index than their Mexican counterparts.

Third, I predict that Dominicans will show higher levels of parental involvement than Mexicans because of their higher levels of education and higher levels of legal citizenship, relative to Mexicans. For these same reasons, I also hypothesize that Dominicans will perceive fewer barriers to involvement than Mexicans and a more positive perception of their child's school compared to Mexicans.

## **Analytic Plan**

To understand variation in levels of involvement between national origin groups, I first examine baseline group differences using descriptive statistics. I then analyze individual dimensions of parental involvement and of the index. Next, I analyze the relationship between parental involvement and national origin groups using OLS regression. My model-building includes five steps. First, I examine baseline differences in parental involvement across the national origin groups. Second, I add two supplemental indices - perceived barriers to involvement and perception of parent-school relationship. Third, to the models with national origin and perceptions of barriers and parent-school relationship, I add whether the child's school had a parent liaison at school. Fourth, I control for levels of self-efficacy and some sociodemographic controls. Lastly, the fifth model adds the three important SES variables, e.g. whether parents have at least a high school education, whether English was spoken during the interview, and whether respondents have Internet and computer at home.

Because I expect many of the differences among national origin groups to relate to social position in, and pathways into, the United States, I unpack these expected differences in parental involvement using ordinal logistic regression. This strategy will allow me to understand where the differences exist and how these may later affect scores on the parental involvement index, the dependent variable of primary concern. To conduct all statistical analyses, I used R version 2.15.0; script is available upon request.

#### RESULTS AND FINDINGS

## **Differences by Immigrant National Origin Group**

Table 3 reveals key differences in the attributes of parents, children, households and schools across national origin groups. With respect to parent attributes, all national origin groups significantly differ from Mexicans. For example, although most respondents in our total sample are female (86 percent), Dominicans have significantly fewer women than Mexicans (83 vs. 88 percent, respectively). Consistent with the literature, Dominicans, island-born Puerto Ricans and Other Latino immigrants, are on average significantly older than Mexicans (40, 43, 39 vs. 37 years, respectively). Dominicans and island-born Puerto Ricans have significantly smaller proportions of homeownership than Mexicans (2 and 14 vs. 23 percent). Interestingly, significantly smaller proportions of respondents in all other groups report being the mother than Mexicans (82 percent of Dominicans, 78 percent of mainland-born Puerto Ricans, 68 percent of island-born Puerto Ricans, and 80 percent of Other Latinos, compared to 86 percent of Mexicans). As expected, all groups have significantly fewer currently married respondents than Mexicans (66 percent compared to 41 percent for Dominicans, 35 percent for mainland-born Puerto Ricans, 20 percent for island-born Puerto Ricans and 50 percent for Other immigrants). Although U.S. citizenship is not included in our final regression models, it is worth noting that 44 percent of Dominicans and 27 percent of those classified as Other reported being naturalized citizens versus 13 percent of Mexicans (a significant difference for both groups).

TABLE 3: Descriptive Statistics by Immigrant National Origin Group

				Puerto Ricans	Puerto Ricans	
	Total	Mexicans	Dominicans	(Mainland)	(Island)	Other
Parent Attributes						
Female	86%	88%	83% **	87%	88%	85%
Mean Age	38.3	36.5	40.3 **	35.7	42.7 **	39.3 **
Owns Home	16%	23%	2% **	18%	14% *	29%
Is Mother	82%	86%	82% *	78% **	68% **	80% *
Currently Married	51%	66%	41% **	35% **	20% **	50% **
Is Citizen	26%	13%	44% **	N/A	N/A	27% **
Spoke English during interview	13%	3%	3%	86% **	39% **	14% **
At least HS Education	51%	31%	68% **	75% **	65% **	58% **
High Self Efficacy	69%	65%	81% **	70%	64%	68%
Medium Self Efficacy	19%	21%	17%	14%	24%	19%
Low self Efficacy	12%	13%	7% **	15%	12%	13%
Child Attribute						
Mean Grade Level	5	4.9	5.1 *	4.4 **	5.5 **	5.1
Household Attributes						
Mean # of Children <18	2.3	2.6	2 **	2.4 *	1.8 **	2.2 **
Has internet/computer	56%	40%	72% **	68% **	67% **	59% **
School Attribute						
Parent Liaison at School	77%	71%	88% **	78%	78%	71%
N	1261	554	378	105	75	149

Note: Significance tests for differences between Mexicans and other national origin groups

Looking closely at SES variables reveals important differences among national origin groups. Both Puerto Rican groups (mainland and island born) and Other Latinos have significantly greater proportions of respondents speaking English during the interview than Mexicans (86, 39, and 14 percent vs. 3 percent, respectively), but the difference between Mexicans and Dominicans is not significant. In terms of education, all groups have significantly greater proportions of respondents with at least a high school education compared to Mexicans (68, 75, 65, and 58 vs. 31 percent, respectively). While self-efficacy does not differ for most

<sup>\*</sup> p < 0.1. \*\* p < 0.05

groups, Dominicans are significantly more self-efficacious than Mexicans: 81 percent of Dominicans had high self-efficacy compared to 65 percent of Mexicans.

Mainland-born Puerto Ricans had significantly younger children (average grade 4.4), and island-born Puerto Ricans (average grade 5.5) had significantly older children, than Mexicans (average grade 4.9). Dominicans also reported having older children than Mexicans (average grade 5.1 vs. Mexican average of 4.9)

Households also reveal relevant differences across national origin. On average, all groups have significantly fewer children than Mexicans (mean=2.6), with island born Puerto Ricans having the fewest children (mean=1.8). Likewise, all groups also had significantly greater proportions of respondents with Internet and a computer at home than Mexicans (72, 68, 67, and 59 vs. 40 percent, respectively). Lastly, only Dominicans differed from Mexicans in the presence of a parent liaison in their child's school. Compared to 71 percent of Mexicans, more (88 percent) Dominicans reported having a parent liaison. There was no significant difference between Mexicans and the other three groups.

Consistent with prior studies, these differences indicate that Mexican immigrants are more disadvantaged in a number of ways than their Latino counterparts. Mexicans are less fluent in English, less educated and fewer of their households have access to technology than the other national origin groups in the sample. However, these findings are inconsistent with prior studies' descriptions about the Puerto Rican U.S. experience. In fact, mainland-born Puerto Ricans appear the most advantageous in our sample. They are mostly English speaking, with a greater proportion of high school completion than all other groups and greater access to technology than Mexicans. The Dominicans in our sample also show varying areas of advantage and disadvantage. While they have the highest proportions of respondents with Internet and a

computer at home, Dominicans had higher self-efficacy and more were citizens, than Mexicans.

Yet Dominicans also had the smallest proportion of homeownership, and their English proficiency was comparable to that of Mexicans.

