Academic Performance of Young Children in Immigrant Families: The Significance of Race, Ethnicity, and National Origins[1]

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Children of immigrants come from diverse backgrounds and enter school with different family migration experiences and resources. This paper addresses two basic questions: (1) to what extent does generation status exert an independent effect on early school performance net of race/panethnicity, language proficiency, and the family resources available to children as they enter formal schooling? and (2) to what extent do these broad conceptualizations of children in immigrant families mask variation by national origins? We take advantage of longitudinal data on a kindergarten cohort from the Early Childhood Longitudinal Study to examine children from diverse backgrounds. Considerable variation in academic performance persists across racial/panethnic groups as well as by country-of-origin background and linguistic ability even when adjusting for family background, resources, and previous academic performance. We find some intriguing evidence of early "segmentation" among children from various groups, suggesting some convergence within race and ethnicity for some children. However, this conclusion should not be overstated, because the results also point to the great diversity by national origins that are masked by reliance on racial/panethnic groupings.

INTRODUCTION

The growth of immigration over the past three decades represents the second-largest flow of international migrants to the United States following the massive European migration of the early 20th century. These recent arrivals come from diverse backgrounds representing multiple countries, linguistic origins, and ethnic groups. Nowhere is the impact of these traits more apparent

than among the youth in the United States. Today one in five children in primary and secondary school have at least one foreign-born parent (Jamieson, Curry, and Martinez, 2001). The school is the first major formal organization the child encounters and serves as a major conduit in the U.S. stratification system. Thus, one of the most revealing settings in which to view the relative success or failure of newcomers and their children is the school (Entwisle and Alexander, 1993).

Two difficulties that emerge when examining the relative progress of children in immigrant families are determining what characteristics are inherent to their status and determining to whom these children should be compared. We know that children of immigrants today are likely to be members of ethnic minority groups in the United States, to come from homes in which a non-English language is spoken, and to come from a wide variety of national origins. All of these characteristics are related to generation status and all have been associated with differential success and opportunity in the United States. When it comes to determining the progress of these children in U.S. schools, it is not always clear which is the salient reference group for determining their relative achievement.

One view is that that these children are appropriately compared to the majority (*i.e.*, non-Hispanic White) children so that their adaptation to the American mainstream (*e.g.*, their "assimilation") can be assessed. This classic, linear view suggests children from immigrant families may start out behind their peers with U.S.-born parents but that over time, through the socialization they receive in American schools, these children of immigrants catch up. In the case of the "model minority" stereotype applied to recent Asian migrants, this story may become even more dramatic if children of immigrants surpass their native peers (Kao, 1995).

However, another view points to the inherent disadvantages associated with position in the American racial/ethnic hierarchy that may inhibit progress through formal institutions. In this case, those children of new immigrants who are from historically disadvantaged groups in the United States may need to overcome structural obstacles in order to have the same academic success as their U.S.-born peers. In this "segmented" or "divergent" assimilation perspective, children of immigrants are likely to be affected by the context of reception of their immigrant parents (Fernandez-Kelly and Schauffler, 1994). In this case, one might expect that immigrant adaptation would vary according to perceived position in the ethnic hierarchy of the United States (Portes and Zhou, 1993; Fernandez-Kelly and Schauffler, 1994). Racial identity and panethnic group membership in the United States could play an important

role in any generation status differences in educational outcomes. Thus, it may be most appropriate to examine the extent to which children in immigrant families resemble their co-ethnic or co-racial peers from non-immigrant families, who, presumably, face similar structural obstacles in the United States.

Deciding to whom children of immigrants should be compared is also complicated by their diverse origins, which may or may not map closely with U.S. racial or ethnic labels. Researchers have repeatedly found important specific country-of-origin differences that are masked by the broad panethnic identity captured in survey data in the United States (Portes and Rumbaut, 2001). If there are important country-of-origin differences within racial/ethnic groupings, specifying national origins may go further toward explaining nativity differences in outcomes than merely examining race/ethnicity. Thus, the academic trajectories of children from some national origins may converge with minority racial/ethnic groups while other children from similar racial or panethnic origins but different national origins maintain trajectories more similar to their majority peers.

Both the straight-line and segmented assimilation frameworks are concerned with proximity to the migration experience whether measured in terms of generational progression or in terms of individual duration in the receiving context and orientation to the sending community and culture. However, when using the theoretical framework of assimilation (whether straight-line or segmented) to study children, it is the family's migration status and orientations that are likely to be important. Immigrant families (raising both first- and second-generation children) may provide resources to children that buffer the effects of structural barriers to success in the receiving context.

The primary goals of this paper are (1) to investigate the effects of generation status and family experience in the United States on early school performance net of family background; and (2) to investigate the relative performance of children by national origin when compared with children of U.S.-born parents in different racial/ethnic groups. We pay particular attention to the role of English proficiency, familial resources, and family-school connectivity in accounting for variation across groups.

BACKGROUND

Previous research on high-school students reveals differences in school performance by race, ethnicity, and immigrant status (*e.g.*, Kao and Tienda, 1995; White and Kaufman, 1996; Glick and White, 2003). Results of analyses with the High School and Beyond Survey, National Educational Longitudinal

Study, Adolescent Health Survey, and Children of Immigrants Longitudinal Survey have all demonstrated important nativity, racial/ethnic, and country-of-origin differences in academic performance and educational attainment (*e.g.*, Duran and Weffer, 1992; Kao, 1995; Portes and McLeod, 1996; Driscoll, 1999; Glick and White, 2003). Some studies point to downward trajectories in school, particularly for Mexican and other Hispanic youth (Lopez and Stanton-Salazar, 2001; Portes and Rumbaut, 2001: ch. 9). Others point to greater educational attainment by immigrant youth when compared to youth in the third and higher generations (Glick and White, 2004).

Fewer large-scale studies have followed children through the transition to school. Thus, while we are gaining knowledge about the educational attainment and labor market outcomes for new adult arrivals and adolescents, we have less understanding of the progress made by very young children in immigrant families and the influence of family resources on these children's outcomes. This paper begins this process by focusing specifically on the early school performance of the children of immigrants and the relative importance of generation status, racial identification, and national origins in determining outcomes. Here we review the literature addressing these multiple factors associated with being a child of immigrants.

Generation Status and Family Experience in the United States

The term "first generation" is broadly applied to all born outside of the United States. Those who arrive as very young children, however, face different adaptation processes from those who arrive as adolescents or young adults. Indeed, earlier studies with adolescents reveal that those who arrived in the United States as very young children (*i.e.*, before school age or in the first year or two of formal schooling; sometimes referred to as the 1.5 generation) perform better on academic tests than those who arrived after schooling was well under way (Glick and White, 2003). Both the children of this 1.5 generation and second generation have immigrant parents. These children, therefore, all share the unique position of being socialized in the United States, a social and cultural context potentially quite different from that faced by their parents when they were children. Children in the 1.5 and second generations may also share access to immigrant communities and resources in the United States that promote achievement in school, resources that might not be available to their third-or-higher-generation counterparts (Kao and Tienda, 1995). Further, many children with limited English proficiency in school today are not immigrants themselves but the U.S.-born children of immigrant

parents. This study focuses on 1.5-generation children and their second-generation peers. They are compared to their third-or-higher-generation (*i.e.*, U.S.-born children of U.S.-born parents) counterparts.

