

LATIN AMERICAN IMMIGRATION, MATERNAL EDUCATION, AND APPROACHES TO MANAGING
CHILDREN'S SCHOOLING IN THE U.S.

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Abstract

Concerted cultivation is the active parental management of children's education that schools often value and reward and that, because it differs by race/ethnicity, nativity, and socioeconomic status, plays a role in educational disparities. Analyses of the Early Childhood Longitudinal Study-Kindergarten Cohort ($n = 10,913$) revealed that foreign-born Latina mothers were generally less likely to engage in school-based activities, enroll children in extracurricular activities, or provide educational materials at home when children were at the start of elementary school than U.S.-born White, African-American, and Latina mothers, in part because of their lower educational attainment. Within the foreign-born Latina sample, the link between maternal education and the three concerted cultivation behaviors varied only slightly by whether the education was attained in the U.S. or Latin America or by other maternal characteristics. Higher maternal education appeared to matter somewhat more to parenting when children were girls, attended public schools, and had higher achievement.

Key words: maternal education, family, immigration, parental involvement, policy

Given the rising economic returns to educational attainment and the critical role of the start of formal schooling in long-term educational trajectories, parents' management of their children's early schooling has become a major policy focus (Entwisle, Alexander, & Olson, 2005; Goldin & Katz, 2008; Pianta, Cox, & Snow, 2007). Three themes emerging from related research are that: (a) parents manage their children's early schooling in many ways, (b) differences in parental management often map onto race/ethnicity, socioeconomic status (SES), and other structural/cultural locations, and (c) schools often favor some parenting strategies over others (Lareau, 2003; Pomerantz, Moorman, & Litwack, 2007). The confluence of these trends suggests that the degree to which parents engage in what Lareau (2003) has labeled concerted cultivation parenting plays a role in the intergenerational transmission of inequality. Understanding how and why this happens, therefore, can inform our theoretical understanding of the link between early development and societal inequality as well as policy interventions aiming to break this link.

In this spirit, this study explores parents' strategies for managing children's early education in the context of a major source of stratification in the U.S.: Latin American immigration. Efforts to explain educational disparities related to this immigration stream often highlight that Latin American immigrants are less likely to know and adhere to the unwritten rules of school-focused parenting (e.g., concerted cultivation) that U.S. schools implicitly enforce. In other words, they support their children's schooling but not necessarily in ways that schools reward (Fuller, 2007; Glick, Bates, & Yabiku, 2009; Lopez, 2001; Suarez-Orozco & Suarez-Orozco, 2001). This pattern likely has more to do with SES than immigration or race/ethnicity. Because Latin American immigrant women tend to have low levels of education and maternal education predicts concerted cultivation, establishing whether maternal education mediates or moderates differences in concerted cultivation between Latin American immigrants

and other mothers is important (Crosnoe & Kalil, 2010; Domina & Roksa, 2012; Kalil, Ryan, & Corey, 2012). Doing so, however, requires understanding whether the human capital aspects of schooling or greater familiarity with American schools are why maternal education matters and, therefore, calls for knowing *where* immigrant mothers attained their education.

To pursue these goals, this study draws on the Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K) to compare Latin American immigrants to U.S.-born White, African-American, and Latina mothers on three concerted cultivation behaviors (involvement in school, provision of educational resources at home, enrollment in extracurricular activities; see Cheadle, 2008) when children start elementary school. We also examine the extent to which any differences are explained by corresponding differences in maternal education and determine whether the location of education (i.e., in the U.S. versus Latin America) matters. Finally, we investigate other life course circumstances of Latin American immigrants that may constrain the translation between maternal education and concerted cultivation as well as characteristics of their children that might facilitate it. The purpose is to anchor theoretical models of family-school connections in an understanding of maternal education and immigration while also informing interventions targeting the early educational management of parents of Latin American origins, such as *Lee y Seras* and *Abriendo Puertas* (Bridges, Cohen, Fuller, & Velez, 2009; Goldenberg & Light, 2009).

Family-School Connections and Immigration

A large literature has documented that most parents actively prepare their children for school and support their children's schooling, although mothers still tend to bear the majority share of such parenting. Some mothers, however, are better able to convert their involvement into academic gains for their children than others. Some kinds of involvement tend to be more

aligned with the informal norms and expectations of schools than others, giving parents following this implicit “script” more payoff for their involvement behaviors (Davis-Kean, 2005; Hoover-Dempsey, Walker, Sandler, Whetsel, Green, Wilkins, & Closson, 2005; Pomerantz et al., 2007; Raver, Gershoff, & Aber, 2007; Suarez-Orozco & Suarez-Orozco, 2001).

Lareau’s (2003) ethnographic work on parental involvement is a prime example of how differences in involvement may factor into child outcomes. According to Lareau (2003), *concerted cultivation* involves parents viewing their children as projects to be managed, including by searching out opportunities for children to get ahead in school, actively cultivating and investing in any skills children have (or do not have), and viewing schools and other organizations as there to serve them and something to be “worked”. The flip side is what Lareau called *natural growth*, which involves parents giving children freedom to be kids and let themselves figure out who they want to be without much parental intrusion or management. The argument is that neither approach to parenting is fundamentally better than the other but that concerted cultivation is more likely to be rewarded by the U.S. educational system.

