



# HHS Public Access

Author manuscript

*J Marriage Fam.* Author manuscript; available in PMC 2017 February 01.

Published in final edited form as:

*J Marriage Fam.* 2016 February 1; 78(1): 60–74. doi:10.1111/jomf.12250.

## Latin American Immigration, Maternal Education, and Approaches to Managing Children's Schooling in the United States

**Robert Crosnoe,**

University of Texas at Austin

**Arya Ansari,**

University of Texas at Austin

**Kelly M. Purtell,** and

Ohio State University\*

**Nina Wu**

Children's Council of San Francisco\*\*

### Abstract

Concerted cultivation is the active parental management of children's educations that, because it differs by race/ethnicity, nativity, and socioeconomic status, plays a role in early 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 were 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 did not vary by whether the education was attained in the United States or Latin America. Higher maternal education appeared to matter somewhat more to parenting when children were girls and had higher achievement.

### Keywords

immigrants; Latinos; parent education; parent involvement; policy; school readiness

### Background

Given the rising economic returns to educational attainment and the critical role of the start of formal schooling in educational trajectories, parents' management of their children's early schooling has become a major policy focus (Entwisle, Alexander, & Olson, 2005;

---

Population Research Center, University of Texas at Austin, 305 East 23rd Street, G1800, Austin, TX 78712

(crosnoe@austin.utexas.edu; aansari@utexas.edu).

\*Department of Human Sciences, Ohio State University, 130C Campbell Hall, 1787 Neil Avenue, Columbus, OH 43210 (purtell.15@osu.edu).

\*\*Children's Council of San Francisco, 445 Church Street, San Francisco, CA 94114 (ninawu85@gmail.com).

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 map onto race/ethnicity, socioeconomic status (SES), and other structural and cultural locations; and (c) differences in such management predict children's achievement because management both supports learning and elicits better treatment from schools (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"—active, planful, and visible management of children's educational opportunities—plays a role in the intergenerational transmission of inequality. Understanding how and why differences in concerted cultivation happen, therefore, can inform theoretical understandings of the link between early development and societal inequality and can inform policy interventions aiming to break it.

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 United States: Latin American immigration. Efforts to explain educational disparities related to this immigration stream often highlight that Latin American immigrants are less likely to visibly follow some basic "scripts" for school-focused parenting that are prominent in the United States. In other words, they support their children's schooling but not necessarily in ways that school personnel and other parents expect (Fuller, 2007; Glick, Bates, & Yabiku, 2009; Lopez, 2001; Suárez-Orozco & Suárez-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 because 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 human, financial, social, or cultural capital dimensions of education are why maternal education matters, which, in turn, calls for more attention to *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, and enrollment in extracurricular activities; 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 (United States vs. 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 origin.

## 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 tend to bear the majority share of such parenting. Some mothers, however, are better able than others to convert their involvement into academic gains for their children. In general, active, visible, and managerial forms of involvement tend to have an academic payoff. Like other forms of involvement, they support and scaffold learning and open up new opportunities to build skills. More than other forms of involvement, they also elicit positive responses from schools, as they are more aligned with informal norms and expectations of school personnel (Davis-Kean, 2005; Hoover-Dempsey et al., 2005; Pomerantz et al., 2007; Raver, Gershoff, & Aber, 2007; Suárez-Orozco & Suárez-Orozco, 2001).

Lareau’s (2003) ethnographic work on concerted cultivation is a prime example of how differences in parental involvement may be a factor in child outcomes. 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 investing in any skills children have (or do not have), and viewing schools and other organizations as there to serve them. The flip side is what Lareau called natural growth, which involves parents giving children freedom to be kids and to 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 closely associated with positive academic outcomes (although natural growth is more closely associated with positive socioemotional outcomes).

Indeed, both quantitative and qualitative evidence has documented that concerted cultivation seems to provide an academic edge for children in elementary school. For example, three clear dimensions of concerted cultivation—involvement in school, provision of educational resources at home, and enrollment in extracurricular activities—consistently predict academic gains (Bodovski & Farkas, 2008; Cheadle, 2008; Crosnoe & Cooper, 2010; Pomerantz et al., 2007). Again, we can think about the basic value of such behaviors and the added value of how school personnel perceive them. First, when parents are more involved in 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 upon entering any 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). Second, 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 be ambiguous (Dornbusch, Glasgow, & Lin, 1996; Lareau, 2003; Schneider, 2007), these concerted cultivation behaviors take on extra importance.