### Parental Involvement by Immigrant National Origin Groups

Table 4 describes the relationship between national origin and parent involvement. Eight parent involvement variables are included, along with the index of parent involvement, and so are significant tests for differences between Mexicans and other national origin groups. The first row of parental involvement scores shows significant differences between Mexicans and all other national origin groups. While Mexicans average 3.9 on the parental involvement index, Dominicans and both Puerto Rican groups yield higher scores (4.1, 4.9, and 4.3 respectively). In fact, mainland-born Puerto Ricans appear the most involved. In contrast, the Other Latino group averages a 3.6 on the index, significantly less than Mexicans. How parental involvement differs across national origin group is revealed by each of the eight variables. The first variable in Table 4 shows that 42 percent of Dominican and 55 percent of mainland-born Puerto Ricans reported knowing the name of the principal of their child's school, compared to 36 percent of Mexicans. Dominicans were also significantly more likely than Mexicans to talk to at least a few parents than Mexicans (53 vs. 43 percent, respectively). In addition, Dominicans and mainland-born Puerto Ricans were more likely to attend between 1-2 PTA meetings than Mexicans (23 and 27 vs. 18 percent, respectively).

**TABLE 4: Parent Involvement Variables by Immigrant National Origin** 

	То	tal	Mexican	Domin	ican	Puerto I (mai		Puerto I		Oth	er
Parental Involvment Index	4.0	(1.9)	3.9 (1.9)	4.1 **	(1.8)	4.9 **	(1.8)	4.3 **	(1.8)	3.6 **	(1.9)
	%	N	% N	%	N	%	N	%	N	%	N
Knows principal's name											
Yes	39%	(492)	36% (198)	42% *	(157)	55% **	(58)	45%	(33)	31%	(46)
		1259	553		378		105		74		149
# of Parents talked to											
1-5	47%	(594)	43% (239)	53% **	(200)	50%	(53)	40%	(30)	48%	(72)
		1261	554		378		105		75		149
PTA meetings attended											
1-2	21%	(259)	18% (102)	23% *	(88)	27% *	(28)	20%	(15)	17%	(26)
		1261	554		378		105		75		149
Spoke to teachers/ admin											
<=Monthly	67%	(843)	71% (395)	65% *	(245)	53% **	(56)	64%	(48)	66% *	(99)
>=Weekly	28%	(349)	24% (134)	28%	(107)	43% **	(45)	35% *	(26)	25%	(37)
		1259	554		376		105		75		149
Visited school											
<=Monthly	63%	(788)	63% (350)	63%	(238)	54%	(57)	52% *	(39)	70%	(104)
>=Weekly	35%	(438)	34% (189)	34%	(127)	46% **	(48)	45% *	(34)	27%	(40)
		1259	554		376		105		75		149
Read to child											
<=Monthly	22%	(281)	24% (131)	17% **	(66)	23%	(24)	24%	(18)	28%	(42)
>=Weekly	59%	(750)	60% (333)	59%	(222)	70% *	(73)	57%	(43)	53%	(79)
		1261	554		378		105		75		149
Helped with homework											
<=Monthly	50%	(633)	53% (291)	50%	(188)	47%	(49)	48%	(36)	46%	(69)
>=Weekly	5%	(66)	5% (28)	3%	(12)	15% **	(16)	7%	(5)	3%	(5)
		1261	554		378		105		75		149
Took to lib/ museum											
Yes	32%	(400)	34% (187)	32%	(121)	14% **	(15)	23% *	(17)	41%	(60)
		1258	554		376		105		75		148

Note: Significance tests for differences between Mexicans and other national origin groups

So far, this analysis reveals interesting national origin differences. On the whole,

Dominicans appear more engaged than Mexicans on a number of measures including knowing
the principal's name, knowing more parents, and attending more PTA meetings. Like

Dominicans, mainland-born Puerto Ricans were also more likely than Mexicans to know the
principal's name and attend more PTA meetings. In addition, mainland-born Puerto Ricans were

<sup>\*</sup> p < 0.1. \*\* p < 0.05

also more likely to speak to teachers and administrators weekly, visit their child's school weekly, read to their child weekly, and help their child with homework weekly, compared to Mexicans. Island-born Puerto Ricans showed marginally significant differences compared to Mexicans; more of these Puerto Ricans reported speaking to teachers and administrators weekly and making weekly school visits. Mexicans were only more engaged than the other groups in two respects. In an analysis not shown here, more Dominicans reported that they never read to their child than Mexicans (24 vs. 16 percent, respectively), and more Mexicans took their child to the library or museum than both groups of Puerto Ricans.

### Parent Involvement by SES and Immigrant National Origin

National origin differences among parental involvement variables become further nuanced when we include the three SES variables. Table 5 presents these differences. Generally speaking, the results show that higher levels of SES (having at least a high school education, speaking English during the interview, and having internet and a computer at home) are linked to more parent involvement. For example, among Mexicans, the average scores on the parental involvement index between those with at least a high school education and those with less than one as well as between those who spoke English during the interview and those who did not are both significantly different. For Dominicans, the difference between those with and without at least a high school education is also statistically significant, although English and having internet and computer at home are not. For Puerto Ricans (both mainland and island-born) and Others, differences in average parental involvement index scores between respondents with high and low SES were also significant.