While the children of the 1.5 and second generations share socialization in the United States, we may find some variation between them due to differences in families' experience in the United States. Although the 1.5 and second generation both have foreign-born parents, there may be considerable variation in immigrant parents' age at arrival. This could be a greater marker of experience in the United States than the children's own generation status. Few studies of the educational trajectories of immigrant youth have disaggregated by the parents' age at arrival so our expectations are guided by previous work on assimilation. If we adopt a straight-line assimilation approach, then families with longer experience in the United States (*i.e.*, parents who migrated as children) should be associated with higher achievement among children than families with less experience in the United States (Alba and Nee, 2003). Parents who were educated and socialized in the United States may be better able to guide their children through U.S. social institutions like schools. But, this is in contrast to the finding that children of immigrant parents do well in school because they benefit from their parents' more recent arrival via their optimism about opportunities in the United States (Kao and Tienda, 1995). The more pessimistic view may expect children of immigrant parents who migrated as children themselves to not do as well academically if, as the segmented assimilation perspective implies, their parents are in a more disadvantaged position in the United States. This also implies an interaction between parents' age at arrival and race or ethnicity.

Racial Identification and Country of Origin

Children of immigrants today are inserted into the racial/ethnic hierarchy of the United States and they are likely to be influenced by the context of reception faced by their family based on this identification (Fernandez-Kelly and Schauffler, 1994). In this view, the children of immigrants from those groups that have been historically disadvantaged in the United States may face different opportunities or barriers than other children from immigrant families (Zhou, 1997a). Discrimination may spur some groups to seek success through school (*i.e.*, Sue and Okazaki, 1990) while others may deemphasize formal education if these routes are perceived as blocked.

While studies of early education point to the importance of stratification for shaping even the very initial academic trajectories of children in the United

States (Entwisle and Alexander, 1993; Lee and Burkam, 2002), we have less of an understanding of when in the schooling process the children of immigrants are most likely to be impacted by this disparity. Differences in the effect of generation status on academic performance trajectories among students from different racial/ethnic backgrounds imply important interactions between race and generation status. "Regardless of their class origin or knowledge of English, nonwhite immigrants face greater obstacles in gaining access to the white middle-class mainstream" (Portes and Rumbaut, 2001:47). According to this perspective, we should find interactions of race and generation status whereby children of immigrants of some racial/panethnic identities outperform their third-and-higher-generation peers while others lag behind.

If insertion into a racial/ethnic hierarchy is the primary influence, variation in academic performance should be greater by race/ethnicity than by generation status or national origins. However, studies that compare children across national origins suggest the "segmented" feature of adaptation may not take place across entire panethnic groups but is rather evidenced among particular national origin groups. National origins reflect very different selectivity processes and the pre-migration characteristics of these groups may explain differences in attainment among the children of immigrants (Feliciano, 2005). The story of immigrant academic achievement is often predicated on the selection of immigrants with specific cultural values and beliefs that enhance or detract from their achievement in the United States (Zhou, 1997b; Goyette and Xie, 1999; Kim, 2002). Again, findings are mixed but for some first- and particularly second-generation youth, performance is lower than those in the third-or-higher-order generation even in the presence of controls for differences in the stock of human capital (Portes and Rumbaut, 2001). Mexican, Nicaraguan, Haitian, and Cambodian youth have all been found to exhibit lower academic performance than their U.S.-born peers while Vietnamese- and Chinese-origin youth have been cited as surpassing their third-or-higher-generation peers (*see* Portes and Rumbaut, 2001; Suarez-Orzoco and Suarez-Orzoco, 2001; Kim, 2002). In this case, a complete picture of variation in academic achievement will only emerge once country of origin is taken into account. We examine children's outcomes, therefore, not only according to their own racial/ethnic identity (as indicated by their parents) but also according to their family's national origins. It is quite likely that the racial/ethnic categories so often used in the United States mask considerable variation by these national origin groups. Further, we expect national origin differences may be larger than differences by generation status.

Language Proficiency

One of the most frequently mentioned traits shared by many children of immigrants is their lack of readiness to learn in English upon entering formal schooling in the United States. A lack of English proficiency is cited as a primary reason for poor school performance among many first- and second-generation children (Rosenthal, Baker, and Ginsburg, 1983; Cosden *et al.*, 1995). While language proficiency and ethnic background are closely intertwined with immigrant status, both traits have an independent effect on educational attainment (Glick and White, 2003). Some of this may be due to differences in the prevalence of non-English homes among youth of later generations in some ethnic groups rather than others. Groups may vary in the extent to which native language use persists across generations. Some groups experience rapid turnover to English-only households by the second or at least third generations while others see native languages persevere with and sometimes without English use in the home (Alba *et al.*, 2002). In other words, English proficiency may be more directly linked to generation status for some groups than others. Given its close link to academic performance, English proficiency may capture most of the variation in academic performance observed by generation status and possibly by country of origin.

Family Resources

Certainly most studies of status attainment in the United States point to the importance of human capital and socioeconomic status in determining subsequent outcomes across the life course. Few analyses of the progress of immigrants' children would fail to point to the importance of income and parental education in enhancing children's academic progress. Much of the debate over the potential downward progress for these children has focused on the extent to which impoverished immigrant families are unable to provide needed resources that support children's schooling.

    To gain a better understanding of which characteristics of immigrant families work as advantages for their children's transition into formal schooling in the United States, it may be useful to consider resources or investments that fall under the broad construct of family capital, social capital, or even "familial social capital" (Muller, 1993; Stanton-Salazar, 1997; Teachman, Paasch, and Carver, 1997; Hao and Bonstead-Bruns, 1998). This network of relations provides a web of support for the student that may encourage and support achievement (Lareau, 1989). Nativity differences in access to social capital may be

essential to understanding the subsequent nativity differences in outcomes over the early life course (Fuligni, 1997). In early childhood the family serves as the primary social environment for children, and families may behave in ways that promote academic success for their children. For example, reading to preschool-age children, taking a child to the library, or engaging in other academically oriented activities can support subsequent educational perform-ance (Griffin and Morrison, 1997; Christian, Morrison, and Bryant, 1998; Senechal and LeFevre, 2002; Sy and Schulenberg, 2005). Overall, such within-family social capital may buffer students against attitudes or conditions that discourage academic achievement (Hao and Bonstead-Bruns, 1998).

For young children, the school may serve as the primary extra-familial context encountered, and the interactions of family and school are expected to be another key resource for children. Some parents are better able to convert their involvement to positive outcomes for their children. For example, parents of lower-class backgrounds are not perceived as having the same level of interest or understanding by teachers as parents whose backgrounds more closely resemble the teacher's background (Lareau, 1989). We address the possibility that immigrant parents are less likely to become directly involved through contact with the school but may still provide additional educational opportunities to children beyond regular schooling. Enrollment in additional academic, artistic, or culturally relevant programs may all provide an environment supportive of academic performance and school progress. We expect this involvement outside of school will be more common and involvement with the school to be less common for children of immigrants when compared to their third-and-higher-generation counterparts. But both types of involvement are expected to enhance children's academic achievement.