Lareau's (2003) work focused on children in elementary school, motivated by theory and evidence that the kind of active parental management encompassed in concerted cultivation is most age appropriate and effective when children are young, curricula are less differentiated, and educational pathways are more malleable. An argument can be made that the start of elementary school is particularly critical (Cheadle, 2008; Crosnoe & Cooper, 2010). According to the school transition model (Entwisle et al., 2005), long-term disparities in educational attainment are rooted in the transition into elementary school, as initially small differences in academic skills at school entry are acted on by school processes so that they compound from year to year. A primary way 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 may help to explain academic disparities between the children of Latin American immigrants and their peers (Crosnoe & Kalil, 2010; Suárez-Orozco & Suárez-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 of lower quality. In fact, such parents engage in an array of positive parenting behaviors, are supportive socioemotionally, and emphasize school success. They are just less likely to adhere to the White middle-class norm of active and visible involvement that seems to have academic benefits and is valued by schools. The reasons have little to do with motivation or values and instead reflect the convergence of socioeconomic disadvantages, low English proficiency, and cultural barriers with schools in this population (Crosnoe & Kalil, 2010; Goldenberg, Gallimore, & Reese, 2005; Lopez, 2001).

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

### **Maternal Education**

Because sociodemographic disparities in concerted cultivation are academically relevant, identifying the mechanisms underlying these disparities is important. The truth is that many mechanisms are at work. The key is to focus on mechanisms that are theoretically grounded, aligned with current policy initiatives, and have special implications for the sociodemographic population of interest. For immigration-related disparities in concerted cultivation, one mechanism that satisfies all three requirements is maternal education.

First, theoretical models for understanding educational differences in health, family formation, and civic engagement have influenced research showing that disparities in maternal education strongly predict differences in school involvement. These models suggest that, in addition to its strong economic rewards, accruing more education helps people build critical thinking skills (e.g., adjudicating among options or between short- and long-term ramifications), develop psychosocial capacities (e.g., a sense of control over one's

life), gain experience interacting with societal institutions, and learn how to spot and capitalize on opportunities (Kingston, Hubbard, Lapp, Schroeder, & Wilson, 2001; Mirowsky & Ross, 2003). These resources have been used to shed light on why, independent of income, more educated women 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 (Currie & Moretti, 2003; Domina & Roksa, 2012; Kalil et al., 2012; Magnuson, 2007; Mistry, Biesanz, Chien, Howes, & Benner, 2008). Accordingly, Lareau (2003) conceptualized maternal education as a driving force of concerted cultivation. Going beyond its link to financial capital, education represents human, social, and cultural capital.

Second, support for the educational attainment of mothers has become a popular focus of policy intervention aiming to promote children's future prospects, which reflects both the value of educational attainment for parenting and the political complexities and associated controversies of improving families' socioeconomic circumstances (e.g., income assistance) (King, Smith, & Glover, 2011; Magnuson, 2007). This "dual generation" philosophy that, through parenting, investments in mothers double as investments in children has long been a major part of international aid and development, and it 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 (Jejeebhoy, 1995; U.S. Department of Education, 2003; Zigler & Muenchow, 1994).

Third, the theoretical argument for and policy relevance of maternal education for supporting children through parenting is especially relevant and timely for Latin American immigrants in the United States. Latina immigrants have low rates of educational attainment relative to other women in the United States. The majority of Latina immigrants have not graduated from high school or its equivalent, and a substantial number of them have not even entered high school or its equivalent (Hernandez, 2006). At the same time, the aforementioned explanations for their lower engagement in concerted cultivation-like behavior are connected to education and both its financial and nonfinancial benefits. After all, more educated women tend to be in better socioeconomic circumstances; to have better-developed English-language skills; and to be better able to agentially interact with teachers, understand what schools expect, and make their own expectations known to schools. Crosnoe and Kalil (2010) used these connections to interpret their findings reported in this journal that Mexican immigrant women who returned to school themselves increased their involvement in school activities. Furthermore, these connections have motivated the intense focus of dual-generation programs on the Latino/a immigrant population, such as Lee y Serás and Abriendo Puertas (Bridges, Cohen, Fuller, & Velez, 2009; Goldenberg & Light, 2009).

Although the particularly salient role of maternal education in concerted cultivation behavior seems clear, the question of whether the location in which that maternal education is attained matters is unclear. For example, Crosnoe and Kalil (2010) did not differentiate whether mothers' past education was accrued in the United States or in Mexico. We argue that this differentiation is important. The socioeconomic, cognitive, social, and experiential resources accrued through education will matter regardless of the national setting in which education

is pursued. In other words, any education offers an advantage. Yet education attained in the United States might offer advantages that add to those baseline advantages. For immigrants, U.S.-based education may bring greater opportunities in the U.S. labor market, do more to enhance English proficiency, and—perhaps most of all—increase familiarity with the written and unwritten rules of the U.S. educational system. This “bonus” of U.S.-based education does not suggest that non-U.S. educational systems are inferior. Instead, it suggests that the alignment of the U.S. system with other U.S. institutions means that U.S.-based education has practical benefits (Glick et al., 2009; Jejeebhoy, 1995; King et al., 2011).