TABLE 5: Parent Involvement by SES and Immigrant National Origin

		TOTAL	  L		N	MEXICAN	AN	'	DOMI	DOMINICAN		PUERTO RICAN	RICAN	OTHER	HER
	P Educ >= HS	: English		Internet/ Comp	P Educ	English	Internet/ Comp	pat/	P Educ >= HS English	Internet/ lish Comp	net/ np	P Educ >= HS English	Internet/ sh Comp	P Educ >= HS English	Internet/ lish Comp
	Yes No	Yes	No Yes	Š	Yes No Yes		No Yes	<u>2</u>	Yes No Yes	No Yes	Š	Yes No Yes	No Yes No	Yes No Yes	No Yes No
PI Index	3.4 ** 2.8	3.9 **	3.0 3.2	** 2.9	3.4 ** 2.8	3.8 ** 2.	9 3.1	5.9	3.4 ** 2.8 3.4	3.2 3.2	3.2	3.8 ** 3.4 4.0 **	3.1 3.8 ** 3.4	3.0 ** 2.1 3.5 **	2.5 2.8 ** 2.4
Knew prinicpal's name															
Yes	4.4 ** 4.1	4.6 ** 4.2	4.2 4.3	4.3	4.4 4.2	3.9 4.	4.3 4.3	4.3	4.4 ** 3.8 3.9	4.2 4.2	4.4	4.4 * 4.8 4.8 **	3.7 4.5 4.5	4.3 ** 3.4 4.6	3.9 4.2 3.8
# Parents talked to															
1-5	2.8 ** 2.5	3.3 **	2.5 2.7 **	** 2.5	2.6 2.4	3.9 ** 2.	2.4 2.6 2	2.4	2.7 * 2.5 2.2	2.7 2.7	2.6	3.3 3.0 3.5 **	2.8 3.4 ** 2.9	2.4 ** 2.0 2.7	2.2  2.3  2.2
# PTA mtgs attended															
1-2	4.0 ** 3.4	** 4.4	3.6 3.8 *	* 3.6	3.7 3.5	3.0 3.	3.6 3.7	3.5	3.7 ** 3.3 3.8	3.6 3.6	3.7	4.9 ** 3.6 4.7 **	4.1 4.6 * 4.2	3.8 ** 2.5 3.0	3.3 3.5 3.0
Spoke to teachers/admin	l														
<= Mthly	2.8 ** 2.3	2.9 ** 2.5	2.5 2.7 **	** 2.4	2.6 ** 2.3	3.0 2.	2.4 2.5 * 2	2.3	2.9 ** 2.5 2.4	2.8 2.8	2.8	3.0 2.7 3.0 **	2.6 3.0 ** 2.6	2.5 ** 1.7 2.7	2.1 2.4 ** 1.8
>=Wkly	4.9 ** 4.6	5.2 **	4.6 5.0 **	** 4.5	5.2 * 4.8	4.9 4.	9 5.3 **	4.7	4.7 ** 4.0 5.0	4.5 4.7 **	4.2	5.0 5.1 5.3 **	4.3 5.2 * 4.7	4.6 ** 3.8 5.4 **	4.0 4.6 * 3.9
Visited school															
<= Mthly	2.6 ** 2.1	3.0 ** 2	2.2 2.4 **	** 2.2	2.5 ** 2.0	3.1 ** 2.	2.1 2.3 2	2.1	2.6 ** 2.4 2.9	2.5 2.6	2.5	2.8 2.6 3.0 **	2.3 2.8 * 2.6	2.2 ** 1.7 3.2 **	1.8 2.1 1.9
>=Wkly	4.9 ** 4.3	5.1 **	4.5 4.7 **	** 4.4	4.9 ** 4.4	4.6 4	6 4.8 **	4.4	4.8 ** 3.9 5.0	4.5 4.5	4.5	5.0 ** 4.5 5.2 **	4.1 5.0 ** 4.4	4.6 ** 4.0 5.0	4.3 4.6 ** 4.1
Read to/with child															
<= Mthly	2.1 ** 1.8	2.6 ** 1.9	1.9 2.0	1.9	2.1 1.9	3.3 ** 1.9	2.1	1.9	1.9 1.9 2.0	1.9 1.8	2.0	2.5 ** 1.9 2.6 **	2.0 2.3 2.4	2.0 1.4 2.3	1.7 2.1 ** 1.3
>=Wkly	4.2 ** 3.7	4.6 **	3.9 4.1	** 3.8	4.1 ** 3.6	4.4 3.	8 3.9 *	3.7	4.2 * 4.0 4.1	4.1 4.1	4.0	4.5 4.5 4.6 **	4.1 4.5 4.4	3.9 ** 3.2 4.7 **	3.5 3.8 * 3.4
Helped with homework															
<= Mthly	3.6 ** 3.1	4.0 **	3.3 3.5 **	** 3.3	3.5 ** 3.1	3.9 3.	3.2 3.3 3	3.2	3.6 * 3.4 4.8	3.5 3.5	3.7	3.9 4.0 4.0	$3.7 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	3.3 ** 2.3 3.7	2.8 3.2 ** 2.5
>=Wkly	5.9 5.9	5.8	5.9 6.1	* 5.6	6.2 6.0	9 0.9	6.1 6.8 ** 5	5.5	6.1 6.0 /	6.1 5.7 **	0.8	5.7 5.8 5.8	5.0 5.8 5.7	4.8 4.0 4.0	4.8 5.5 4.0
Went to lib/museum															
Yes	3.9 ** 3.6	4.1 ** 3.7	3.7 3.8	3.7	3.9 ** 3.6	3.9	3.7 3.6 3	3.7	3.9 ** 3.6 4.1	3.8 3.8	3.8	3.9 3.9 4.1 **	3.5 4.0 * 3.7	3.6 3.3 3.8	3.4 3.6 1.1

Note: Numbers in italics indicate cell counts too small to perform significance test

\* p< 0.1. \*\*p < 0.05 Stars indicate significance test for within national origin group differences by SES

single underline: p < 0.1. double underline: p < 0.05 Underlines indicates significant differences between Mexicans and other national origin groups

On the whole, Table 5 uncovers a relationship between SES and parental involvement that varies by national origin. For all four groups, parent education – specifically, having at least a high school education –makes a significant difference in parental involvement scores.

Language matters for all groups but Dominicans who, perhaps because of higher levels of education and authorized status, are better able to navigate around this particular barrier. This idea is supported by the differences between Mexicans and Dominicans who did not speak English during the interview. Dominicans with as comparably low levels of English-speaking as Mexicans had significantly higher average scores on the parental involvement index (3.2 vs. 2.9, respectively). Similarly, Dominicans with no Internet and computer in the home average higher scores on the parental involvement index than Mexicans who also lack this access (3.2 vs. 2.9). Moreover, the average parental involvement score for Dominicans with less than a high school education is lower than for those who did not speak English and those who do not have Internet and a computer in the home, suggesting that Dominicans have more success circumventing certain linguistic and technological obstacles than Mexicans.

Because of small cell sizes, Table 5 combines mainland-born and island-born Puerto Ricans into one larger category. As such, it is not surprising that all three SES categories indicate significant differences between those with low and those with high SES. Predictably, those with high SES have greater scores on the parental involvement index than their lower SES counterparts. Puerto Ricans also appear to significantly differ in parental involvement scores across SES categories compared to Mexicans. Those with and without a high school education have significantly higher scores than Mexicans (3.8 vs. 3.4, respectively). This same pattern is reflected among those with and without Internet and computer in the household (3.8 and 3.4 vs. 3.1 and 2.9). However, there are no significant differences in parental involvement scores for

both those who did and those who did not speak English between the two groups. For Puerto Ricans who already speak English and have higher levels of education, access to this technology seems to offer an additional edge over their less technologically connected peers and Mexican counterparts.

The Other Latinos category differs in parental involvement scores by all SES groupings. Within-group comparisons show that those with higher SES (having at least a high school education, speaking English during the interview and having a computer and Internet in the household) score significantly higher on the parental involvement index than their lower SES peers. The table also reveals that Other Latinos have significantly lower parental involvement scores than Mexicans across all SES categories. In terms of education, Mexicans with and without a high school education averaged significantly higher scores than the Other Latinos (3.4 and 2.8 vs. 3.0 and 2.1). Likewise, Mexicans who didn't speak English during the interview and those who do not have a computer and Internet in the household scored significantly higher than Other Latinos (2.9 and 2.9 vs. 2.5 and 2.4). These differences are likely a byproduct of the potpourri of national origins encompassed within this grouping, with some groups perhaps better off than others.

### **Other Factors Influencing Parent Involvement**

As evident by their influence on parental involvement scores, varying levels of SES affect each national origin group differently. How might we begin to explain how these differing levels of education, English speaking and access to technology translate into variations in parental involvement? As the literature review suggests, immigrants confront a number of barriers to involvement in their children's education. These may be related to factors that inhibit

rapid assimilation into mainstream society – cultural differences, communication issues, and lack of available resources. Before analyzing the main regression model, I will unpack some of the barriers and perceptions that affect parental involvement among immigrant groups in this study.