Indeed, both quantitative and qualitative evidence has documented that concerted cultivation seems to provide a competitive academic edge for children in elementary school. For example, three clear dimensions of concerted cultivation are involvement in school, provision of educational resources at home, and enrollment in extracurricular activities, and all three have been consistently associated with academic gains (Bodovski & Farkas, 2008; Cheadle, 2008; Crosnoe & Cooper, 2010; Pomerantz et al., 2007). When parents are more involved in school activities that require family-school contact, they are more familiar with the values, expectations, and norms of school personnel, and they are more likely to advocate for their children and have school personnel take their views seriously. When children are stimulated at home as well as in

outside activities, they tend to have a stronger academic skill set entering any given classroom, more instrumental assistance on which to draw when facing academic challenges, a greater sense of personal efficacy, and more experience navigating organizational structures (Cohen, 1987; Crosnoe & Kalil, 2010; Entwisle & Alexander, 1996; Hill & Taylor, 2004). In an educational system that rewards children and families for supplementing in-school activities with outside activities, for having a sense of entitlement that demands services and supports from schools, and for having inside information to help make decisions when the long-term consequences of these decisions may seem ambiguous (Schneider, 2007; Lareau, 2003; Dornbusch, Glasgow, & Lin, 1996), these concerted cultivation behaviors take on added importance.

The conceptual model put forward by Lareau (2003) focused on children in elementary school. This focus was based on theory and empirical evidence that the kind of active parental management of academic progress encompassed in concerted cultivation is most age-appropriate and effective when children are young, curricula are less differentiated, and educational pathways are less set. An argument can be made that the start of elementary school, in particular, is critical (Cheadle, 2008; Crosnoe & Cooper, 2010). According to the school transition model (Entwisle, Alexander, & Olson, 2005), long-term disparities in educational attainment are rooted in the transition into elementary school, as initially small differences in academic skills at the start of school are acted on by school processes so that they compound from year to year. One of the primary ways that family processes matter, therefore, is by contributing to those early differences that then grow into larger disparities later on in the school career.

Given this link between concerted cultivation and early academic outcomes, evidence that Latin American immigrants may engage less than other parents in behaviors encompassed in concerted cultivation parenting may help to explain observed academic disparities between the

children of Latin American immigrants and their peers (Crosnoe & Kalil, 2010; Suarez-Orozco & Suarez-Orozco, 2001; Tienda, 2009). Attention to this issue has often focused on the supply side with a deficit tone, implying that lower rates of concerted cultivation among Latin American immigrants means that they care less about school or that their parenting is lower quality. An alternative, perhaps more in line with the concerted cultivation perspective, is to view these rates at the nexus of supply and demand, so that the discussion is less about “good” and “bad” parenting and more about synergy, or lack thereof, between family and school approaches to education (Crosnoe & Kalil, 2010; Goldenberg, Gallimore, & Reese, 2005; Lopez, 2001).

The first objective of this study, therefore, is to document in a national sample whether Latin American immigrants are less likely to be involved in school, home, and other concerted cultivation activities when their children are starting elementary school. Given the strong gendered patterns in parental involvement more generally, our focus is on mothers.

Maternal Education

Accumulating evidence indicates that differences in maternal involvement in education are rooted in disparities in maternal education. In fact, studies often report that maternal education is one of the strongest predictors of maternal behavior and parenting (Crosnoe & Cooper, 2010; Domina & Roksa, 2012; Kalil et al., 2012; Mistry et al., 2008). More educated mothers tend to take on more active teaching roles, engage their children in more stimulating cognitive and social activities, and employ more strategic approaches to organizing their children’s education (Davis-Kean, 2005; Magnuson, 2007). Accordingly, Lareau (2003) conceptualized maternal education as a driving force of concerted cultivation. Although education can bring women financial returns, it is also a form of human capital that shapes how they organize their own lives around their children, seek to configure their children’s lives, and

see opportunities in external activities and organizations (Currie & Moretti, 2003; Magnuson, 2007; Oreopolous & Salvanes, 2009).

If maternal education is a major factor in concerted cultivation, then the educational profiles of Latin American immigrants should be considered. In short, Latina immigrants have low rates of educational attainment relative to other women in the U.S. The majority has not graduated from high school or its equivalent, and a substantial number have not even entered high school or its equivalent (Hernandez, 2006). Thus, the low relative levels of schooling among Latina immigrants might help to explain why they are less likely to engage in specific parenting behaviors that seem to play a role in children's early educational experiences.

Focusing on maternal education and its link to family-school connections is certainly in line with policy goals. After all, efforts to increase maternal education have long been a major part of international aid and development, based on the idea that investing in the human capital of mothers will allow them to better promote the future prospects of their children (Jejeebhoy, 1995). This philosophy has filtered into the U.S. realm, as evidenced by Even Start (now defunct), the parental component of Head Start, and community-based programs aiming to promote parents' management of early education. Many such efforts target Latin American immigrants with young children, recognizing their lower levels of education, the potential cultural and language barriers between home and school, and the crucial nature of school readiness (Bridges et al., 2009; Goldenberg & Light, 2009; U.S. Department of Education, 2003; Zigler & Muenchow, 1994). Integrating these policy goals with theoretical and empirical themes in the developmental literature, Crosnoe and Kalil (2010) demonstrated that Mexican immigrant mothers in the U.S. who continued their schooling in the American educational system after having children increased their engagement in some concerted cultivation behaviors.