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 is that the general advantages of education matter most, so that concerted cultivation will increase as overall maternal education (U.S.-based, Latin American-based) increases. The second is that the practical advantages of education will add to its general advantages, so that concerted cultivation will increase as maternal education in the U.S. increases.

### Constraints and Elicitation

Just as human capital investment programs often reveal heterogeneous treatment effects, theoretical models of the returns to education often emphasize variability in who benefits and who does not (King et al., 2011; Mirowsky & Ross, 2003). For example, Augustine (in press) has argued that the links among maternal education, parenting, and child outcomes depend on mothers’ life situations that constrain their translation of parenting goals into behavior and on their children’s characteristics and experiences that elicit more engagement and investment. In this spirit, we also consider whether mothers’ levels of concerted cultivation would be less or more affected by an increase in educational attainment, in the United States or elsewhere, as a function of their own life-constraining circumstances and their children’ evocative circumstances.

First, we hypothesized that maternal constraints linked to stress and disadvantage when children are young disrupt the translation of education into concerted cultivation. For example, single motherhood (highlighted as crucial in Augustine’s work) and lack of English proficiency (especially relevant to Latinas) 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. Specifically, single mothers are less likely to have a partner to help them during periods of time- or labor-intensive parenting, and mothers who are English-language learners will likely have more trouble navigating schools and community programs or fully grasping the often subtle messages that both send to parents (Crosnoe & Kalil, 2010; Clements, Barfield, Kotelchuck, & Wilber, 2008; Suárez-Orozco & Suárez-Orozco, 2001).

Second, we hypothesized that child factors linked to parental investment facilitate the translation of maternal education into concerted cultivation. Given that much of parenting is



a response to children's needs, wants, and traits (e.g., Bornstein, Hendricks, Haynes, & Painter, 2007; Cox & Paley, 1997), differences between children may differentially elicit concerted cultivation behaviors from mothers of the same education level—such as child gender (a characteristic they are born with and is not influenced by parenting) and academic skills (which they develop and are influenced by parenting). For example, 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. As another example, 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. Thus, children's observable academic and/or cognitive skills and social behaviors may help Latina immigrant mothers follow through on the propensity to practice concerted cultivation parenting that more education brings, regardless of other circumstances (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 maternal union status and language skills constrain the link between maternal education and concerted cultivation (maternal constraints hypothesis) and the degree to which child gender and early academic skills facilitate it (child elicitation hypothesis).

## Methods

### Data

Managed by the National Center for Education Statistics (NCES), ECLS-K (Class of 1998) has a nationally representative sample created with a multistage 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. Finally, 21,409 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 and consisted of interviews with parents, teachers, and school administrators, as well as diagnostic tests of children (Denton & West, 2002). Subsequent waves occurred in the spring of kindergarten, the fall and spring of first grade (1999–2000), the spring of third grade (2002), the spring of fifth grade (2004), and finally the spring of eighth grade (2007).

Although our focus was on kindergarten, the parent nativity questions were asked only in first-grade data. Thus, data from kindergarten and first grade were used, with longitudinal weights and multiple imputation reducing sampling biases and correcting nonrandom attrition. Children without a valid weight ( $n = 6,408$ ) were dropped. Our analytical sample consisted of mothers who were U.S.-born Whites, African Americans, and Latinas and foreign-born Latinas interviewed when children were in kindergarten and first grade. Thus, the 2,536 parents who self-reported other race/ethnicities or who did not specify a race/ethnicity were dropped, as were non-Latina parents who were not born in the United States ( $n = 706$ ) or did not specify a country of origin ( $n = 846$ ). These exclusion criteria yielded a final sample of 10,913 children and families.

## Measures

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

**Maternal race/ethnicity and nativity**—NCES identified race/ethnicity on the basis of the reports of mothers in kindergarten. In first grade, mothers reported their country of birth. These measures were cross-classified to create dummy variables. As already mentioned, we selected four categories for inclusion in our sample based on population sizes in the United States and sample sizes in ECLS-K, as well as to provide interesting comparison groups for the questions at hand. Thus, the 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 refer to this set of categories generally 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 groups by country of origin were small. Mexican-origin immigrants made up the majority of the foreign-born Latinas, and results were qualitatively 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: eighth grade or below, 9th–12th grade, high school diploma or equivalent, vocational or technical program, some college, bachelor's degree, graduate or professional school—no degree, master's degree, and doctorate or professional degree. These reports were converted to a quasi-continuous measure of years of schooling ranging from 8 to 20 (see Crosnoe & Kalil, 2010). In general, results 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 United States and number of years of education attained outside of the United States) based on the reports of foreign-born mothers of how much of their schooling they had attained in their home country.