THE CURRENT STUDY

Academic performance in the early years of school forms a strong basis for predicting later achievement (Entwisle and Alexander, 1993). Mastery of early academic skills is an important predictor of ultimate educational attainment. In our analyses, we consider parental age at arrival, national origins, family activities, and resources provided to children outside of school as well as family interactions with the schools as determinants of subsequent academic achievement. If the educational performance of the children of immigrants was influenced solely by the racial/ethnic hierarchy in which they are inserted in the United States, then accounting for the racial/ethnic composition of these children would be sufficient. Alternatively, if immigrant parents retain an

optimistic outlook while their children face blocked opportunities within formal social institutions such as schools, the interaction of race and generation status may be important for explaining actual academic performance. Finally, because the selection of immigrants varies by national origins, we may observe greater variation in school performance among children when we examine national origins than when we rely solely on measures of generation status or language proficiency to capture the "immigration" effect.

The analyses in this paper rely on new national-level data that are quickly becoming a primary source of information on young children's academic trajectories for researchers and policymakers (Lee and Burkam, 2002). The Early Childhood Longitudinal Study Kindergarten cohort is a rich source of information from families, teachers, and schools. The analyses presented here will examine children's performance on math tests and the extent to which variation in performance is limited to broad racial/panethnic groups or is variable by national origins within these groups. We focus on family characteristics and behaviors that may also explain variation in academic performance among young children in immigrant families and non-immigrant families.

DATA AND METHODS

The data for this paper come from The Early Childhood Longitudinal Study – Kindergarten Cohort (ECLS-K). The ECLS-K is an ongoing data collection effort by the U.S. Department of Education, National Center of Education Statistics (NCES). The survey began with a cohort of 22,000 children in kindergarten. Children are followed longitudinally and will continue to be followed throughout their elementary schooling and beyond. The data have the advantage of recording not only the birthplace of the child and one parent but also allow for a very detailed analysis of racial and ethnic variation in school outcomes. Further, the ECLS-K allows respondents to indicate more than one race, which will allow for the inclusion of mixed race children. By focusing on one cohort of children who are all approximately the same age, the analysis will be better able to delineate the consequences of generation status net of developmental stage than studies examining children of all different ages (Garcia Coll and Magnusun, 1997; Fuligni, 2001). By focusing on a younger cohort with nationally representative data, this paper is able to extend those studies with adolescents (*i.e.*, those based on High School and Beyond, NELS:88, CILS, and Add Health data) to young children as they enter school (Crosnoe, 2005). Because the ECLS-K is a school-based sample, all of the

descriptive and regression analyses are weighted and adjusted for the clustered sampling design in the ECLS-K.[2]

The data employed here are limited in the sense that only children who enroll in kindergarten are included in the sample. Since kindergarten is not compulsory in all states some children will necessarily be missed by this criterion. However, all types of kindergartens including full-day, half-day, public, and private programs are included. Further, children remain in the sample even if they change schools or withdraw from school. Data for the analyses presented here come from participants in the Spring 1999 and Spring 2002 waves of ECLS-K, by which time most of the children are in the third grade. Our final sample includes 13,618 children who participated in all three waves of the study and who have valid test score data in the 2002 wave of the survey. Basic demographic information on children and their families are available from the Spring 1999 panel of the data. Data on the place of birth of at least one parent are available beginning in the Spring 2000 parent interview with additional items included in the Spring 2002 interview. Unfortunately, this still leaves 1,453 cases with missing information on generation status or parents' arrival in the United States. There is some reason to suspect that these cases missing such information are more likely to be in immigrant families; they are disproportionately likely to have been given the Oral Language Development Scale (OLDS) test, indicating that their home language is non-English, and their math scores, like those of immigrant children, are substantially lower than those of White children in nonimmigrant households. Simply dropping these cases, as is often done with missing data, may bias our sample in favor of high-performing children from English-speaking immigrant families. Therefore, we retain these cases and indicate whether they are missing country-of-origin information.

Outcome Measures

There are many ways to assess progress in school in the United States and all have their merits and disadvantages. For example, grades have real consequences for students. Poor performance in class reflected with poor grades determines opportunities to proceed to higher grade levels. However,

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[2]We employ the survey commands in SAS for this purpose. We also note that there are several different weighting options available in the data. We employ longitudinal weights for the Kindergarten–Third Grade sample. Analyses with alternate weights produced different sample sizes but substantively similar results.

grades are likely to vary across schools and teachers within schools, making it difficult to determine the extent to which academic performance varies due to differences among teachers and schools or other factors. To make matters more complicated, grades are more variable in the earlier school years where they are more likely to reflect behavioral issues as well as academic ability. For these reasons, analysis of academic progress is measured here with standardized math test scores from the spring of 2002 and change in test scores from 2000 to 2002. The comparison of the academic achievement of students from diverse social and educational settings is facilitated when one standardized measure is available (Bankston and Caldas, 1996). The item response theory (IRT) adjusted standardized math score is employed.[3] We convert these scores into Z-scores to facilitate comparison of effects across models. Because there is some temporal variation in the administration of the test, the models also include a variable for the date of the test.[4]

Independent Variables

Generation status is measured using the parent survey in the 2000 and 2002 waves. One parent, most often the mother, reported her and the child's places of birth.[5] Children born outside the United States are counted as children of the 1.5 generation (n = 298). Those born in the United States to at least one foreign-born parent are categorized as second-generation children (n = 2,272). Closely correlated with the children's generation status is their parents' age at arrival in the United States. In our data, the vast majority of the 1.5-generation children have a parent who arrived in the United States after age 15 (95%) and was therefore much less likely to experience schooling or peer socialization in

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[3]The ECLS-K staff evaluated all children from non-English homes for language proficiency. Those children who were not sufficiently proficient in either English or Spanish were not given the achievement tests. There were 1,567 children who were not administered the English or Spanish version test in Kindergarten and only 350 children in first grade who were not assessed. By third grade, all children are assessed (Rathbun and West, 2004). We keep all children in the sample. Those children who do not have first-grade math tests are coded as missing on the test. Analyses eliminating these cases revealed substantively similar results to those we present here.
[4]This variable is not significant in any models.
[5]This is due to the survey design, where only one parent was asked about their country of birth. This parent was usually the mother, since the order of preference for the parent interview was 1) the child's mother, 2) the child's father, and 3) other adult household member, who was asked information about the mother. We estimate that this focus on mother's nativity misclassifies the 3% of all 4–6-year-olds in the United States who have a U.S.-born mother and a foreign-born father (authors' tabulations for 2000 Census data).

the United States. In contrast, just over 30% of the second-generation children have a parent who arrived in the United States before age 15 and was therefore likely to experience schooling and peer socialization in the United States. We identify second-generation children by the age of migration of their parents, creating three categories of generation status that approximate the family's experience in the United States: 1.5 generation; second generation, parent arrived after age 15; and second generation, parent arrived before age 15. These children are compared to those born in the United States whose parent also reported being born in the United States (generation 3+; n = 9,900). We also include a category for unknown generation status.

Age at migration and generation status are closely associated with English language proficiency (Stevens, 1999). Young children may perform less well in school when they are limited in English proficiency (Stiefel *et al.*, 2003) but often make rapid progress in English acquisition as well (Espenshade and Fu, 1997). Given its close link to academic performance, we expect that English proficiency will capture some of the variation in academic performance observed by generation status and possibly by country of origin. We include a measure of English language proficiency in the kindergarten year. The Oral Language Development Scale was administered to all children whose school record indicated that they spoke a non-English language at home (in the absence of a school record, information was provided by the teacher). The test scores range from 0 to 60, with scores of 37 or above indicating English proficiency. Thus, our measure of English language proficiency is a simple dichotomy of whether the child took and subsequently failed this English proficiency test in the fall of the kindergarten year (n = 896). We note that all of these children pass the test by third grade.