Like most studies of maternal education and immigration, however, Crosnoe and Kalil (2010) did not differentiate whether mothers' past education was accrued in the U.S. or elsewhere. The lack of attention to the context of maternal education is important, given the emphasis on the cultural, social, and psychological resources of maternal education emphasized in the concerted cultivation perspective and related perspectives. For example, the underlying motivation of international aid initiatives targeting maternal education in poor countries is that education in and of itself is what matters. Yet, some studies of early parenting suggest that immigrant mothers increase their engagement in cognitive stimulation at home the longer they are in the U.S., an acculturation process that would seem to suggest that what really matters is not education so much as education in the U.S. (Glick et al., 2009; Jejeebhoy, 1995).

The second objective of this study, therefore, is to examine the extent to which disparities in maternal education between Latina immigrants and other mothers explain any differences in mothers' concerted cultivation when children start school. This objective can be broken down into competing hypotheses about the context in which maternal education is accrued. The first hypothesis is that familiarity with American education—understanding the unwritten rules by which schools expect and value concerted cultivation—matters, so that concerted cultivation will increase as maternal education in the U.S. increases. The second is that the diverse skills that education cultivates—for example, personal efficacy, an ability to maneuver organizations, confidence within schools, informed decision-making—matter, so that concerted cultivation will increase as maternal education increases, regardless of where that education occurred.

Constraints and Elicitation

Of course, immigration, maternal educational attainment, and concerted cultivation do not occur in a vacuum. Instead, they are linked to other aspects of mothers' and children's life

courses. As a result, certain characteristics and circumstances of both mothers and their children could affect the translation between maternal education and concerted cultivation. Consequently, some mothers' levels of engagement in concerted cultivation would be less affected by an increase in educational attainment, in the U.S. or elsewhere, and some would be more affected.

First, we hypothesized that maternal constraints linked to stress and disadvantage when children are young will disrupt the translation of maternal education into concerted cultivation. For example, being young, single motherhood, families' socioeconomic circumstances, and lack of English proficiency may constrain the benefits of maternal education from being fully realized because they impose practical constraints on mothers. Collectively, these factors represent situations in which mothers may enjoy less help or support, have too little time, or face communication barriers, affecting their capacities to act on their motivations and values. For instance, young mothers often have less expansive social networks or support systems that would enable them to consistently engage in active parental management and interactions with outside organizations, single mothers are less likely to have a partner to spell them during periods of time- or labor-intensive parenting, and English language learner mothers will likely have more trouble navigating schools and community programs or fully grasping the often subtle messages both send to parents (Crosnoe & Kalil, 2010; Clements, Barfield, Kotelchuck, & Wilber, 2008; Lleras, 2008; Presser, 2003; Suarez-Orozco & Suarez-Orozco, 2001).

Second, we hypothesized that child factors linked to parental investment will facilitate the translation of maternal education into concerted cultivation. Children differ in many ways even when their mothers are similarly educated. Given that much of parenting is a response to children's needs, skills, wants, and traits (e.g., Bornstein, Hendricks, Haynes, & Painter, 2007; Cox & Paley, 1997), these child differences may differentially elicit concerted cultivation

behaviors from mothers. For example, girls and children who have attended pre-k, are attending private school, and have observable academic/cognitive skills may invite more concerted cultivation from Latina immigrant mothers, helping them to follow through on the propensity to practice concerted cultivation parenting that maternal education brings, regardless of circumstances. Collectively, these factors represent situations in which direct investment in children is less prone to disruption by other life constraints. For instance, evidence suggests that girls are more interpersonally sensitive, conforming, and affiliative than boys in ways that might spur parents to create more opportunities for them. At the same time, histories of child care and preschool often serve to help parents develop templates for parental involvement that they can then apply elsewhere. Moreover, private schools are smaller, have more cohesive social networks, and provide more family-school contact in ways that could facilitate the diffusion of concerted cultivation ideas and practices. Importantly, despite impressions that parents might be spurred to action when children have learning problems, evidence actually suggests that children with clearly observable academic and social skills tend to actively and passively encourage their parents to take a more agentic role in their educational experiences (Crosnoe, Augustine, & Huston, 2011; Bornstein et al., 2007; Coleman & Hoffer, 1987).

The third objective of this study, therefore, is to examine the degree to which the link between maternal education and concerted cultivation varies as a function of maternal and child characteristics. The former are expected to constrain this link, the latter to facilitate it.

Methods

Data

ECLS-K (Kindergarten Class of 1998) is a useful dataset for our purposes because, like other data from the National Center for Education Statistics (NCES), it contains school-related

data on the parents of young children with ample representation of immigrant families. Unlike other data (including newer studies), however, its maternal education can be broken down by where that education was attained. It also has a nationally representative sample created with a multi-stage frame. In the first stage, 100 primary units—typically counties—were randomly selected. In the second, NCES randomly sampled approximately 1,000 schools within these units, with separate frames for public and private schools. Finally, 22,782 children set to be enrolled in kindergarten in the 1998-1999 school year (approximately 23 per school) were randomly selected from these schools (Rathbun & West, 2004). Data collection began in the fall of 1998, consisting of interviews with parents, teachers, and school administrators as well as diagnostic tests of children (Denton and West 2002). Subsequent waves occurred in the spring of kindergarten, fall and spring of first grade (1999-2000), spring of third grade (2002), spring of fifth grade (2004), and, finally, the spring of eighth grade (2007).