As Table 1 shows, the average mother in the sample had attained more than 13 years of education ( $M = 13.53$ ,  $SD = 2.41$ ), meaning that she was likely a high school graduate who had pursued but not completed some form of higher education. Attainment was highest among U.S.-born Whites ( $M = 14.07$ ,  $SD = 2.21$ ). U.S.-born African American ( $M = 12.82$ ,  $SD = 1.94$ ) and U.S.-born Latina ( $M = 12.83$ ,  $SD = 2.08$ ) mothers were similar to each other on this measure, with less experience in higher education than U.S.-born White mothers. Foreign-born Latinas had the lowest level of education, with slightly more than 11 years on average ( $M = 11.15$ ,  $SD = 2.74$ ), and therefore generally fell below the high school graduation threshold. For the average foreign-born Latina, approximately 9 years of education were attained in her home country (see Table 1).

**Concerted cultivation parenting**—On the basis of extensive work with family data in ECLS-K (Crosnoe & Cooper, 2010; Magnuson, Meyers, Ruhm, & Waldfogel, 2004; Moon & Lee, 2009; Raver et al., 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 parent–teacher association or 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 and/or 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 number of children’s CDs, tapes, and audios in the home.

**Maternal and child moderators**—Two sociodemographic characteristics of mothers were also measured with maternal reports in the kindergarten data collection to capture the constraint processes in the conceptual model. They include marital status (1 = *married to or partnered with child’s father*, 0 = *other status*) and home language use (1 = *non-English*, 0 = *English*), which was measured as a rough proxy of mothers’ English skills. As a way of tapping the elicitation processes in the conceptual model, we also included child gender (1 = *female*, 0 = *male*) and children’s standardized math test scores in the fall of kindergarten to proxy their school readiness and academic skills. 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. We also included children’s experience in center-based care (1 = *yes*, 0 = *no*), type of elementary school the child attended in kindergarten (1 = *public*, 0 = *private*), mothers’ age (in years), families’ income-to-needs ratios from the spring of kindergarten, and urbanicity dummy variables (large city, city fringe or large town, small town).

### Plan of Analyses

The conceptual model was tested in three stages for each concerted cultivation outcome. Analyses were performed in Mplus (Muthén & Muthén, 2013) and included stratification and clustering variables as well as longitudinal sampling weights. Missing data were addressed through 50 imputed data sets in the Mplus program, thereby avoiding the statistical bias of listwise deletion (Allison, 2001). Notably, our focal outcomes were normally distributed (skew = .32–1.32), but we used the maximum likelihood estimator with robust standard errors (MLR) to account for violations of normality. For mediation, we examined whether maternal education was predicted by race/ethnicity, whether race/ethnicity predicted the concerted cultivation outcomes, and whether the inclusion of maternal education attenuated the racial/ethnic differences in concerted cultivation. The significance of this attenuation was gauged by using the *z*-statistic from the Sobel (1982) test.

The first goal of this study was to examine racial/ethnic differences in concerted cultivation parenting and the degree to which maternal education explained any observed differences. 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 United States and education attained outside the United States. 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 two maternal characteristics and two child characteristics to predict each outcome.

## Results

### Maternal Education, Race/Ethnicity, and Parenting

Following our first objective, 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 it did not include maternal education. Looking across models, foreign-born Latinas scored 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: 41% for enrollment in organized activities and 65% for provision of educational resources in the home. Additional analyses showed that foreign-born Latinas also scored significantly lower on all concerted cultivation outcomes than U.S.-born Latinas (school involvement:  $b = -.42, p < .01$ ; organized activities:  $b = -.41, p < .001$ ; educational resources:  $b = -18.56, p < .001$ ), albeit with smaller effect sizes ranging from 25%–30% of a standard deviation. With the exception of organized activities ( $b = -.39, p < .001, 30\%$  of a standard deviation), however, foreign-born Latinas did not significantly 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 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, though only slightly. Thus, maternal education disparities in the three concerted cultivation outcomes were smaller than racial/ethnic disparities.

Comparing the race/ethnicity coefficients between Models 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 ( $z = 5.68, p < .001$ ). In reduced form, similar mediation patterns were found for the other comparisons in the model ( $z_{Black} = 1.81, p < .10$ ;  $z_{U.S. Latina} = 3.41, p < .001$ ). Model comparisons for the other two concerted cultivation outcomes revealed much the same thing.

As an extended exploration, we also examined 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. 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 revealed that benefits were slightly stronger for non-White mothers.