#### Barriers to Involvement

Table 6 displays selected regression coefficients for five barriers to involvement and it reveals some interesting findings. First, Dominicans and both Puerto Rican groups are significantly less likely than Mexicans to name inability to communicate well in English as a barrier to involvement. This is expected for Puerto Ricans given their U.S. birthright but less so for Dominicans, who have levels of English speaking comparable to Mexicans. However, Dominicans have higher levels of citizenship and education (see Table 3) and these skills may make it so that Dominicans can reach out for help and/or find other ways to communicate with teachers and administrators. Dominicans are also significantly less likely than Mexicans to perceive transportation problems as a barrier to involvement and, along with Other Latinos, are also less likely to report difficulty in overcoming cultural barriers as an obstacle to involvement. Lastly, island-born Puerto Ricans and Other Latinos are more likely than Mexicans to perceive events scheduled during work or sleeping hours as a barrier to involvement. In contrast, there were no significant differences between Mexicans and other national origin groups with respect to perceptions of childcare problems as a barrier to involvement.

	ng a nicat ngli	ldca	porta	icult rcoi	sche ; wo ng b
Variable	<u>o</u>	D SE	o o	O SE	o o
National Origin (ref=Mexican) Puerto Rican (mainland) Duerto Rican (island)	-2.343 ** 0.594	-0.466 0.338	-0.427	0.418 0.310	-0.213 0.274 0.564 ** 0.275
Dominican Immigrant	-0.412 ** 0.170	0.006 0.179	-0.505 ** 0.248	* * * *	
	661.0 001.0-		1.00.0		
Farent Fercephons Parent School Relationship Index (0-9)	-0.071 ** 0.034	-0.090 ** 0.033	-0.015 0.043	-0.300 ** 0.034	-0.062 ** 0.030
Parent Liaison (1=yes)	0.128 0.157	-0.005 0.157	-0.267 0.199	0.123 0.155	-0.168 0.137
Self Efficacy (ref = high) medium low	1.238 ** 0.149 1.842 ** 0.211	0.817 ** 0.154 0.983 ** 0.203	0.900 ** 0.196 1.536 ** 0.235	0.515 ** 0.153 0.559 ** 0.198	0.566 ** 0.138 0.959 ** 0.192
Likelihood Ratio Chi-Square N	399.62 1251	161.72 1250	117.9	173.88 1251	99.99 1248

TABLE 6: Selected Coefficients from Ordinal Logistic Regression, Barriers to Involvement

marital status, parent education, whether respondent spoke English during the interview and whether respondent has Internet and computer in their home Note: The coefficients shown above are net of sex, age, homeownership, number of children < 18 in the household, child's grade in school, \* p < 0.1. \*\* p < 0.05

Although my primary interest is in the coefficients for each of the barriers, Appendix C presents coefficients and standard errors for each of the models predicting the index of the barriers to involvement. In the final model, mainland-born Puerto Ricans and Dominican immigrants appear to perceive significantly fewer perceived barriers to involvement than Mexicans, even accounting for the SES variables (of which two – parent education and English proficiency –are significant negative predictors). These findings further suggest that differences in SES manifest themselves in obstacles that hinder the ability of some parents to become more actively involved in their children's education. That Puerto Ricans and Dominicans perceive fewer barriers may help explain some of the differences in parental involvement seen in Tables 4 and 5 (and Table 9 found later in the text).

### Perception of Parent-School Relationship

How parents perceive their relationship with their child's school also has some bearing on parents involvement. School efforts to create a welcoming environment for parents, especially for those who might otherwise feel isolated, may encourage parents to take active roles in their children's education. Table 7 shows selected coefficients for ordinal logistic regressions of each of the individual items composing the perception of parent-school relationship index. At the outset, the table reveals several key differences among the national origin groups.

Child's school know about concerns in Teachers at community issues and TABLE 7: Selected Coefficients from Ordinal Logistic Regression, Parent Perception of Parent-School Relationship Variables School officials care about parents personally when school personel greet parents Teachers and visit school Feels the school is proving child with excellent education show positive child's school child's culture Teachers at interest in child's school problems and really try to Teachers at understand parents' concerns Make you Feel Child's School Teachers at Welcome Communicate with Principal Parents to Encourages School

moving to new

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Variable

Parent never thinks about

National Origin (ref=Mexican) Puerto Rican (mainland) Puerto Rican (island) Dominican Immigrant Other Immigrant	-0.507 -0.217 0.017	0.330 0.315 0.195 0.225	-1.134 ** 0.550 -0.521 0.532 0.180 0.377 -0.300 0.375	. 0.550 0.532 0.377 0.375	-0.167 -0.215 0.104 0.102	0.352 0.338 0.220 0.253	-0.756 * 0.400 -0.644 * 0.365 -0.090 0.241 -0.569 0.256	0.400 0.365 0.241 0.256	-0.254 0.479 -0.310 0.439	0.397 0.416 0.240 0.319	0.842 0.932 0.928 **	0.542 0.581 0.378	-0.282 0.181 0.192 0.213	0.339 0.336 0.207 0.243	0.010 0.188 -0.108	0.282 0.282 0.158 0.189	-0.661 ** 0.302 -0.277 0.297 -0.629 ** 0.181 0.477 * 0.247
Parent Perceptions  Barriers to Inv. Index (0-5) -0.193 ** 0.060	-0.193 **	090.0	-0.095	0.105	-0.179 ** 0.068	0.068	-0.241	0.073	-0.327 ** 0.076	0.076	-0.264 ** 0.100	0.100	-0.483 ** 0.065	0.065	-0.191 ** 0.051	: 0.051	-0.267 ** 0.059
Parent Liaison (1=yes)	0.808 ** 0.154	0.154	1.108 ** 0.258	0.258	0.608 ** 0.173	0.173	0.763	0.181	0.362 *	0.200	0.940 ** 0.241	0.241	0.403 ** 0.167	0.167	0.685 ** 0.136	. 0.136	0.079 0.161
Self Efficacy (ref = high) medium low	-0.281 0.176 -0.813 ** 0.206	0.176	-1.096 ** 0.320 -2.046 ** 0.315	0.320	-0.084 0.207 -1.194 ** 0.216	0.207	-0.042	0.226	-0.728 ** 0.214 -1.525 ** 0.232	0.214	-0.346 0.305 -1.082 ** 0.302	0.305	-0.059 0.188 -0.991 ** 0.205	0.188	0.046 0.151	0.151	-0.334 ** 0.168 -0.593 ** 0.205
Likelihood Ratio Chi-Square N	95.9 1250	6 0	96.460	0 _	102.720 1250	70	85.380 1250	380	132.900	00	71.290 1250		157.060	90	130.650	50	108.160 1248

marital status, parent education, whether respondent spoke English during the interview and whether respondent has Internet and computer in their home Note: The coefficients shown above are net of sex, age, homeownership, number of children < 18 in the household, child's grade in school, \* p < 0.1. \*\* p < 0.05

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The biggest story in Table 7 are the effects for mainland-born Puerto Ricans, for whether respondent feel teachers at their child's school make them feel welcome and whether teachers show a positive interest in their child's culture exemplifying this point. Notably, they are less likely than Mexicans to perceive that this is true, despite higher levels of education, English speaking and access to technology. In addition, this Puerto Rican group is also less likely to never think about moving their child to a new school. In other words, they are the more likely than Mexicans to consider moving their child to another school. As suggested in the literature review, these results possibly speak to the disadvantaged second-generation (and beyond) experience of mainland-born Puerto Ricans in the United States.