Although our focus was on the kindergarten year, the parent nativity questions were only asked in the first grade data collection. Thus, data from the kindergarten and first grade waves were used, with longitudinal sample weights and multiple imputation employed to reduce sampling biases and correct for non-random attrition. The analytical sample for this study consisted of mothers who were U.S.-born Whites, African Americans, and Latinas and foreign-born Latinas who participated in data collection when their children were in kindergarten and first grade ($n = 10,913$).

Measures

Descriptive statistics for the main study variables are included in Table 1.

Maternal race/ethnicity and nativity. NCES identified categories of race/ethnicity based on the reports of mothers in the fall of kindergarten. In the spring of first grade, mothers

reported their country of birth. These race/ethnicity and nativity measures were cross-classified to create a set of dummy variables. As already mentioned, we selected four of these categories for inclusion in our sample based on population sizes in the U.S. and sample sizes in ECLS-K as well as to provide interesting comparison groups for the questions at hand. Thus, the final set of dummy variables used here included U.S.-born Whites ($n = 7,696$), U.S.-born African Americans ($n = 1,422$), U.S.-born Latinas ($n = 703$), and foreign-born Latinas ($n = 1,092$). For the sake of brevity, we generally refer to this set of categories as race/ethnicity rather than race/ethnicity and nativity. Ideally, national origin data could have been used to further break down the sample, but cell sizes for most Latina immigrant groups by country of origin were small. Mexican-origin immigrants made up the majority of the foreign-born Latina subsample, and results were similar when looking at all foreign-born Latinas or the Mexican-born subsample.

Maternal education. NCES collapsed mother reports of the highest grade in school they had completed by their children's kindergarten year into nine categories: 8th grade or below, 9th – 12th grade, high school diploma/equivalent, vocational/technical program, some college, bachelor's degree, graduate/professional school-no degree, master's degree, and doctorate/professional degree. These reports were converted to a quasi-continuous measure of years of schooling ranging from 8 to 20 (see Crosnoe & Kalil, 2010). Results generally did not differ with various categorical specifications. For the foreign-born Latinas, we deconstructed this quasi-continuous scale into two new variables (number of years of education attained in the U.S., number of years of education attained outside of the U.S.) based on the reports of foreign-born mothers of how much of their schooling had been attained in their home country.

As seen in Table 1, the average mother in the sample had attained over 13 years of education, meaning that she was likely a high school graduate who had pursued, but not

completed, some form of higher education. Not surprisingly, attainment differed across groups. It was highest among U.S.-born Whites. U.S.-born African-American and U.S.-born Latina mothers' rates of educational attainment were similar to each other, with less experience in higher education than U.S.-born White mothers. Foreign-born Latinas had the lowest level of education, with just over 11 years of education on average and, therefore, generally falling below the high school graduation threshold. For the average foreign-born Latina, approximately nine years were attained in her home country.

Concerted cultivation parenting. Based on extensive work with family data in ECLS-K (Crosnoe & Cooper, 2010; Magnuson, Meyers, Ruhm, & Waldfogel, 2004; Moon & Lee, 2009; Raver, Gershoff, & Aber, 2007) and particularly on adaptations of the concerted cultivation framework with these data (Bodovski & Farkas, 2008; Cheadle, 2008), we measured three outcomes based on parent reports in the fall/spring kindergarten waves. First, school-based involvement was the sum of seven binary items (1 = yes), including attended an open house or back-to-school night, attended a meeting of a PTA, PTO, or Parent-Teacher Organization, and volunteered at the school or served on a committee. Second, enrollment of children in organized activities outside of school was the sum of eight binary items (1 = yes), including enrolled children in dancing lessons, athletic activities, and organized clubs/recreational programs. Third, provision of educational resources at home was the sum of two continuous items: number of children's books in the home and the number of children's CDs, tapes, and audios in the home.

Other maternal characteristics. Several sociodemographic characteristics of mothers were also measured with maternal reports in the kindergarten data collection to capture the constraint processes in the conceptual model. These include age (in years) and marital status (1 = married to or partnered with child's father, 0 = other status). Families' income-to-needs ratios

from the spring of kindergarten were included as a way of capturing economic resources available to mothers. Finally, mothers' home language use (1 = non-English; 0 = English) was measured as a rough proxy of mothers' English skills.

Child characteristics. As a way of tapping the elicitation processes in the conceptual model, several child characteristics were also measured, including gender (1 = female, 0 = male), whether the child received center-based care before kindergarten (1 = yes, 0 = no), and the type of elementary school the child attended in kindergarten (1 = public, 0 = private). To proxy children's school readiness and academic skills, we took the child's score on a standardized math test in the fall of kindergarten (scores ranging from 10-116). Reading tests were not used because English language learners were screened out of them during the initial data collection waves.