### **Maternal Education Inside and Outside the United States 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 remaining objectives were to focus on foreign-born Latinas and unpack that observed educational effect in terms of location (second objective) and variability across mothers and children (third objective). The models presented from this point on, therefore, were estimated in a sample including only the children of foreign-born Latinas.

Beginning with the adjudication between the general advantages and practical advantages hypotheses, the first column in Table 3 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 United States and years attained outside the United States. Across outcomes, total number of 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, in comparison 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 the education was attained. Wald's test confirmed that, for all three outcomes, the coefficients were statistically similar for years of education received inside and outside the United States. Moreover, the Bayesian information criterion statistic suggested that the two maternal education variable model were *not* superior to the single maternal education variable model for any outcome. Thus, where mothers received their education did not matter (which supports the general advantages hypothesis). As an additional step, we estimated models in which maternal education attained in the United States was interacted with maternal education attained outside the United States. None of these interactions were significant (not shown).

## 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 selected maternal characteristics to constrain concerted cultivation and blunt observed maternal education effects (maternal constraints hypothesis) and for selected child characteristics to elicit concerted cultivation and strengthen observed maternal education effects (child elicitation hypothesis). To this end, the models from Table 3 were reestimated, including two focal maternal characteristics (marital status and language use), and their interactions with total years of maternal education (regardless of region). These analyses revealed no difference in the links between maternal education and the concerted cultivation variables by mothers' marital status. At lower levels of maternal education, mothers from English- and Spanish-speaking homes did not differ from each other in any concerted cultivation behavior, but at higher levels of education, the former had greater provisions for learning than the latter ( $R^2 = .01$ ; see Table 4).

Next, the models from Table 3 were reestimated, including the two focal child characteristics and their interactions with the total years of maternal education variable. For two outcomes, at least one interaction reached statistical significance (see Table 4). First, the maternal education variable interacted with the children's test scores to predict educational resources at home. This interaction was interpreted by calculating predicted outcome scores for different combinations of maternal education and test scores (using standard deviation cut points). Overall, foreign-born Latinas were more likely to provide educational resources when their children had higher measured academic skills (vs. lower), regardless of their educational attainment. Higher maternal education, however, appeared to make more of a difference in this concerted cultivation variable for high-ability children than for low-ability children—either because mothers were responding to children's skills with parenting or because those skills reflected earlier parenting ( $R^2 = .01$ ). Second, maternal education also interacted with child gender to predict enrollment in organized activities. At low levels of maternal education, foreign-born Latinas enrolled their children in organized activities at similarly low levels—sons, however, were enrolled more often than daughters. As maternal education increased, enrollment went up for girls only, such that they appeared to benefit from having mothers with more educational experience ( $R^2 = .01$ ). Another interpretation is that girls elicited concerted cultivation from more educated mothers in ways that magnified observed maternal education effects.

## Discussion

Concerted cultivation seems to facilitate children's academic progress because of what such behavior entails and because of what it signals to schools (Lareau, 2003). Because concerted cultivation is also loaded with cultural values, it can be controversial to study. For example, research on lower concerted cultivation levels among Latina immigrants may be misconstrued as implying that such parents are less invested in or supportive of their children's success. In truth, Latina immigrants are highly involved and supportive parents, and so their relatively lower level of concerted cultivation says more about how they view U.S. schools and how U.S. school personnel view them (Glick et al., 2009; Lopez, 2001;

Reese, Balzano, Gallimore, & Goldberg, 1995; Suárez-Orozco & Suárez-Orozco, 2001). This study's findings that maternal education underlies immigration-related disparities in concerted cultivation, therefore, are notable, given that educational attainment shapes parents' views of school and schools' views of parents.

In general, foreign-born Latinas were less likely than U.S.-born mothers, Latina or not, to engage in concerted cultivation parenting when their children were in the early years of elementary school. 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 it is more amenable to policy intervention than race/ethnicity, nativity status, or parenting and less politically contentious than interventions targeting income. Indeed, many local, state, and federal programs attempt to raise the human capital of mothers from disadvantaged groups, including Latinas and English-language learners more generally, with the goal of ultimately improving child outcomes (Crosnoe, 2010).

Although we expected the role of maternal education in concerted cultivation to vary 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 a mother attained her education did not seem to matter so much. What mattered for concerted cultivation was how much education a mother attained overall. This pattern is more in line with the general advantages hypothesis than the practical advantages 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 U.S. educational system.