The racial/ethnic identification of the child also comes from the parent survey. Parents are asked to classify children according to racial and panethnic group and then may identify children by specific ethnicity within the Hispanic and Asian panethnic categories. So, for example, all children whose parents selected "Mexican" also selected the broader "Hispanic" label. We use those categories with large enough numbers of cases for comparison across all three generation groups (*i.e.*, there are sufficient cases from the first, second, and third+ generation to compare within each category[6]): Non-Hispanic White (n = 7,713), non-Hispanic Black (n = 1,712), Mexican origin (n = 1,242),

[6]The exception to this is American Indian children, for whom the generation designation is not meaningful.

Puerto Rican origin (n = 170), other Hispanic origins (n = 1,026), Asian (n = 1,123), Pacific Islander (n = 202), American Indian or Alaskan native (n = 230), or of mixed racial identity (n = 355).

There are some studies of children of immigrants focusing on specific countries of origins. The Children of Immigrants Longitudinal Study (CILS) conducted in Miami and San Diego has provided information on several of these groups (Rumbaut and Portes, 2001). Less information by country of origin has been available at a nationally representative level beyond Census data. To compare the importance of the racial/ethnic identification of the children to that of their country-of-origin background, the children of immigrant families (first and second generation) are also examined separately by country-of-origin grouping. Children are grouped according to the birthplace of their mother. No analogous ancestry information is available for the third and higher generation (*i.e.*, children whose mothers are born in the United States) but analyses including country of origin also include race/ethnic categories for the U.S.-born children of U.S.-born parents. This has the advantage of leaving non-Hispanic white third-and-higher-generation children as the reference group and demonstrating the extent to which racial/ethnic variation among the third and higher generation remains significant. The results presented here include single country of origin when there were more than 40 cases from that country and regional groupings for smaller numbers of cases. Appendix Table A specifies which countries are included when categories consist of more than one country. The following countries and country-groups are included: Mexico, Puerto Rico, Central America, South America, Cuba, Caribbean, China, Vietnam, Laos and Cambodia, the Philippines, India, Other East Asian, Other Asian, Eastern Europe, Western Europe, and other countries (predominately from Africa or the Middle East, with a few cases each).

To illustrate the overlap between country-of-origin and the racial/panethnic categories so often employed in survey data, Appendix Table B reports the racial/ethnic composition of children in the various country-of-origin groupings. As one might expect, the more countries included in a group, the greater the racial/ethnic diversity of the children as reported by their parents. Nonetheless, some interesting patterns are observable. Those children whose families come from Mexico, Puerto Rico, and Central America are considerably more likely to be labeled as "Hispanic" than are those from South America. Similarly, children with at least one parent from China, Vietnam, Laos, and Cambodia are more likely to be labeled as "Asian" by their parents than are those from the Philippines or other "Asian" countries. In addition, considerable attention should be paid to those children from the "Caribbean,"

who are far more likely to be "Black" than any other group of first- or second-generation children.

Family Resources and Involvement

Family resources are critical to children's school success, and measures for both financial resources and family involvement and engagement are included in the analyses. The distribution of these measures is presented in Table 1. These measures include the age (in months) and gender of the child, family structure (two parents, one parent and a parent's partner including stepparents or cohabiting partner, single mother, and "other family type"), and number of siblings. Two measures are included to capture the family's socioeconomic status. First, we include family income. This measure is logged in the regression analyses although the mean is presented in Table 1. Second, we include a measure of the parent's education. For the majority of children, this measure refers to the mother's education. Father's education is substituted only if the mother's education is not reported. These measures all come from the kindergarten year measure unless it is missing, in which case the first-grade measure is substituted.

We next include measures of the early educational experiences that may influence academic performance. First, we measure childcare arrangements prior to kindergarten leaving children who were predominately in parental care only as the reference category. Overall, immigrant families are more likely to use kin care and less likely to use center-based care than non-immigrant families (Brandon, 2002). Our measure includes those receiving care in a home by a relative, care in a home by a nonrelative, children who attended Head Start programs, those who attended center-based programs, and finally, children whose childcare experiences involved multiple settings. The second indicator of previous experience is for students who are repeating kindergarten in 1999 (n = 488). Although previous research has suggested that immigrant children may be more subject to grade retention than their U.S.-born peers at higher grades (Harker, Guo, and Harris, 2001), this does not appear to be the case for these very young children. A larger proportion of those in the third or higher generation are repeating kindergarten in 2000 than are the children of immigrants in this sample. We also include a measure for whether the child is enrolled in a full-day or half-day kindergarten program. There is considerable variation in the availability of full-day kindergarten programs (Lee *et al.*, 2006).

The final set of variables is intended to measure the extent to which families are involved in activities at the child's school and the extent to which families

TABLE 1
SAMPLE CHARACTERISTICS, ECLS-K PARTICIPANTS KINDERGARTEN-THIRD GRADE

	Percent or Mean		Percent or Mean
Child Characteristics		Pre-Kindergarten Care Arrangements	
Age in 1999 (in months)	86.93	Parental care only	34%
	(4.2)	Home-based relative care	11%
Gender		Home-based non-relative care	9%
Female	49%	Head Start program only	8%
Male	51%	Other center care	34%
		Multiple care arrangements	4%
Race/Ethnicity		Kindergarten School Characteristics	
Non-Hispanic White	56%	Private school	13%
Non-Hispanic Black	16%	Public school	87%
Mexican origin	10%		
Puerto Rican origin	1%	Half-day K program	46%
Other Hispanic	8%	Full-day K program	54%
Asian origin	4%		
Pacific Islander	1%	Child Is Repeating Kindergarten (1999)	4%
American Indian	2%		
Mixed race and/or ethnicity	2%	Kindergarten Activities/Involvement	
Generation Status		School Involvement (parent)	
1.5 generation	2%	Attended an open house	68%
2nd gen., parent arrived after age 15	5%	Attended a PTA meeting	31%
2nd gen., parent arrived pre age 15	9%	Attended a parent/teacher conference	78%
Third or higher generation	73%		
Generation status unknown	11%		
English Proficiency		Non-School Activities (year)	
Failed kindergarten OLDS test	6%	Sports or arts classes/activities[a]	57%
Passed or did not need test	94%	Non-English language instruction	5%
Family Structure in Kindergarten		Child Taken on Outings in Last Month	
Both parents	69%	Went to library in last month[b]	50%
Parent & partner	8%	Other outings in last month	72%
Single mother	21%		
Other family type	2%		
Family Socioeconomic Status			
Family Income	50,043		
	(1,076)		
Parent Education			
Less than high school	10%		
High school graduate	27%		
Some college	31%		
Four-year college degree	16%		
More than four-year degree	12%		
Number of Cases	13,618		

Source: ECLS-K cohort.

Note: Sample weighted and adjusted for design effects; unweighted sample size present.

[a]Child was enrolled in an organized sport, took dance, music, or arts classes.

[b]Family/household member took child to one of these in previous month: museum, zoo, aquarium, play or concert, game.

engage the child in other non-school activities that could also enhance academic performance. First, we use three dichotomous measures of parental involvement in the kindergarten year: attendance at an open house event at the school; attendance at a parent/teacher organization meeting at the school, and attendance at a parent/teacher conference at the school.