Controls. Several of the maternal and child characteristics just described also served as covariates in multivariate models to account for unobserved heterogeneity in maternal education. Also, urbanicity dummy variables (large city, city fringe/large town, small town) served as covariates in all models, as is the norm in research with ECLS-K (Lee & Burkham, 2003).

Plan of Analyses

The conceptual model was tested in three stages for each concerted cultivation outcome. All analyses were performed in Mplus (Muthén & Muthén, 2013) and included stratification and clustering variables to properly estimate standard errors due to the clustered nature of the data. Further, to account for other design effects (e.g., oversampling) as well as differential attrition across waves, we employed longitudinal sampling weights. Missing data were addressed through 50 imputed datasets, thereby avoiding the statistical bias of listwise deletion (Allison, 2001).

The first goal of this study was to examine racial/ethnic differences in concerted cultivation parenting and the degree to which any observed differences were explained by

maternal education. To do so, the three outcomes were regressed on the total maternal education score, race/ethnicity dummy variables (including foreign-born Latina), and control variables. The second goal was to examine whether the location of educational attainment mattered. Focusing on the foreign-born Latina subsample, the same regressions were estimated, but this time the total maternal education scale was replaced by the scales for education attained in the U.S. and education attained outside the U.S. The third and final goal was to determine whether observed associations between maternal education and concerted cultivation parenting in the foreign-born Latina subsample varied as a function of key constraint factors and/or elicitation factors. The maternal education variables, therefore, were interacted with four maternal characteristics and four child characteristics to predict each outcome.

Results

Maternal Education, Race/Ethnicity, and Parenting

Following our first research goal, Table 2 contains the results of regressions for each concerted cultivation parenting outcome in the full sample of mothers. For each outcome, Model 1 included the race/ethnicity dummy variables and several maternal and child characteristics but did not include maternal education. Looking across models, foreign-born Latinas were significantly lower on all three dimensions of concerted cultivation than U.S.-born White mothers. The foreign-born Latina coefficient ($b = -.53, p < .001$) in the school involvement model translated into an effect size indicating that the difference between foreign-born Latinas and U.S.-born Whites equaled about 32% of a standard deviation in the school involvement distribution in the full sample. The effect sizes for the other two outcomes were larger, equaling 41% for enrollment in organized activities and 65% for provision of educational resources in the home. Additional analyses (results not shown) showed that foreign-born Latinas also scored

significantly lower on all concentrated cultivation outcomes than U.S.-born Latinas, albeit with smaller effect sizes. With the exception of organized activities, however, foreign-born Latinas did not differ from U.S.-born African Americans.

The next set of models included a measure of total years of maternal education (see Model 2 for each outcome). Maternal education, as measured this way, was significantly associated with each concerted cultivation outcome. The coefficient for maternal education in the school involvement model translated into an effect size indicating that the difference of an extra year of education equaled 9% of a standard deviation in the school involvement distribution in the full sample. The effect sizes for the other two outcomes were larger, although only slightly. Thus, maternal education disparities in the three concerted cultivation outcomes were smaller than racial/ethnic disparities.

Comparing the race/ethnicity coefficients between Model 1 and 2 for each outcome indicated that some racial/ethnic differences in concerted cultivation parenting observed in the first set of models were mediated by racial/ethnic differences in maternal education. For example, the coefficient for foreign-born Latinas in the school involvement model was reduced from -.53 (Model 1) to -.37 (Model 2), indicating that 30% of the initially observed difference in school involvement rates between foreign-born Latina mothers and their U.S.-born White peers was accounted for by the lower level of educational attainment among the former than the latter. Although in reduced form, similar mediation patterns were seen for the other racial/ethnic comparisons in the model. Model comparisons for the other two concerted cultivation outcomes revealed much the same thing.

As an extended exploration, we also sought to determine whether the link between maternal education and concerted cultivation parenting varied across racial/ethnic groups. Thus,

we estimated extra models that included interactions between race/ethnicity and maternal education. These analyses revealed only minimal variation across groups in how much additional education appeared to increase mothers' participation in various concerted cultivation activities. The observed "benefit" of more education—at least in terms of associated increases in these three concerted cultivation outcomes—was far more similar than different between foreign-born Latinas and U.S.-born White, African-American, and Latina mothers. The differences that did exist (for school involvement) typically revealed that benefits were slightly stronger for non-White mothers.

Maternal Education Inside and Outside the U.S. among Foreign-Born Latinas

Having established the lower level of concerted cultivation among foreign-born Latina mothers of young children relative to their U.S.-born counterparts and a role of educational attainment in these disparities, the next aim of this study was to focus on foreign-born Latinas and unpack that observed educational effect. The models presented from this point on, therefore, were estimated in a sample including the children of foreign-born Latinas only. Our goal was to look into any differences in the context in which education was attained and then explore possible variation in the link between maternal education, wherever it was attained, and concerted cultivation outcomes by key maternal and child characteristics.

In Table 3, the first column for each concerted cultivation outcome contains results from models with a single measure of maternal education: total years of education attained. The second contains results from models with two measures of maternal education: years attained in the U.S. and years attained outside the U.S. Across outcomes, total years of maternal education was consistently and positively related to concerted cultivation (see Model 1 for each outcome).