Dominicans also differ from Mexicans, albeit in different and contradictory ways. While they are the only national origin group significantly more likely to report that teachers and school personnel greet them personally when they visit their child's school, Dominicans, like mainland-born Puerto Ricans and Other Latinos, are also more likely to think about moving their child to a new school than Mexicans. Although it is not a significant difference, Dominicans appear less likely to feel that their child's school is providing an excellent education than Mexicans. Despite not feeling ignored or slighted by school personnel, Dominicans appear nonetheless more critical and unsatisfied about the education their children are receiving.

Additionally, several variables displayed in the table corroborate what prior work has revealed. The barriers-to-involvement index is a consistently significant negative predictor of the parent-school relationship. In other words, those who experience more of the barriers are less likely to perceive a positive parent-school relationship. In contrast, the presence of a parent liaison is a significant positive indicator of all but two of the variables. A contact person seems to encourage a positive relationship between parent and school. As might be expected, having low

self-efficacy appears to negatively affect all but one of the perception variables, indicating that not feeling like you can make a difference in your child's education reduces the likelihood of a positive relationship with the child's school.

Like the regression model for barriers to involvement, Appendix D contains an additional OLS regression model predicting parents' perceptions using the 9-item parent-school relationship index. While each of the variables analyzed separately reveals the national origin differences in which I am most interested, the regression models help us to understand findings in our later tables. Although the first model shows baseline differences that suggest both groups of Puerto Ricans perceive a significantly less positive parent-school relationship than Mexicans, in the final model with the SES variables, only the significant negative effect for mainland-born Puerto Ricans remains. Compared to Mexicans, mainland-born Puerto Ricans feel less positive towards their relationship with their child's school.

#### **Parental Involvement Index**

With the understanding that SES and other relevant factors seem to make a difference in levels of parental involvement, how do parental involvement scores vary across national origin groups when we control for a number of key variables? I use ordinary least squares regression to model the parental involvement index by national origin (shown in Table 8). Model 1 shows the coefficients for each of the national origin groups. Dominicans and both Puerto Rican groups have significantly higher average parental involvement scores than Mexicans, with the difference between mainland-born Puerto Ricans and Mexicans significant at the 0.05 level and the difference between island-born Puerto Ricans, Dominicans and Mexicans marginally significant. In contrast, Other Latinos scored significantly less that Mexicans on the parental involvement

index. Consistent with what one might expect given the literature and my previous analyses,

Dominicans and Puerto Ricans appear to be more involved in their children's education. The

hodgepodge category, Other Latinos, suggests that these respondents overall are less involved in
their children's education.

In Model 2, I add both parent perception indices – barriers to involvement and parent-school relationship – to understand how these factors might affect the relationship between national origin and parental involvement. Controlling for these indices explains away the significance of island-born Puerto Ricans and Dominicans. Mainland-born Puerto Rican and Other Latinos remain significant although the inclusion of the two indices reduces the mainland Puerto Rican effect but increases the negative Other Latinos effect. Both barriers to involvement and perception of parent-school relationship are significant predictors of parental involvement, with the coefficient for barriers indicating that the greater the number of barriers experienced the lower the parental involvement score, controlling for national origin. Conversely, those who score high on the parent-school relationship index had higher parental involvement scores, controlling for national origin.

Model 3 adds Parent Liaison to the model. While the presence of a parent liaison is a significant positive predictor of parental involvement, the indicator does not greatly affect the coefficients for mainland-born Puerto Ricans and Other immigrants. The presence of a parental liaison in the school appears to do little for the parental involvement model, suggesting that the benefits to having a parent liaison might already be captured in the parent-school relationship index.

0.136 0.246 0.234 0.163 0.045 0.170 0.140 0.006 0.140 0.046 0.020 0.697 \*\* 0.196 0.059 \*\* 0.027 0.462 \*\* 0.107 0.239 \*\* 0.104 Model 5 0.143 \*\* -0.260 \*\* 0.343 \*\* 0.216 \*\* 0.304 \*\* \* \* 0.356 \*\* 0.107 \*\* 0.011 \* -0.5740.029  $\overline{\mathbf{B}}$ -0.095-0.054-0.0510.041 0.128 0.006 0.140 0.027 -0.357 \*\* 0.173 0.047 0.763 \*\* 0.190 0.520 \*\* 0.225 0.338 \*\* 0.162 -0.172 \*\* 0.0450.332 \*\* 0.124 -0.268 \*\* 0.131 0.309 \*\* 0.143 0.208 \*\* 0.021 SE Model 4 \* 680.0 0.170 0.037 900.0 0.048 2 0.063 0.123 0.224 0.252 \*\* 0.044 0.313 \*\* 0.129 0.803 \*\* 0.196 0.407 \*\* 0.1670.053 \* 0.027SE Model 3 0.330 0.064 В 0.196 0.224 0.122 0.167 -0.252 \*\* 0.044 0.065 \*\* 0.027  $\mathbf{SE}$ Model 2 0.406 \*\* 0.836 \*\* 0.353 0.112 В 0.977 \*\* 0.195 0.386 \* 0.226 0.227 \* 0.1230.337 \*\* 0.169  $\mathbf{SE}$ Model 1 Perception of Parent School Relationship Index (0-9) High School Degree or higher (1 = yes)Sociodemographic Characteristics Comp/Internet in home (1 = yes)National Origin (ref=Mexican) Child's Grade in School (1-9) # of Children < 18 in House Currently Married (1 = yes)Barriers to Inv. Index (0-5) Puerto Rican (mainland) Self Efficacy (ref = high) Spoke English (1 = yes)Dominican Immigrant Parent Liaison (1=yes) Owns Home (1 = yes)Socioeconomic Status Puerto Rican (island) Parent Perceptions Other Immigrant Age (years) medium Female Variable

TABLE 8: OLS Regression, Parent Involvement Index (0-8)

\* p < 0.1. \*\* p < 0.05

Z

2.185 \*\* 0.415 R2=0.190

2.793 \*\* 0.411

2.818 \*\* 0.248

2.958 \*\* 0.242

2.966 \*\* 0.078

R2=0.029

N = 1253

R2=0.068

N = 1244

R2=0.159

R2=0.073

N=1244

N=1239

N=1239

In Model 4, self-efficacy and most of the sociodemographic characteristics are added. The added variables reduce the effect for mainland-born Puerto Ricans and Others, but do not do away with their significance. However, the variables do explain away the significance of the parent-school relationship index. Medium and low levels of self-efficacy are negative significant predictors of parental involvement (with the effect being stronger for those with low self efficacy), compared to high levels of self-efficacy. In addition, being female is a significant positive predictor, number of children in the household is a marginally significant positive predictor, and child's grade in school is a significant negative predictor of parental involvement. Female respondents, on average, score higher on the parental involvement index than their male counterparts, when controlling for all other variables. The model also suggests that the greater the number of children under 18 living in the household, the greater the score on the parental involvement index. As expected, the parental involvement score decreases as the child's grade increases.

The full model, Model 5, adds the three SES variables –all of which are positive significant predictors of parental involvement. The inclusion of the SES variables explains away the mainland and island-born Puerto Rican effects, leaving just Other Latinos as a negative significant predictor of parental involvement. While all three SES variables are significant, the strongest effect comes from whether or not the respondent has at least a high school degree. The weakest effect comes from whether or not respondent has Internet and computer at home.