We also use several measures of non-school activities. We expect that immigrant parents could face difficulty becoming involved with the school but may still use their resources to enhance their children's academic opportunities. These activities could include being enrolled in a variety of sports or arts classes outside of the school in their kindergarten year. We include a separate variable for enrollment in a non-English language class; these classes may be used by parents seeking to teach their children the traditions and practices of the country of origin. And, it is the case that children of immigrants are more likely to be enrolled in these non-English language classes than their peers with U.S.-born parents (11% vs. 4%). In addition to formal enrollment in classes, we include two variables for outings taken with any member of the family and the focal child in the previous month. The first variable represents outings to the library and the second other outings, including trips to zoos, museums, aquariums, concerts, plays, or sporting events.

RESULTS

Children's early academic performance varies by mother's nativity, race/ethnicity, and English proficiency, suggesting considerable diversity from the outset of formal schooling. Figure I presents the average math scores (IRT scaled, z-scores) in the spring of 2002, four years after introduction to formal schooling. While there are statistically significant differences between children of immigrant mothers (the 1.5 and second generation) and children of U.S.-born mothers, we observe greater differences by English proficiency and race/ethnicity. Children from all racial/ethnic groups have lower scores when compared to non-Hispanic White children. American Indian and non-Hispanic Black children score the lowest. Likewise, children who did not pass the OLDS test in kindergarten perform less well on the math test three years later when compared to those who were not identified as non-English proficient. Clearly, the diversity of origins of immigrants in the United States makes it difficult to tell a single "immigrant" story of academic success or failure.

These descriptive results do not control for the diversity of family and socioeconomic backgrounds of children in immigrant families, leaving the question of whether differences in academic performance will persist in the face

Figure I.   **Math Scores in Third Grade (z-Scores) by Generation Status, Race/
Ethnicity, and English Proficiency**
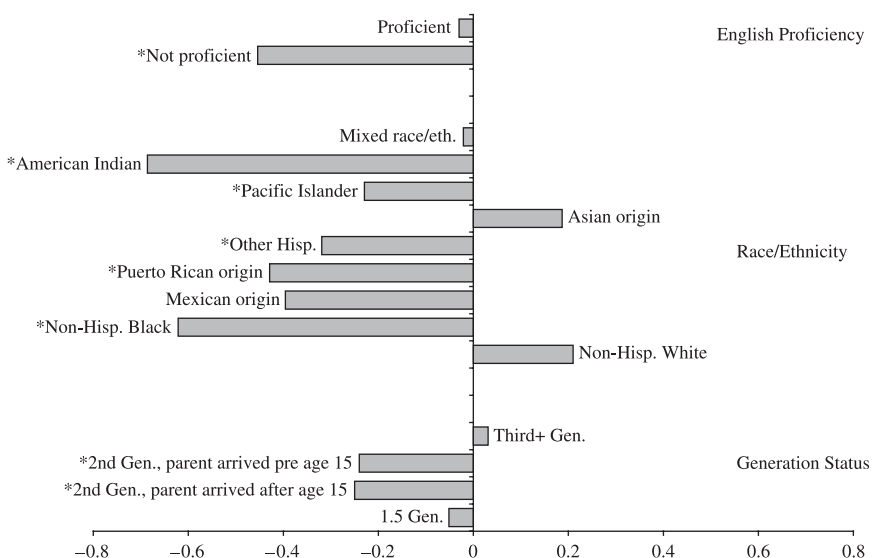
Source: ECLS-K longitudinal data, Kindergarten-Third Grade sample.
Note: Y-axis represents mean for overall sample.
      *Indicates significant difference from overall mean (p < 0.05).

of controls for socioeconomic status, family structure, previous school experiences, and family involvement in school and non-school activities. It seems plausible that these family characteristics may account for differences in academic performance among children in immigrant families. To examine this possibility, results of the regression models predicting the math test scores of spring 2002 (z-scores) are presented in Table 2.

The first model demonstrates that family structure and socioeconomic status are important predictors of early academic performance. Here we see results consistent with previous work on academic performance. Boys are already outperforming girls on the standardized math test. Students who are older also outperform those who are younger. Children who come from more affluent families and have parents with higher levels of education also evidence higher scores. Likewise, children from homes with other than two biological (or adoptive) parents do not perform as well on the math test. With these controls, second-generation children still score significantly below their peers with

TABLE 2
REGRESSION MODELS PREDICTING SPRING 2002 MATH TEST SCORES (IRT; Z-SCORES)

	Model 1	Model 2	Model 3	Model 4
Male	0.16***	0.16***	0.16***	0.11**
Child's Age (in months)	0.02***	0.02***	0.02***	−0.01***
Parent Age (in years)	0.01***	0.01***	0.00	0.00
Family Structure (vs. Both Parents)				
Parent & partner	−0.16***	−0.15***	−0.13***	−0.05*
Single parent	−0.10*	0.00	0.00	0.02
Neither parent	−0.51***	−0.27**	−0.20*	−0.06
Number of siblings	−0.07***	−0.06***	−0.04***	−0.02**
Family Income (log)	0.11***	0.08***	0.05***	0.03***
Parent Education (vs. More than College)				
Less than high school	−0.81***	−0.76***	−0.64***	−0.22***
High school graduate	−0.57***	−0.54***	−0.47***	−0.14***
Some college	−0.29***	−0.27***	−0.27***	−0.06**
Four-year degree	−0.02	−0.03	−0.09*	−0.01
Generation Status (vs. Third+ Generation)				
1.5 generation	0.04	0.10	0.18*	0.17**
2nd gen., parent arrived after age 15	−0.09*	−0.01	0.05	0.05
2nd gen., parent arrived pre age 15	−0.17**	−0.12*	−0.09	−0.04
Race/Ethnicity (vs. Non-Hisp. White)				
Non-Hispanic Black		−0.56***	−0.51***	−0.21**
Mexican origin		−0.23***	−0.19***	−0.09*
Puerto Rican origin		−0.28*	−0.22	0.04
Other Hispanic		−0.25***	−0.22***	−0.06
Asian origin		0.03	0.09	0.08**
Pacific Islander		−0.20*	−0.20*	0.01
American Indian		−0.64***	−0.53***	−0.20
Mixed race and/or ethnicity		−0.12	−0.12	0.00
Not Proficient in English (vs. Proficient in Base Year)		−0.08	−0.06	0.07
Pre-K Childcare Arrangements (vs. Only Parents)				
Relative in home care			−0.01	−0.02
Non-relative in home care			0.19***	0.11***
Head Start program			−0.14**	−0.06*
Other center care			0.16***	0.07***
Multiple arrangements			0.05	0.05
Parental School Involvement (Kindergarten Year)				
Attended open house at school			0.15***	0.05*
Attended PTA meeting			0.04	0.02
Attended parent/teacher conference			−0.01	0.00
Non-School Involvement (Kindergarten Year)				
Sports or arts classes/activities (a)			0.12***	0.00
Non-English language instruction			0.00	0.00
Went to library in last month (b)			0.07**	0.01
Other outings in last month			0.08**	0.04
School Characteristics (Kindergarten Year)				
Private school (vs. public)			−0.05	−0.09***
Half-day K program (vs. full-day)			−0.05	0.02
Child Repeating K in 1999			−0.30***	−0.09*
Math Test Score in 2000				0.73***
Intercept	−2.73	−2.11	−2.41	0.57
R square	0.19	0.22	0.25	0.65

Source: ECLS-K Third Grade longitudinal sample (n = 13,618).
Note: Regression models weighted and adjusted for design effects. Models include measures for missing parent age, number of siblings, or generation status and a measure for the day the test was administered.
    *p < 0.05.
    **p < 0.01.
    ***p < 0.001.