In relation to standard deviation units for each outcome in this subsample, the effect sizes were similar for foreign-born Latinas compared to previous models with the full sample.

Looking at Model 2 for each outcome, maternal education was consistently and positively related to concerted cultivation, regardless of the context in which this education was received. For all three outcomes, the coefficients were similar for years of education received in and outside the U.S., although they did slightly favor U.S.-based education for organized activities and educational resources. As an additional step, we estimated models in which maternal education attained in the U.S. was interacted with maternal education attained outside the U.S. None of these interactions were significant (results not shown). On face value, then, where education was attained did not matter all that much, at least in terms of foreign-born Latinas' engagement in concerted cultivation parenting of young children.

Maternal Constraining Factors and Child Eliciting Factors

Turning to variation in links between maternal education and concerted cultivation in this population, our final research goal was to explore the potential for maternal characteristics to constrain concerted cultivation and blunt observed maternal education effects and for child characteristics to elicit concerted cultivation and strengthen observed maternal education effects. To this end, the models from Table 3 were re-estimated, including the four focal maternal characteristics (age, income, marital status, language use) and their interactions with the two maternal education variables. These analyses revealed almost no difference in the links between maternal education variables and the concerted cultivation variables across various groups of mothers. The only significant interactions (involving home language use, maternal education, and educational resources) suffered from sparse cell coverage that made interpretation difficult.

For the most part, therefore, the link between maternal education and concerted cultivation was the same regardless of the other circumstances of foreign-born Latinas' lives.

Next, the models from Table 3 were re-estimated, including the four focal child characteristics (gender, pre-school attendance, school sector, kindergarten test scores) and their interactions with the two maternal education variables. For two of the concerted cultivation outcomes, at least one interaction reached statistical significance (see Table 4).

In models of provision of educational resources at home, the maternal education variable (both in and out of the U.S.) interacted with the type of school the child attended. These interactions were interpreted by calculating predicted outcome scores for different combinations of maternal education (using standard deviation cut points) and school sector (public vs. private). In general, there did not appear to be a gap in provisions of educational resources between foreign-born Latina mothers with lower and higher levels of education when their children attended private schools. For mothers who enrolled their children in public schools, however, higher maternal education was associated with more educational resources in the home than lower maternal education. Thus, the maternal education gap in educational resources was only found among children attending public schools. Total years of U.S. education also interacted with children's test scores to predict provision of educational resources at home. Calculating predicted outcome scores revealed evidence for enrichment elicitation for more educated mothers, who provided more educational resources for children of high (vs. low) ability. In contrast, less educated mothers demonstrated compensatory elicitation by providing more educational resources for children of low (vs. high) ability.

In models with enrollment in organized activities as the outcome, maternal education, both in and outside of the U.S., interacted with child gender. At low levels of education, foreign-

born Latinas enrolled daughters in organized activities at low levels—boys were more likely to be enrolled. As education increased, however, enrollment went up for girls but not for boys. In terms of enrollment in organized activities, therefore, girls appeared to benefit from having mothers with more educational experience than boys. Another way of looking at this pattern is that girls elicited concerted cultivation from more educated mothers in ways that magnified observed maternal education effects.

In sum, girls and children who attended public schools appeared to benefit more from having mothers with more education than boys and children who attended private schools. When looking at children's achievement, we found evidence for both compensatory and enrichment elicitation across mothers' educational attainment.

Conclusion

The degree to which concerted cultivation practices have value in and of themselves can be debated. The motivation of this study is less about whether these behaviors have inherent value in child development and learning and instead reflects that these behaviors are valued by schools and, therefore, accrue some competitive edge for the children of parents who “follow the script” for parenting written by schools (Lareau, 2003). Racial/ethnic and nativity disparities in concerted cultivation matter for children's future prospects, therefore, because of how they are differentially received by schools and not necessarily because they represent better parenting (Lopez, 2001; Reese, Balzano, Gallimore, & Goldberg, 1995). As a result, understanding educational disparities related to Latin American immigration, which have received much attention and caused such debate in the public and among researchers, might be advanced by considering parenting behaviors to which schools have attached so much meaning over the years. Like past studies (Entwisle et al., 2005; Glick et al., 2009; Suarez-Orozco & Suarez-Orozco,

2001), this study's findings suggest that race/ethnicity and nativity are major determining factors in how parents raise and educate their children, but that these observed differences often mask related socioeconomic differences.

In general, foreign-born Latinas were less likely to engage in concerted cultivation parenting behaviors when their children were in the early years of elementary school than U.S.-born mothers, Latina or not. Some of these disparities were accounted for by corresponding disparities in maternal education. In other words, foreign-born Latinas tended to go less far in school than other mothers, which appeared to be related to their concerted cultivation. This apparent mediational role of maternal education is important in that maternal education is more amenable to policy intervention than race/ethnicity, nativity status, or parenting. Indeed, many local, state, and federal programs explicitly target raising the human capital of mothers from disadvantaged groups, including Latinas and English language learners more generally, with the goal of ultimately improving child outcomes (St. Pierre et al., 2003). Such strategies, however, are politically contentious, especially when related to immigration (Crosnoe, 2011).