It would be easy to simply assume that all differences in parental involvement disappear when accounting for the SES variables. The variation we see between both Puerto Rican groups and Mexicans in Model 4 appear to be explained away by the three SES variables, all of which are significant predictors of parental involvement. In fact, Model 5 shows that the only

significant difference that remains after we control for parent perceptions, the presence of a parent liaison, self efficacy and a select group of sociodemographic characteristics is that between Mexicans and Other Latinos, the category we know the least about. There is no doubt that SES plays a big role in explaining the differences in the parental involvement, but these might be further explored within each variable in the index.

Using ordinal logistic regression to predict each of the individual outcomes, several key differences emerge between the national origin groups. Table 9 shows that Dominicans are significantly more likely to participate in parent-teacher organizations, less likely to read to or with their child and are less likely to help their child with their homework, net of the controls. Other Latinos are significantly less likely than Mexicans to know the principal's name, visit inside their child's school, help their child with their homework and take their child to the library or museum controlling for all other variables. Surprisingly, neither one of the two Puerto Rican groups showed any significant differences in parental involvement compared to Mexicans. Controlling for all other variables, Puerto Ricans and Mexicans appear equally as involved in their children's education.

	TAB	LE 9 : S	elected (	Soefficie	nts fron	ı Ordina	ıl Logist	ic Regre	ssion, Pa	TABLE 9: Selected Coefficients from Ordinal Logistic Regression, Parental Involvement Variables	nvolvem	ent Varia	ables			
			Number of parents of kids in child's school	oer of f kids in school	How often participated in any parent-	often ated in arent-	How often spoken with teachers or administrator by	How often poken with teachers or ninistrator by	How often visited	n visited			How often helped	n helped		
·	Knows Current principal's name	Current Is name	talked to about school	o about	teacher organizations	her zations	phone, email or in person	email or in person	inside school for any reason	hool for ason	How often read to or with child	read to	child with homework	with work	Has take child to library or museum	child to museum
Variable	B	SE	В	SE	B	SE	B	SE	В	SE	B	SE	B	SE	B	SE
National Origin (ref=Mexican) Puerto Rican (mainland)	-0.411	0.286	-0.288	0.274	0.318	0.282	0.034	0.302	0.152	0.306	0.065	0.312	-0.158	0.295	0.00	0.395
Puerto Rican (island) Dominican Immigrant	-0.347	0.272	-0.248	0.271	-0.094		0.236	0.291	0.349	0.293	0.043		-0.221		0.133	0.331
Other Immigrant	-0.356 ** 0.178	* 0.178	-0.291	0.180	-0.141	0.199	-0.290	0.213	-0.476 **		-0.267		-0.470 **		-0.634 **	
Parent Perceptions Barriers to Inv. Index (0-5)	-0.111 *	-0.111 ** 0.050	-0.129 ** 0.049	* 0.049	-0.075	0.053	-0.041	0.058	* 760.0-	0.057	-0.046	0.055	-0.033	0.053	-0.129 ** 0.059	0.059
Relationship Index (0-9)	0.035	0.030	0.101 ** 0.031	* 0.031	0.113 **	* 0.034	* 990:0	0.036	0.013	0.035	0.069 ** 0.034	* 0.034	0.042	0.033	600.0	0.036
Parent Liaison (1=yes)	0.089	0.136	0.602 ** 0.137	* 0.137	0.419 **	* 0.149	0.379 ** 0.161	* 0.161	-0.143	0.154	0.111	0.152	0.375 ** 0.147	١ 0.147	0.318 ** 0.160	0.160
Self Efficacy (ref = high) medium low	0.132	0.145	0.001	0.142	-0.037	0.150	-0.389 *	-0.389 ** 0.167 -0.356 0.223	-0.539 ** 0.167 -0.527 ** 0.222	* 0.167 * 0.222	-0.223	0.156	0.116	0.154	0.242	0.174
Likelihood Ratio Chi-Square N	111.36	.36 45	112.09	112.09 1247	65.48 1247	48 47	118	118.34 1245	134.22 1245	.22 45	275.27 1247	7.2 7.	91.06	90	114.18	4 8

Note: The coefficients shown above are net of sex, age, homeownership, number of children <18 in the household, child's grade in school, marital status, parent education, whether respondent spoke English during the interview and whether respondent has Internet and computer in their home  $^*p < 0.1$  \*\* p < 0.05

A deeper analysis of the parental involvement variables tells an important story about national origin differences within these outcomes. In particular, Dominicans more frequently participate in parent-teacher organizations than Mexicans, net of all other variables. This practice occurs within the formal realm of the school. Given higher levels of citizenship and education, it Dominicans appear to engage with staff, faculty and other parents with greater ease and sense of belonging than their Mexican peers. Informal involvement practices (those that occur outside of school) reveal further differences between Dominicans and Mexicans. Both reading to or with child and helping child with homework show significant variation between the two national origin groups, with Dominicans appearing less likely than Mexicans to frequently do either. While their participation in the PTA hints at facility within these types of formal and structured environments compared to their Mexican peers, Dominicans appear to partake less in their child's education in these informal and unstructured ways. Mexicans appear to engage with their children with greater frequency in the home. This is likely related to low levels of legal status, English proficiency, and education, which may inhibit their ability to communicate and engage with school personnel.

In sum, the national origin differences that are masked in the OLS regression reveal themselves in greater detail for each of the outcome variables. SES indicators work differently according to national origin and the variable in question. The human capital these immigrants bring with them, combined with Portes & Rumbaut's context of reception, influences the way in which they navigate through social institutions. In other words, those immigrants who have been warmly or openly received into the U.S. and who carry with them the skillset necessary for upward mobility will believe themselves an essential part of their child's education process, especially within formal arenas like schools or PTA meetings. Those individuals who lack

human capital and/or who perhaps enter the U.S. under hostile conditions are likely to defer to informal methods of parental involvement, especially those that do not require them to venture into spaces in which they do not feel competent.

#### **Conclusion**

It is increasingly necessary to address the needs of immigrant families within U.S. schools. As the present study reveals, there are significant differences in the parental involvement practices of different Latino immigrant groups due in part to varying migration histories and sociodemographic indicators. In recognizing the importance of examining ethnic and racial groups more carefully, this study analyzes parental involvement differences between five Latino subgroups – Mexicans, Dominicans, mainland-born Puerto Ricans, island-born Puerto Ricans, and Other Latinos. In addition, studying each of the three SES variables – having at least a high school education, speaking English during the survey, and having a computer and Internet at home – separately reveal crucial differences between national origin groups. In sum, this study finds that SES operates differently for each of the immigrant national origin groups, allowing some to navigate around particular barriers using the human capital they possess or the resources at their disposal.

National origin differences emerge early on in the study, beginning with the descriptive statistics table. Dominicans, both Puerto Rican groups, and Other Latinos were noticeably better off than Mexicans. In particular, the table reveals that few Mexicans spoke English during the survey and are less educated and have less access to technology at home compared to all other national origin groups. There appears to be no difference in English-speaking between Mexicans

and Dominicans, a fact that became important in later findings. Puerto Ricans and Other Latinos appear better off than Mexicans according to all three SES indicators.