U.S.-born parents. However, there is no evident difference between the 1.5-generation children and children with U.S.-born parents.

The second model in Table 2 adds measures of race/ethnicity and English proficiency in the kindergarten year (1999). Limited English proficiency at the outset does not significantly impact subsequent academic performance net of family background and socioeconomic status. However, racial/ethnic differences are strong. Children identified as Black, Mexican origin, other Hispanic, Pacific Islander, or American Indian do not perform as well on the third-grade math test as those identified as non-Hispanic White. We also examined the possibility that there are divergent patterns of academic performance among children of immigrant families from different racial/ethnic minority groups by testing interactions of generation status and race/ethnicity (model not shown).[7] We find a significant negative interaction for 1.5-generation children of Mexican and Pacific Island origin, suggesting their performance lags even further behind others. However, it seems likely that there could be other differences we do not observe in the interactions of larger panethnic groups. For example, there is more variation between "Asian" first- and second-generation children in language background and family SES, for example, than between "Hispanic" first- and second-generation children. We explore this possibility in subsequent analyses by identifying children by their foreign-born parent's national origins.

Our third model in Table 2 addresses the possibility that generation status differences are reduced by other family resources or behaviors that enhance children's academic performance. We observe that children's pre-kindergarten care arrangements do influence outcomes as late as third grade. Children in center-based care and children cared for by non-relatives in their own home performed better than children cared for by only their parents, while children in Head Start programs had lower scores, perhaps picking up on unmeasured traits that selected children into eligibility for Head Start in the first place. Further, parental attendance at an open house event at the child's school is associated with higher math scores. We also observe higher scores among children who participated in non-school activities and outings. Children who were retained in kindergarten also lag behind their peers who made normative grade progression, but we observe no differences for the type of school or length of school day in the kindergarten year. With all of the measures in the model,

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[7]Additional models (not shown) test the interaction between language and generation status, but these interactions are not significant.

there is some advantage for children of the 1.5 generation and no longer a deficit among the second-generation children. The 1.5 generation children's scores are not higher until we adjust for the fact that their families tend to be less involved in the school. Interactions of school involvement and participation in non-school activities with generation status reveal no significant differences in the effects of these activities for children of immigrants or children of U.S.-born parents. Thus, parental involvement appears beneficial for all.

The models discussed thus far do not adjust for previous academic performance. To evaluate whether children of immigrants have improvement in academic performance relative to their third-and-higher-generation peers, we also estimated models including previous math test scores (also IRT scaled) from the spring 2000 wave of the survey. We mean-substitute the scores for children missing the 2000 test and include a dichotomous variable indicating they are missing the 2000 test. Thus, we maintain the same sample of children in all models.[8] The results are presented in Model 4. Consistent with previous research, higher family income and higher parental education are associated with greater gains in test scores over time. We also observe an improvement in scores among children of the 1.5 generation. Racial/ethnic differences also persist over time as Black and Hispanic children's scores are lower and Asian-origin children's scores are higher by the third-grade test when we control for prior performance.

The results thus far suggest some differences among children of immigrants and children of U.S.-born parents but the directions are not clear. The results suggest some advantage to children from more recently arrived families. However, the strong racial/ethnic effects with some modest interactions with generation status (suggesting worse outcomes for Mexican and Pacific Islander children from the 1.5 generation) also suggest a need to further disaggregate.

Generation status is correlated with national origin. Some groups are more recently arrived than others and some are more likely to have parents arriving as adults. To explore the possibility that children of immigrants differ in their academic performance when national origin groups are divided rather than relying on generation status alone, Table 3 presents the results of the same regression models predicting math test scores in spring 2002 with an expanded measure of race and national origin replacing the measure of race/ethnicity and generation status from the previous models. Third-and-higher-generation

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[8]Models using only children with valid test scores in first grade (n = 13,379 vs. 13,618) are not substantively different from those presented here.

TABLE 3
REGRESSION MODELS PREDICTING 2002 MATH SCORES (IRT, Z-SCORES); RACE/ETHNICITY AND COUNTRY OF ORIGIN

	Model 1	Model 2	Model 3	Model 4
Race/Ethnicity or Country of Origin (vs. non-Hispanic White; 3rd+ Generation)				
Black, 3rd+ generation	−0.73***	−0.53***	−0.48***	−0.20***
Mexican origin, 3rd+ generation	−0.27**	−0.11	−0.09	0.00
Puerto Rican origin, 3rd+ generation	−0.26	−0.21	−0.15	0.06
Other Hispanic origin, 3rd+ generation	−0.19**	−0.09	−0.08	0.02
Asian, 3rd+ generation	0.05	−0.05	−0.02	0.09
Pacific Islander, 3rd+ generation	−0.30*	−0.25**	−0.23*	0.02
American Indian	−0.79***	−0.60***	−0.48***	−0.18
Mixed Race/Ethnicity, 3rd+ generation	−0.14	−0.07	−0.07	0.01
First or Second Generation				
Mexico	−0.69***	−0.30***	−0.22***	−0.13***
Puerto Rico	−0.55**	−0.43	−0.33	0.07
Central American	−0.29**	−0.05	0.02	0.14*
South American	−0.09	−0.08	−0.02	0.13*
Cuba	0.25	0.19	0.10	0.07
Caribbean	−0.73***	−0.65***	−0.54**	−0.12
China	0.76***	0.45***	0.54***	0.37**
Other East Asian	0.51***	0.26*	0.30*	0.21**
Vietnam	0.40***	0.42***	0.58***	0.38***
Laos/Cambodia	−0.53***	−0.27*	−0.11	−0.02
The Philippines	−0.11	−0.26	−0.16	0.01
India	0.41**	0.13	0.21	0.18
Other Asian	0.05	0.12	0.16	0.08
Eastern Europe	0.36**	0.18	0.31*	0.24**
Western Europe	0.30**	0.20*	0.20*	0.16*
Other countries	−0.05	−0.15	−0.05	0.05
Not Proficient in English (vs. Proficient in Base Year)		−0.05	−0.02	0.10*
Math Score in 2000				0.73***
Intercept	0.11***	−2.21***	−2.55***	0.53***
R square	0.09	0.22	0.25	0.65

Source: ECLS-K Third Grade longitudinal sample (n = 13,618).
Notes: All models are weighted and adjusted for design effects.
    Model 1 = Race/ethnicity and country variables only.
    Model 2 = Model 1 + sex, age, parents' age, parents' education, income, family structure, number of siblings, and kindergarten language proficiency.
    Model 3 = Model 2 + pre-kindergarten care arrangements, Parental school involvement, non-school involvement, kindergarten school characteristics.
    Model 4 = Model 3 + test score in 2000.
    *p < 0.05.
    **p < 0.01.
    ***p < 0.001.

children are identified by their race or panethnicity. Children in the 1.5 and second generations are identified by their foreign-born parent's country of origin. This means that non-Hispanic White children in the third and higher generation serve as the reference group for all others. The models in Table 3 correspond to those in Table 2. The effects of socioeconomic status and family

resources are similar in both tables, so we do not report these coefficients in Table 3.