Although we expected this role of maternal education in concerted cultivation to be highly variable across different circumstances and contexts, it tended to be quite stable within the foreign-born Latina population. The overall pattern of results suggested that neither regional context of education was consistently more strongly associated with concerted cultivation behaviors. In other words, where education was attained did not seem to matter so much. What mattered for concerted cultivation was how much education was attained overall. This apparent generalized education effect is more in line with a human capital argument than a cultural argument. Education likely provides psychosocial and other resources that might allow mothers

to be more agentic and efficacious in their approach to parenting, benefits that could have outweighed the potential benefits of familiarity with the American educational system.

Similarly, we had expected certain maternal characteristics—especially those representing disadvantages in the stratification systems of the U.S.—to constrain the translation of maternal education into concerted cultivation behaviors, but this pattern of maternal constraints was not consistently observed (although sparse cell coverage might have been the reason). Our expectations that certain child characteristics—especially those linked to parental investment—would facilitate this translation received somewhat more support, providing the only non-negligible signs of variability in the foreign-born Latina sample. The link between maternal education and concerted cultivation behaviors tended to be stronger for girls, for children in public schools, and for children who were scoring well on achievement tests (with an opposing compensatory strategy for the less educated mothers of low-scorers). These patterns suggest that maternal education is related to more gender equity in parenting, more investment in children who are eliciting it, and a more active role in contexts in which children may be at risk for getting lost, indicating how maternal agency may be facilitated by educational attainment no matter where that attainment occurred. These findings also suggest the importance of considering child effects in parenting models, reiterating that children are not passive recipients of parenting behavior (Bornstein et al., 2007; Belsky, 1984).

Of course, these conclusions we have made are only preliminary, considering the limitations of the present study. One is that this study focused on a pan-ethnic Latina category rather than looking at differences by national origin. The Crosnoe and Kalil (2010) study of maternal education and Latin American immigration, for example, focused on Mexican immigrant mothers and suggested that this group was where maternal education mattered most.

That study also looked at how parenting behavior changes as children moved through school, which is an important future direction for this line of research. Another limitation is that the parenting behaviors, although based on past research with ECLS-K, were measured in fairly blunt ways. Surely, observational or multi-reported measures of parenting would provide a deeper look into the issues at hand. ECLS-K has many strengths, including its nationally representative sampling frame and large number of immigrant families. Its family and developmental data are not rich, however, and it cannot capture potentially important trends in parenting occurring before children reach school. As a result, it might be thought of as a complement to long-term longitudinal community-based samples with more depth and less breadth (e.g., the Longitudinal Immigrant Student Adaptations Study, see Suarez-Orozco, Suarez-Orozco, & Todorova, 2001). Finally, this study took only rudimentary steps to account for the unobserved heterogeneity in maternal education—what selects women into different educational histories—that might be related to parenting outcomes. Moving forward, more must be done to account for such selection patterns and increase causal inferences.

To the extent that the conclusions of this study are supported by future work addressing some or all of these limitations, the implications of our findings are that investments in the human capital of mothers could eventually accrue benefits for their children through the ways in which mothers manage their children's early educational careers. In this way, inequality is viewed as at least partly rooted in the more intimate ecologies of children's lives (McLoyd, 1998), a view that poses challenges to interventions but is also important to making interventions work (Huston, 2008).

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Table 1
Descriptive Statistics for Main Study Variables

	Full Sample (<i>n</i> = 10,913)		Foreign-Born Latinas (<i>n</i> = 1,092)	
	Mean	SD	Mean	SD
Concerted Cultivation Parenting				
School-based involvement	4.44	1.66	3.36	1.71
Enroll child in organized activities	1.27	1.32	.43	.86
Provision of educational resources at home	95.80	69.78	32.75	40.17
Maternal Characteristics				
Educational attainment	13.53	2.41	11.15	2.74
Income-to-needs	3.25	3.28	1.61	1.84
Age	33.61	6.39	32.60	6.33
Home language (non-English)	.09		.79	
Marital status (married to father)	.75		.75	
Child Characteristics				
Gender (female)	.49		.50	
Attends public school	.78		.91	
Attended center-based care	.78		.55	
Kindergarten math score	26.77	9.24	20.73	6.58
Urbanicity				
Large city	.39		.66	
City fringe	.39		.31	
Small town	.22		.04	

Notes. For binary variables, only mean presented, which can be translated into a frequency. All demographic variables, except for educational attainment outside of the U.S. (first grade), were drawn from the kindergarten year.