To understand the other factors that might explain differences in involvement, the study unpacks the barriers to involvement that keep some parents from actively participating in their child's education. Not surprisingly, mainland born Puerto Ricans (with their higher levels of education, English speaking, and access to technology) experience significantly fewer obstacles than their Mexican peers. Despite levels of English proficiency similar to those of Mexicans, Dominicans are less likely to perceive the inability to communicate in English as a barrier to involvement. This suggests that their relatively high levels of education more than make up for this potential obstacle.

Although Puerto Ricans have higher levels of both education and English speaking than Mexicans, the ordinal logistic regressions for each of the Parent-School Relationship variables reveal that mainland-born Puerto Ricans have a less positive relationship with their children's school. Because they were born in the United States and likely attended U.S. schools, this group has experienced the racial/ethnic hierarchy more than members of the other national origin groups. This insight thus potentially influences the way they perceive how they are treated within these social spheres. Immigrants, on the other hand, compare their children's school to the one they may have experienced in their home country. Believing their children have the opportunity to succeed in the U.S. through their pursuit of an education, these parents may look more favorably upon their schools.

While the parental involvement index itself reveals few differences between national origin groups, closer analysis of each of the variables shows several important findings. First, Dominican immigrants are more likely than Mexicans to participate in their school's PTA

organization. These formal spaces, while inviting to those who have legal status or citizenship in the United States, may seem intimidating to individuals with lower SES backgrounds. Mexican immigrants, with their high proportion of undocumented status may be hesitant to enter a space into which they would likely interact with staff and faculty. Second, Mexicans appeared more likely than Dominicans to both read to their child and help with homework. Given that they seem to shy away from formal methods of participation (i.e., PTA meetings), Mexicans appear to devote more time to parent involvement practices within the home.

This study is not without its limitations. Because of the data's focus on parental experiences and perceptions of their children's schools, academic achievement measures were not available. As prior research has postulated, parental involvement could be a result of a child struggling in school (Lee & Bowen 2006). We did not have the ability to control for that effect. As with other studies of parental involvement (Turney & Kao 2009), it is impossible to capture all the ways in which parents contribute to their child's education. Smaller, qualitative studies have revealed that Latino parents demonstrate their commitment to and interest in their children's education in a variety of ways that are not captured in this study. Storytelling, encouragement and nonverbal expressions of support have been crucial for the academic success of Latino students (Ceballo 2004; Ceja 2004).

While the Other Latinos category in our study does not speak directly to the experience of a particular national origin group, it is perhaps useful in analyzing the overall experience of those who emigrate from smaller countries or those with fewer numbers in the United States – for example, those from Central America. What these results suggest is that those Latino immigrants from countries that are not Mexico, Puerto Rico or the Dominican Republic may, in fact, be facing the same kind of barriers to involvement without the benefit of a protective

enclave or extended social network. More research is needed about the experiences of these immigrants.

Further research is needed to understand the differential outcomes for parental involvement. Are there significant differences between Latino children with parents of different nationalities? While this study focuses on the parental involvement of immigrants, the outcomes for the second generation are also important to consider. U.S. born Dominicans have educational outcomes that are astounding, given the relatively low status of their parents. Close to 60 percent of all Dominican-Americans have some college education, with 22 percent receiving a degree. In contrast, only 13 percent and 12 percent of U.S. born Mexicans and Puerto Ricans have a college education (Hernández & Rivera-Batiz 2003). Findings from this analysis show that Dominicans perceive fewer barriers to involvement and are more formally involved with their children's education. Additionally, island-born Puerto Ricans also appear to have fewer barriers to involvement, yet their mainland-born children achieve academically at a low level. If there are fewer hindrances to their involvement, how might this be explained? Future research would do well to investigate this relationship.

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### APPENDIX A

# Survey Questions About Formal And Informal Parental Involvement Used in 1<sup>st</sup> Factor Analysis

# Can you tell me the name of the current principal?

Yes

No, but recognizes the principal/knows who the

principal is

No

How many parents of kids in school did you talk to about school?

None 1-5 6-10 10+

How often since Fall 07 have you participated in PTA/PTO orgs?

Never

Once or twice Three or more times

Since Fall 07, how often have you...

# Talked with child about school work or grades?

Daily Weekly Monthly Less Often Never

Spoken with teachers or administrators in child's school by phone, email or in-person?

Daily Weekly Monthly Less Often Never Visited inside the school for any reason?

Daily Weekly Monthly Less Often Never

Read to or with child?

Daily Weekly Monthly Less Often Never

Helped child with his or her homework?

Daily Weekly Monthly Less Often Never

Help with school fund-raising event or do some volunteer work for child's school?

Daily Weekly Monthly Less Often Never

During this school year, have you taken child

to a museum or to a library?

Yes No

### APPENDIX B

# Survey Questions About Parents' Experience with Child's School Used in 2<sup>nd</sup> Factor Analysis

Do teachers and school personnel at school greet you personally when you visit the school?

Yes No

At [CHILD]'s school, children learn more if their parents are active in the school.

Strongly Agree Somewhat Agree Neutral

Somewhat Disagree Strongly Disagree

[CHILD]'s school encourages parents and community residents to communicate with the principal.

Strongly Agree Somewhat Agree Neutral

Somewhat Disagree Strongly Disagree

Teachers at [CHILD]'s school really try to understand parents' problems and concerns.

Strongly Agree Somewhat Agree

Neutral

Somewhat Disagree Strongly Disagree

Teachers at [CHILD]'s school make you feel welcome

Strongly Agree Somewhat Agree

Neutral

Somewhat Disagree Strongly Disagree

Teachers at [CHILD]'s school show positive interest in your child's culture

Strongly Agree Somewhat Agree

Neutral

Somewhat Disagree

Strongly Disagree

And would you agree or disagree that at least some teachers at [CHILD]'s school were probably born outside the United States

Agree Disagree

Teachers at [CHILD]'s school know about issues and concerns in your community outside of school

Strongly Agree Somewhat Agree

Neutral

Somewhat Disagree Strongly Disagree

It is difficult to overcome the cultural barriers between teachers and parents

Strongly Agree Somewhat Agree

Neutral

Somewhat Disagree Strongly Disagree

Many obstacles keep people from being involved in their children's school. In the past school year have ...

events scheduled during your normal work or sleep hours always, frequently, sometimes or never made it difficult to be involved with [CHILD]'s school?

Always Frequently Sometimes Never

what about childcare problems?