We first estimate the model with only the variables for race/ethnicity and national origins. This first model in Table 3 demonstrates considerable variation in academic performance by national origins and race/ethnicity. Third-and-higher-generation minority children do not perform as well as their non-Hispanic White counterparts. Looking at the first- and second-generation children by national origins reveals significant differences not apparent when the single indicator of generation status is employed. For example, Mexican- and Caribbean-origin children do not perform as well on the third grade test as non-Hispanic White children in the third and higher generation while children of Chinese and Vietnamese origins pull ahead. We also note the positive effect for the children of Eastern and Western European immigrants, mostly identified as non-Hispanic White by their parents, who also outperform non-Hispanic White children of U.S.-born parents.

Model 2 replicates the analyses with controls for family structure, income, parents' education and age, number of siblings, and language proficiency (corresponding to Model 2 from Table 2). Some of the variation by race/panethnicity and national origins are reduced here but several groups remain quite distinct. Even when we include family involvement and non-school activities in Model 3 (corresponding to Model 3 from Table 2), we observe persistent differences.

Finally, we estimate the same change model with an adjustment for previous math test scores. The change model demonstrates the persistence of racial/panethnic and national-origin differences over time. Some groups are on a "negative" trajectory over time that is not explained by their socioeconomic status or family resources. For example, Black third-and-higher-generation children and Mexican-origin children see test scores decline over time when compared to non-Hispanic White third-and-higher-generation children. Likewise, the higher performance of children of Chinese, Vietnamese, and other East Asian migrants persists over time indicating even greater divergence from non-Hispanic White third-and-higher-generation children.

The results by national origins are strongly suggestive of some emerging "panethnic" patterns of academic performance. In other words, it seems that children of "Hispanic" immigrant origins lag behind and children of some, but not all, "Asian" immigrant origins pull ahead. Does this mean that there is a divergent trajectory for children of immigrants that will see them ultimately converge with third-and-higher-generation peers from the same racial or panethnic groups? Does the color line become reified at such an early age?

Figure II.   **Predicted Average 2002 Math Test Scores by Race/Ethnicity for Third+
Generation or Parent's Country of Origin for Children of Immigrants**
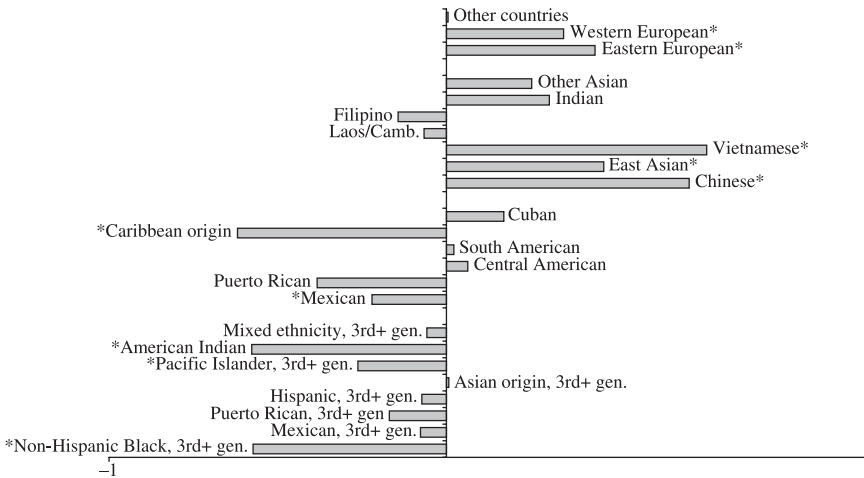
Source: ECLS-K, Kindergarten Class of 1998–1999; weighted and adjusted for design effects.
Note: *Predicted value is significantly different from non-Hispanic White, 3rd+ generation.

One way to address these questions is to compare children not only to
non-Hispanic White children but to their third-generation co-ethnic peers as
well. We illustrate this in Figure II, where we present predicted math test scores
(from the full Model 4 of Table 3) for all racial/ethnic third-and-higher-
generation groups along with national origin groups of first- and second-
generation children. The predicted math test score for Whites in the third and
higher generation is presented as the axis so that each bar demonstrates predicted
distance (either positive or negative) from this reference group, making clusters
by ethnicity or national origins, where they exist, more visible.

One cluster that emerges is made up of non-Hispanic Black third-and-
higher-generation children, Pacific Islander third-and-higher-generation children,
and American Indian children along with children of Caribbean-origin
immigrants. These groups all lag behind non-Hispanic Whites and yet are not
statistically significantly different from one another. A second cluster emerges
among several of the Hispanic groups. Children of Mexican-origin immigrants
do score below the non-Hispanic White reference group but they also score
significantly above this first disadvantaged cluster. Thus, a second group emerges

among Mexican-origin children (particularly third and higher generation), Puerto Rican-origin children (all generations), and other "Hispanic"-origin children of immigrants whose predicted scores are not statistically significantly different from one another. Finally, there is a third clear cluster of scores among Chinese, East Asian, Vietnamese, and European children of immigrants who all have scores significantly higher than every other racial/ethnic third-generation group including Asian-origin children of the third and higher generation. Although these may be substantively small differences in terms of individual learning trajectories, they do suggest significantly different patterns by group that could continue into the children's future. Such a result would certainly coincide with previous research findings on adolescents. The inclusion of European immigrants' children in this highest cluster also suggests that divergent outcomes by nativity are not confined to racial or ethnic minority groups in the United States and may point to the significance of selection of these immigrant parents (Feliciano, 2005).

DISCUSSION

Children of immigrants come from diverse backgrounds and enter school with different experiences and resources. This paper addresses two basic questions: (1) To what extent does generation status or family experience in the United States exert independent effects on early school performance even in the face of controls for family background, race/panethnicity in the U.S., and language proficiency? (2) To what extent do these broad conceptualizations of children in immigrant families mask variation by national origins? We also assessed the extent to which family behaviors, such as school involvement or non-school activities and outings, explain differential outcomes for children of immigrant parents. Our analyses take advantage of a large sample of young children in U.S. schools to ask which characteristics so closely entwined with immigrant status today predict early school performance. Our focus on race/ethnicity in particular is designed to address current debates over the continued significance of race for children's academic performance and questions regarding the extent to which children of immigrants are affected by being embedded in the U.S. racial/ethnic hierarchy. Further, we take advantage of the longitudinal nature of the data to ask whether deficits present in the first year or two of formal school persist two years later.

The results support the findings of numerous studies that have continually emphasized the importance of considering diversity within the immigrant population (*i.e.*, Portes and Rumbaut, 2001, among others). Our results point

to a continued significance of race/ethnic origins that persists net of family background or even language proficiency. Further, our results suggest that some children of immigrants do have divergent academic trajectories such that some groups see scores move toward those of third-and-higher-generation minority groups while others surge ahead. These divergent trajectories are not explained away by differential socioeconomic status or other family background characteristics measured after arrival in the United States. We cannot directly assess selectivity of migration with these data.

The results also suggest that parental behaviors and involvement are associated with academic outcomes among young children. Family resources and behaviors are also beneficial to all children regardless of nativity, supporting calls to increase parental involvement at home and at school.

Parents who attend school events, enroll children in classes outside of school, or take children on outings may be more motivated or better informed about their children's needs or better able to seek assistance for children's academic skill acquisition. Regardless of whether these measures indicate some dimension of parental motivation or are directly related to children's academic success, it is clear that these activities alone cannot completely account for disadvantages associated with race/ethnic position in the United States.