Similarly, we had expected certain maternal characteristics—especially those representing disadvantages in the stratification systems of the United States—to constrain the translation of maternal education into concerted cultivation behaviors. We found some evidence for this maternal constraints hypothesis, with the translation weaker for Spanish-speaking mothers. Our child elicitation hypothesis that this translation would be more pronounced in the face of certain child characteristics—especially those linked to parental investment—received more support. The link between maternal education and concerted cultivation tended to be stronger for girls and for children who already scored well on achievement tests. These patterns suggest that maternal education is related to more gender equity in parenting and perhaps more investment in children who are eliciting it (likely co-occurring with some carry-over effects of earlier concerted cultivation). As such, they indicate how educational attainment, no matter where it occurred, may facilitate maternal agency. These findings also suggest the importance of considering child effects in parenting models, reiterating that children are not passive recipients of parenting behavior (Belsky, 1984; Bornstein et al., 2007).

Of course, these conclusions are only preliminary, considering the limitations of our 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 maternal education mattered most for this group. 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, though based on past research with ECLS-K, were measured in fairly blunt ways. Surely, observational or multiple-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 Suárez-Orozco, Suárez-Orozco, & Todorova, 2008). 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 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).

## Acknowledgments

The authors acknowledge the support of grants from the National Institute of Child Health and Human Development (R01 HD055359-02S1, PI: Robert Crosnoe; R01 HD055359, PI: Robert Crosnoe; R24 HD42849, PI: Mark Hayward; T32 HD007081-35, PI: Kelly Raley; F32 HD069121, PI: Kelly Purtell; F31 HD061216-01, PI: Nina Wu) to the Population Research Center, University of Texas at Austin. Opinions reflect those of the authors and not necessarily those of the granting agencies.

## References

- Allison, P. Missing data. Thousand Oaks, CA: Sage; 2001.
- Augustine JM. Maternal education and the unequal significance of family structure for children's early achievement. *Social Forces*. in press.
- Belsky J. The determinants of parenting: A process model. *Child Development*. 1984; 55:83–96. [PubMed: 6705636]
- Bodovski K, Farkas G. Concerted cultivation and unequal achievement in elementary school. *Social Science Research*. 2008; 37:903–919.
- Bornstein MH, Hendricks C, Haynes OM, Painter KM. Maternal sensitivity and child responsiveness: Associations with social context, maternal characteristics, and child characteristics in a multivariate analysis. *Infancy*. 2007; 12:189–223.
- Bridges, M.; Cohen, S.; Fuller, B.; Velez, V. Evaluation of Abriendo Puertas. Los Angeles: Families in Schools; 2009. Retrieved from <http://www.familiesinschools.org/site/images/stories/fruit/laccpexecsumforweb.pdf>



- Cheadle JE. Educational investment, family context, and children's math and reading growth from kindergarten through third grade. *Sociology of Education*. 2008; 81:1–31.
- Clements KM, Barfield WD, Kotelchuck M, Wilber N. Maternal socioeconomic and race/ethnic characteristics associated with early intervention participation. *Maternal Child Health Journal*. 2008; 12:708–717. [PubMed: 18026825]
- Cohen J. Parents as educational models and definers. *Journal of Marriage and the Family*. 1987; 49:339–351.
- Coleman, JS.; Hoffer, T. Public and private high schools: The impact of communities. New York, NY: Basic Books; 1987.
- Cox M, Paley B. Families as systems. *Annual Review of Psychology*. 1997; 48:243–267.
- Crosnoe, R. Two generation strategies and involving immigrant parents in children's education. Policy brief for Urban Institute; 2010. Retrieved from <http://www.urban.org/publications/412204.html>
- Crosnoe R, Augustine JM, Huston AC. Children's early child care and their mothers' later involvement with schools. *Child Development*. 2011; 83:758–772. [PubMed: 22313134]
- Crosnoe R, Cooper CE. Economically disadvantaged children's transitions into elementary school: Linking family and school contexts to inform policy. *American Educational Research Journal*. 2010; 47:258–291. [PubMed: 20711417]
- Crosnoe R, Kalil R. Educational progress and parenting among Mexican immigrant mothers of young children. *Journal of Marriage and Family*. 2010; 72:976–990. [PubMed: 26336322]
- Currie J, Moretti E. Mothers' education and the intergenerational transmission of human capital: Evidence from college openings. *Quarterly Journal of Economics*. 2003; 118:1495–1532.
- Davis-Kean PE. The influence of parent education and family income on child achievement: The indirect role of parental expectations and the home environment. *Journal of Family Psychology*. 2005; 19:294–304. [PubMed: 15982107]
- Denton, K.; West, J. Children's reading and mathematics achievement in kindergarten and first grade. Washington, DC: National Center for Education Statistics; 2002.
- Domina T, Roksa J. Should Mom go back to school? Post-natal educational attainment and parenting practices. *Social Science Research*. 2012; 41:695–708. [PubMed: 23017803]
- Dornbusch S, Glasgow K, Lin I. The social structure of schooling. *Annual Review of Psychology*. 1996; 47:401–429.
- Entwisle D, Alexander K. Family type and children's growth in reading and math over the primary grades. *Journal of Marriage and the Family*. 1996; 58:341–355.
- Entwisle DR, Alexander K, Olson LS. First grade and educational attainment by age 22: A new story. *American Journal of Sociology*. 2005; 110:1458–1502.
- Fuller, B. Standardized childhood: The political and cultural struggle over early education. Palo Alto, CA: Stanford University Press; 2007.
- Glick J, Bates L, Yabiku S. Mother's age at arrival in the United States and early cognitive development. *Early Childhood Research Quarterly*. 2009; 24:367–380.
- Goldenberg, C.; Gallimore, R.; Reese, L. Using mixed methods to explore Latino children's literacy development. In: Weisner, T., editor. *Discovering pathways in children's development: Mixed methods in the study of childhood and family life*. Chicago, IL: University of Chicago Press; 2005. p. 21-46.
- Goldenberg, L.; Light, D. Lee y Serás: Evaluation report. New York, NY: Education Development Center; 2009.
- Goldin, C.; Katz, LF. *The race between education and technology*. Cambridge, MA: Harvard University Press; 2008.
- Hernandez, D. Young Hispanic children in the US: A demographic portrait based on Census 2000: A report to the National Task Force on Early Childhood Education for Hispanics. 2006. Retrieved from <http://www.ecehispanic.org/work/younghispanic.pdf>
- Hill N, Taylor L. Parent–school involvement and children's academic achievement: Pragmatics and issues. *Current Directions in Psychological Science*. 2004; 13:161–164.