Always Frequently Sometimes Never

### what about transportation problems?

Always Frequently Sometimes Never

# what about not being able to communicate well in English?

Always Frequently Sometimes Never

# Does anything else often prevent you from being involved in [CHILD]'s school?

Yes No

# You feel the school is providing [CHILD] with an excellent education

Strongly Agree Somewhat Agree Neutral

Somewhat Disagree Strongly Disagree

### School officials don't care about you

Strongly Agree Somewhat Agree Neutral Somewhat Disagree Strongly Disagree

# You often think about moving [CHILD] to another school.

Strongly Agree Somewhat Agree Neutral Somewhat Disagree Strongly Disagree

	Model 1	Model 2	Model 3	Model 4	Model 5
	$\overline{b}$ SE	$\overline{b}$ SE	$\overline{b}$ SE	$\overline{b}$ $SE$	$\overline{^{\mathrm{b}}}$ $\overline{\mathrm{SE}}$
Variable					
National Origin (ref=Mexican)	-0.705 ** 0.130	-0.838 ** 0.125	-0.838 ** 0.125	-0.698 ** 0.118	-0.395 ** 0.157
Puerto Rican (mainland)	-0.142 0.151	-0.210 0.145	-0.210   0.145	-0.116 0.141	0.055 0.150
Puerto Rican (island)	-0.411 ** 0.081	-0.403 ** 0.078	-0.403 ** 0.079	-0.308 ** 0.080	-0.223 ** 0.086
Dominican Immigrant Other Immigrant	-0.162 0.113	-0.183 * 0.108	-0.183 * 0.108	-0.103 0.102	-0.026 0.104
Parent Perceptions		-0.178 ** 0.017	-0.178 ** 0.017	-0.115 ** 0.017	-0.121 ** 0.017
Parent School Relationship Index (0-9)	9)		0.001 0.084	-0.029 0.078	-0.020 0.078
Parent Liaison (1=yes)					
Self Efficacy (ref = high)				0.798 ** 0.080	0.790 ** 0.080
medium					
low					
Sociodemographic Characteristics					
Female				-0.150 * 0.090	-0.164 * 0.090
Age (years)				0.001 0.004	-0.001 0.004
Owns Home $(1=yes)$				-0.280 ** 0.088	-0.235 ** 0.089
# of Children < 18 in House				0.109 ** 0.030	0.102 ** 0.030
Child's Grade in School (1-9)				0.041 ** 0.013	0.044 ** 0.013
Currently Married $(1 = yes)$				0.100 0.065	0.105 0.065
High School Degree or higher (1 =					
yes)					-0.115 * 0.068
Spoke English $(1 = yes)$					-0.274 ** 0.125
Comp/Internet in home $(1 = yes)$					-0.104 0.067
Intercept	1.790 ** 0.052	3.080 ** 0.131	3.078 ** 0.179	1.971 ** 0.228	2.153 ** 0.234
	R2 = 0.034	R2 = 0.115	R2 = 0.115	R2 = 0.241	R2 = 0.249
Z	1257	1252	1252	1247	1247

\* p < 0.1. \*\* p < 0.05

	Model 1	Model 2	Model 3	Model 4	Model 5
V7	$\overline{b}$ SE	$\overline{b}$ SE	$\overline{b}$ SE	$\overline{b}$ SE	$\overline{b}$ SE
Variable National Origin (ref=Mexican) Puerto Rican (mainland) Puerto Rican (island) Dominican Immigrant	-0.736 ** 0.211 -0.408 * 0.244 0.049 0.132	-1.067 ** 0.204 -0.438 * 0.235 -0.144 0.128	-1.121 ** 0.201 -0.490 ** 0.231 -0.273 ** 0.127	-0.950 ** 0.197 -0.506 ** 0.234 -0.356 ** 0.133	-0.484 * 0.259 -0.198 0.247 -0.135 0.143
Other Immigrant					
<b>Parent Perceptions</b> Barriers to Inv. Index (0-5)		-0.468 ** 0.044	-0.452 ** 0.043	-0.315 ** 0.046	-0.330 ** 0.046
Parent Liaison (1=yes)			0.878 ** 0.132	0.828 ** 0.128	0.838 ** 0.127
Self Efficacy (ref = high) medium low				-0.253 * 0.137 -1.697 ** 0.173	-0.261 * 0.136 -1.683 ** 0.172
Sociodemographic Characteristics Female Age (years) Owns Home (1= yes) # of Children < 18 in House Child's Grade in School (1-9) Currently Married (1 = yes) Socioeconomic Status High School Degree or higher (1 = yes) Spoke English (1 = yes) Comp/Internet in home (1 = yes)				0.094 0.149 0.016 ** 0.007 -0.128 0.147 0.037 0.049 0.000 0.021 0.127 0.108	0.056 0.149 0.013 * 0.007 -0.033 0.148 0.024 0.049 0.007 0.021 0.141 0.107 -0.337 ** 0.112 -0.309 0.207 -0.244 ** 0.110
Intercept	7.222 ** 0.084 R2=0.013	8.062 ** 0.113 R2=0.095	6.509 ** 0.258 R2=0.126	6.637 ** 0.339 R2=0.194	6.994 ** 0.346 R2=0.208
z	1256	1252	1252	1248	1248

\* p < 0.1. \*\* p < 0.05

## **APPENDIX E: Operationalization of Variables Used in Analyses**

Variables Operationalization

A. Dependent Variables

Parent Involvement Index Index ranging from 0-9, composed of 8 items measuring extent of parental involvement in school

Knew principal's name Ordinal variable coded 0 for no, 1 for recognizes principal (but doesn't know name) and 2 for yes Ordinal variable coded 0 for no parents, 1 for 1-5 # of parents talked to

parents, 2 for 6-10 parents, and 3 for 10+ parents

Ordinal variable coded 0 for no meetings, 1 for 1-2 # of PTA mtgs attended meetings, and 2 for 3+ meetings

Ordinal variable coded 0 for never, 1 for monthly or Talk to child re: grades/school less, 2 for at least weekly

Spoke to teachers/admin Ordinal variable coded 0 for never, 1 for monthly or

less, 2 for at least weekly

Visited school Ordinal variable coded 0 for never, 1 for monthly or

less, 2 for at least weekly

Read to/with child Ordinal variable coded 0 for never, 1 for monthly or

less, 2 for at least weekly

Ordinal variable coded 0 for never, 1 for monthly or Helped with homework

less, 2 for at least weekly Coded 1 for yes, 0 for no

Coded 1 for yes, 0 for no

**B.** Independent Variables

Went to library/museum

National Origin (set of dummy variables)

Puerto Rican (mainland born) Coded 1 for yes, 0 for no Coded 1 for yes, 0 for no Puerto Rican (island born) Coded 1 for yes, 0 for no

Dominican Other

Parent Perceptions

Barriers to Involvement Index Index ranging from 0-5, composed of 5 items

measuring perceived barriers to parental

involvement Perception of Parent School Relationship

Index ranging from 0-9, composed of 9 items measuring perception of quality of parent school

relationship

Parent Liaison Coded 1 if child's school had parent liaison, 0

otherwise

Self Efficacy Ordinal variable coded 0 for high, 1 for medium, 2

for low

Demographics Female Coded 1 for females, 0 for otherwise

Age (years) Age at time of survey

Owns Home Coded 1 if respondent owns home, 0 if otherwise # of children < 18 in house # of school age children living in household Child's grade in school (1-9) Grade of respondent's child with next birthday Currently married

Coded 1 for respondents currently married, 0 for

High school degree or higher Coded 1 for at least a high school degree, 0 otherwise

Spoke English Coded 1 if respondent spoke English during

interview, 0 if otherwise

Coded 1 if respondent has a computer and internet at Comp/Internet at home

home, 0 if otherwise