The analyses presented here also demonstrate the importance of looking within generation status at national origins. We find some intriguing support for the idea that adaptation in the United States really takes on a "segmented" feature along racial lines but that not all national origin groups can be so easily categorized. When we divide children according to national origins and compare their test scores to third-and-higher-generation children from various racial/ethnic backgrounds, we are able to observe clustering of scores for Black third-and-higher-generation children, children of Caribbean immigrants, and American Indian children. Children of Mexican immigrants lag behind their third-generation co-ethnic peers but still perform significantly better than this lowest scoring group. It remains to be seen whether these children will lose ground over time or rise to the scores of the third-and-higher-generation Mexican-origin children. We are also able to replicate other studies suggesting Asian origin immigrants are a diverse group with divergent paths through school. While children of Vietnamese, Chinese, and other East Asian-origin immigrants surpass all of their peers on the math test score, children of Laotian or Cambodian immigrants, Indian, and Filipino immigrants have lower scores. And, when we adjust for prior test performance, we still see some divergence and clustering, suggesting that these group differences may lead to quite different academic trajectories as children move through school.

Our findings are consistent with those found for adolescents. Racial/ ethnic minority children, particularly black and Hispanic youth from all generations, perform less well on academic achievement tests than their non-Hispanic white counterparts. In adolescence, significant racial/ethnic differences in academic achievement persist through schooling while generation status appears to exert less of an impact on subsequent academic performance once previous performance is taken into account (Glick and White, 2003). It seems likely that the effect of racial/panethnic group could eventually predominate over the national origin differences we find here when predicting academic performance into the future. Analyses with later waves of the survey will help elucidate the long-term trajectories and relative importance of all of these factors so closely intertwined with one another.

There are some limitations to the analyses presented here. Most notably, the country-of-origin background for children in the third and higher generation is unavailable. This means all third-and-higher-generation children are compared within the same racial and panethnic groups that mask such variation for first- and second-generation children. While the racial/ethnic groupings presented may have some real consequences for the lives of these children, they may still mask important diversity within the third-and-higher-generation groups. In addition, while we can observe some differences by parent's age at migration, we are unable to determine the mode of entry to the United States by the immigrant parents. It seems likely that some of the differences we observe that are not captured by controls for income or parental education are still due to differential selectivity of migrants across countries (Feliciano, 2005). Finally, race/ethnicity cannot be used as a sole proxy for context of reception. Future analyses including other contextual variables will be better able to assess the importance of context of reception variation than the analyses presented here.

Overall, the results presented here suggest that academic performance diverges by nativity and, more specifically, by national origins, in the early years of formal schooling in the United States. This is of particular concern when we consider the children in immigrant families who may face blocked opportunities to their subsequent achievement that keep them on similar trajectories as children from the same minority panethnic group in the third or higher generation (Portes and Rumbaut, 2001). Should this occur, we can expect recent immigration to simply feed the system of racial/ethnic inequality in the United States. The analyses presented here provide an initial view of school performance; further waves of data will allow us to observe the extent to which groups converge over time.

APPENDIX TABLE A
COUNTRY-OF-ORIGIN GROUPINGS FROM ECLS DATA

Country Grouping Label	Countries Included in Group	Number of Cases
Mexico	Mexico	765
Puerto Rico	Puerto Rico	59
Central American	Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua	138
South American	Argentina, Chile, Uruguay, Bolivia, Peru, Ecuador, Colombia, Venezuala, Guyana, Brazil, Panama	139
Cuba	Cuba	41
Caribbean	Aruba, Bahamas, Bermuda, Dominica, Haiti, Jamaica, Trinidad & Tobago, Virgin Islands, Dominican Republic	139
China	China, Taiwan, Hong Kong	92
Vietnam	Vietnam	87
Laos/Cambodia	Laos, Cambodia	108
The Philippines	The Philippines	212
India	India	89
Other East Asian	North Korea, South Korea, Japan	68
Other Asian	Malaysia, Singapore, Sri Lanka, Thailand, Burma	63
Eastern Europe	Former Macedonia, Bulgaria, Romania, Croatia, Slovakia, Poland, Albania, Malta, Russia, Ukraine, Georgia, Turkey, Armenia, Moldova	71
Western Europe	Canada, New Zealand, Austria, Australia, Andorra, Belgium, France, Germany, Luxembourg, Cyprus, Greece, Netherlands, Portugal, San Marino, Spain, United Kingdom, Finland, Sweden, Iceland, Switzerland, Italy/Vatican City	185
Other Countries	Pakistan, Afghanistan, Iran, Iraq, Kuwait, Jordan, Oman, Qatar, Saudi Arabia, United Arab Emirates, Yemen, Lebanon, Israel, Syria, South Africa, Zimbabwe, Burundi, Kenya, Ethiopia, Djibouti, Nigeria, Togo, Guinea, Ghana, Liberia, Cape Verde, Sierra Leone	149

Source: ECLS-K, Kindergarten Class of 1998–1999.

APPENDIX TABLE B
RACIAL/ETHNIC IDENTITY OF FIRST- OR SECOND-GENERATION CHILDREN BY PARENTS' COUNTRY OF ORIGIN

	US/3+ Generation	Mexico	Puerto Rico	Central American	South American	Cuba	Caribbean	Eastern Europe	Western Europe
Non-Hispanic White	68.0	0.4	4.4	10.4	17.0	4.8	3.8	91.0	74.9
Non-Hispanic Black	15.9	0.1	2.2	7.0	2.7	0.0	38.1	1.3	6.4
Mexican Origin	5.4	91.0	1.4	7.6	2.5	0.0	0.3	4.6	4.0
Puerto Rican Origin	0.9	0.2	75.9	0.6	3.2	1.5	6.2	0.0	2.0
Other Hispanic	0.4	7.9	15.3	73.0	62.6	93.8	42.9	0.0	5.4
Asian Origin	1.4	0.5	0.8	0.0	9.2	0.0	6.2	0.4	4.6
Pacific Islander	0.5	0.2	0.0	0.0	1.1	0.0	1.1	0.0	1.6
American Indian	1.9	0.0	0.0	0.0	0.5	0.0	0.5	0.0	0.0
Mixed Race/Ethnic.	2.5	0.0	0.0	0.0	0.7	0.0	0.8	2.7	1.0

	China	Other East Asian	Vietnam	Laos/Cambodia	The Philippines	India	Other Asian	Other Countries
Non-Hispanic White	0.0	28.5	2.1	0.5	2.5	2.7	4.2	29.8
Non-Hispanic Black	0.0	0.0	0.0	0.0	0.0	0.0	36.6	25.1
Mexican Origin	0.0	1.9	0.0	0.0	0.0	0.0	2.0	0.9
Puerto Rican Origin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3
Other Hispanic	0.0	0.0	0.0	0.0	3.0	0.0	0.0	31.1
Asian Origin	100.0	65.5	96.6	96.6	75.3	97.3	36.2	8.4
Pacific Islander	0.0	0.0	1.3	2.9	13.8	0.0	20.6	0.1
American Indian	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mixed Race/Ethnic.	0.0	4.1	0.0	0.0	5.4	0.0	0.4	0.3

Source: ECLS-K, Kindergarten Class of 1998–1999.
Note: Sample weighted and adjusted for design effects.

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