- Hoover-Dempsey KV, Walker JMT, Sandler HM, Whetsel D, Green CL, Wilkins AS, Closson KE. Why do parents become involved? Research findings and implications. *Elementary School Journal*. 2005; 106:105–130.
- Huston AC. From research to policy and back. *Child Development*. 2008; 79:1–12. [PubMed: 18269505]
- Jejeebhoy, SJ. Women's education, autonomy, and reproductive behaviour. Oxford, UK: Clarendon Press; 1995.
- Kalil A, Ryan R, Corey M. Diverging destinies: Maternal education and the developmental gradient in time with children. *Demography*. 2012; 49:1361–1383. [PubMed: 22886758]
- King, C.; Smith, T.; Glover, R. Investing in children and parents: Fostering dual-generation strategies in the United States. New York, NY: Foundation for Child Development; 2011.
- Kingston PW, Hubbard R, Lapp B, Schroeder P, Wilson J. Why education matters. *Sociology of Education*. 2003; 76:53–70.
- Lareau, A. Unequal childhoods: Class, race, and family life. Berkeley, CA: University of California Press; 2003.
- Lopez G. The value of hard work: Lessons on parent involvement from an (im)migrant household. *Harvard Educational Review*. 2001; 71:416–437.
- Magnuson K. Maternal education and children's academic achievement during middle childhood. *Developmental Psychology*. 2007; 43:1497–1512. [PubMed: 18020827]
- Magnuson KA, Meyers MK, Ruhm CJ, Waldfogel J. Inequality in preschool education and school readiness. *American Educational Research Journal*. 2004; 41:115–158.
- McLoyd VC. Socioeconomic disadvantage and child development. *American Psychologist*. 1998; 53:185–204. [PubMed: 9491747]
- Mirowsky, J.; Ross, CE. Education, social status, and health. New York, NY: Aldine de Gruyter; 2003.
- Mistry RS, Biesanz JC, Chien N, Howes C, Benner AD. Socioeconomic status, parental investments, and the cognitive and behavioral outcomes of low-income children from immigrant and native households. *Early Childhood Research Quarterly*. 2008; 23:193–212.
- Moon SS, Lee J. Multiple predictors of Asian American children's school achievement. *Early Education & Development*. 2011; 20:129–148.
- Muthén, LK.; Muthén, BO. Mplus user's guide. Los Angeles, CA: Muthén & Muthén; 2013.
- Pianta, RC.; Cox, MJ.; Snow, KL. School readiness and the transition to kindergarten in the era of accountability. Baltimore, MD: Brookes; 2007.
- Pomerantz EM, Moorman EA, Litwack SD. The how, whom, and why parents' involvement in children's academic lives: More is not always better. *Review of Educational Research*. 2007; 77:373–410.
- Rathbun, A.; West, J. From kindergarten through third grade: Children's beginning school experiences. Washington, DC: U.S. Department of Education, National Center for Education Statistics; 2004.
- Raver CC, Gershoff E, Aber L. Testing equivalence of mediating models of income, parenting, and school readiness for White, Black, and Hispanic children in a national sample. *Child Development*. 2007; 78:96–115. [PubMed: 17328695]
- Reese L, Balzano S, Gallimore R, Goldenberg C. The concept of *educación*: Latino family values and American schooling. *International Journal of Educational Research*. 1995; 23:57–61.
- Schneider, B. Forming a college-going community in US schools. Seattle, WA: Bill and Melinda Gates Foundation; 2007.
- Sobel ME. Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological Methodology*. 1982; 13:290–312.
- Suárez-Orozco, C.; Suárez-Orozco, M. Children of immigration. Cambridge, MA: Harvard University Press; 2001.
- Suárez-Orozco, C.; Suárez-Orozco, M.; Todorova, I. Learning a new land: Immigrant students in American society. Cambridge, MA: Harvard University Press; 2008.
- Tienda, M. Hispanicity and educational inequality: Risks, opportunities, and the nation's future. Princeton, NJ: Educational Testing Service; 2009.