Table 2

Results of Regression Models for Concerted Cultivation Outcomes in Full Sample

	Unstandardized B (SE)					
	School Involvement		Organized Activities		Educational Resources	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Race/Ethnicity						
U.S.-born Blacks	-.49 *** (.12)	-.45*** (.12)	-.15** (.05)	-.13** (.05)	-45.02*** (2.02)	-44.06*** (2.08)
U.S.-born Latinas	-.11 (.12)	-.05 (.12)	-.14 (.08)	-.10 (.08)	-25.54*** (3.60)	-23.59*** (3.42)
Foreign-born Latinas	-.53 *** (.13)	-.37*** (.02)	-.54*** (.08)	-.41*** (.07)	-44.11*** (4.81)	-37.88*** (4.44)
Maternal Characteristics						
Maternal education		.15*** (.01)		.12*** (.01)		5.43*** (.38)
Maternal age	.02 *** (.00)	.01* (.00)	.01*** (.00)	.00 (.00)	1.22*** (.10)	.91*** (.10)
Income-to-needs	.05 *** (.01)	.03*** (.01)	.06*** (.01)	.04*** (.01)	2.34*** (.36)	1.42*** (.33)
Marital status (married to father)	.61*** (.06)	.53*** (.06)	.25*** (.04)	.18*** (.04)	10.31*** (1.71)	7.78*** (1.65)
Home Language (non-English)	-.54 *** (.14)	-.41*** (.13)	-.16 * (.07)	-.06 (.07)	-25.58 *** (3.89)	-20.69*** (3.50)
Child Characteristics						
Gender (female)	-.03 (.04)	-.04 (.04)	.51*** (.03)	.51*** (.03)	4.67** (1.69)	4.56** (1.62)
Attends public school	-.19 * (.09)	-.11 (.09)	-.12** (.05)	-.05 (.05)	-3.35 (2.39)	-.20 (2.34)
Attended center-based care	.19 *** (.06)	.08 (.04)	.22*** (.04)	.14*** (.04)	6.83*** (1.84)	3.38* (1.67)
Kindergarten math score	.02 *** (.00)	.02*** (.00)	.03*** (.00)	.02*** (.00)	.93*** (.11)	.67*** (.10)
Intercept	2.75 *** (.17)	1.31*** (.19)	-.34** (.14)	-1.50*** (.17)	23.09*** (5.76)	-29.58*** (7.29)
R^2	.19	.22	.21	.24	.27	.30

Notes. Reference category for race/ethnicity dummy variables was native-born Whites. All models controlled for urbanicity. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 3

Results of Regression Models for Concerted Cultivation Outcomes in Foreign-Born Latina Sample

	Unstandardized B (SE)					
	School Involvement		Organized Activities		Educational Resources	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Maternal Characteristics						
Total years of education	.15*** (.03)		.05*** (.01)		3.61*** (.52)	
Years of education in U.S.		.11*** (.04)		.06*** (.02)		3.30*** (.71)
Years of education outside U.S.		.11*** (.03)		.04** (.01)		2.82*** (.58)
Maternal age	.02 (.01)	.01 (.01)	.00 (.01)	.00 (.01)	.52* (.22)	.47* (.22)
Income-to-needs	.11* (.05)	.13** (.05)	.07* (.03)	.07** (.02)	3.87*** (1.38)	4.09*** (1.27)
Marital status (married to father)	.19 (.15)	.20 (.16)	-.04 (.07)	-.03 (.07)	-.46 (2.66)	.11 (2.74)
Home language (non-English)	-.09 (.16)	-.12 (.17)	-.11 (.07)	-.10 (.07)	-18.24*** (4.51)	-18.55*** (4.76)
Child Characteristics						
Gender (female)	.05 (.11)	.09 (.12)	.11 (.06)	.12* (.06)	1.29 (2.92)	2.12 (2.95)
Attends public school	-.46 (.28)	-.47 (.27)	-.43* (.20)	-.42* (.20)	-3.84 (7.92)	-4.34 (7.77)
Attended center-based care	.17 (.14)	.22 (.14)	.13** (.05)	.14** (.05)	1.46 (2.26)	2.50 (2.38)
Kindergarten math score	.02** (.01)	.02** (.01)	.02*** (.00)	.02*** (.00)	1.20*** (.34)	1.26*** (.37)
Intercept	.74 (.55)	1.08 (.57)	-.22 (.31)	-.24 (.33)	-39.67* (16.05)	-33.74* (15.44)
R^2	.18	.17	.19	.19	.36	.35

Notes. All models controlled for urbanicity. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 4. Selected Results of Regression Models for Concerted Cultivation Outcomes in Foreign-Born Latina Sample, by Child Characteristics

	Unstandardized B (SE)		
	Educational Resources		Organized Activities
	1	2	
Maternal Education			
Years of education in U.S.	-.84 (2.60)	-4.17* (1.99)	.03 (.02)
Years of education outside U.S.	-.56 (2.22)	-2.67 (2.75)	.02 (.02)
Home language	-17.22*** (4.58)	-16.60*** (4.46)	-.09 (.07)
Child Characteristics			
Child gender (female)	1.99 (2.76)	1.72 (2.53)	-.62* (.27)
Child attends public school	-66.52* (33.88)	.76 (8.04)	-.41* (.20)
Kindergarten math score	1.23*** (.36)	-2.70* (1.24)	.01** (.00)
Interaction Terms			
U.S. education x public school	51.71* (25.89)		
Foreign education x public school	42.23 (22.80)		
U.S. education x math score		3.83*** (.90)	
Foreign education x math score		2.99* (1.40)	
U.S. education x child gender			.84** (.32)
Foreign education x child gender			.57* (.25)
Intercept	18.82 (34.67)	37.16 (25.13)	.10 (.37)
R^2	.38	.40	.22

Notes. All models controlled for urbanicity as well as other maternal/child characteristics.
 * $p < .05$, ** $p < .01$, *** $p < .001$