- U.S. Department of Education. Third national Even Start evaluation: Program impacts and implications for improvement. Washington, DC: U.S. Department of Education Planning and Evaluation Service, Elementary and Secondary Education Division; 2003.
- Zigler, E.; Muenchow, S. Head Start: The inside story of America's most successful educational experiment. New York, NY: Basic Books; 1994.

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

**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 education				
Educational attainment (total)	13.53	2.41	11.15	2.74
Educational attainment inside U.S.			8.59	4.03
Educational attainment outside U.S.			2.74	3.00
Maternal/child moderators				
Mother marital status (married to father)	.75		.75	
Mother home language (non-English)	.09		.79	
Child gender (female)	.49		.50	
Child's kindergarten math score	26.77	9.24	20.73	6.58
Covariates				
Income-to-needs	3.25	3.28	1.61	1.84
Maternal age	33.61	6.39	32.60	6.33
Attended center-based care	.78		.55	
Attended public school	.78		.91	
Urbanicity				
Large city	.39		.66	
City fringe	.39		.31	
Small town	.22		.04	

*Note.* For binary variables, only mean presented, which can be translated into a frequency. All demographic variables, except for educational attainment outside of the United States (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
<b>Race/ethnicity</b>						
U.S.-born African Americans	-.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)
<b>Maternal characteristics</b>						
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)
<b>Child characteristics</b>						
Gender (female)	-.03 (.04)	-.04 (.04)	.51 *** (.03)	.51 *** (.03)	4.67 ** (1.69)	4.56 ** (1.62)
Attended center-based care	.19 *** (.06)	.08 (.04)	.22 *** (.04)	.14 *** (.04)	6.83 *** (1.84)	3.38 * (1.67)
Attended public school	-.19 * (.09)	-.11 (.09)	-.12 ** (.05)	-.05 (.05)	-.3.35 (2.39)	-.20 (2.34)
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 <sup>2</sup>	.19	.22	.21	.24	.27	.30

Note. 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
<b>Maternal characteristics</b>						
Total years of education	.15*** (.03)	.11*** (.04)	.05*** (.01)	.06*** (.02)	3.61*** (.52)	3.30*** (.71)
Years of education in U.S.						2.82*** (.58)
Years of education outside U.S.						.47* (.22)
Maternal age	.02 (.01)	.01 (.01)	.00 (.01)	.00 (.01)	.52* (.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)
<b>Child characteristics</b>						
Gender (female)	.05 (.11)	.09 (.12)	.11 (.06)	.12* (.06)	1.29 (2.92)	2.12 (2.95)
Attended 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 <sup>2</sup>	.18	.17	.19	.19	.36	.35

Note. 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, Including Interaction Terms

	Educational resources		Organized activities
	1	2	
Maternal education	-1.57 (2.40)	7.53*** (1.98)	0.01 (0.01)
Maternal moderator			
Home language	-17.47*** (4.41)	37.14 (23.03)	-0.12 (0.07)
Child moderators			
Child gender (female)	1.14 (2.76)	1.37 (2.79)	-0.66** (0.25)
Child kindergarten math score	-1.78 (1.23)	1.13*** (0.30)	0.02*** (0.00)
Interaction terms			
Maternal education × home language		-4.65* (2.05)	
Maternal education × child gender			0.07*** (0.02)
Maternal education × math score	0.25* (0.12)		
Intercept	19.89 (24.50)	-87.04** (29.91)	0.17 (0.34)
<i>R</i> <sup>2</sup>	.37	.37	.20

*Note.* All models controlled for urbanicity as well as other maternal/child characteristics.

\*  $p < .05$ .

\*\*  $p < .01$ .

\*\*\*  $p < .001$ .