The Future of Children
PRINCETON-BROOKINGS

Immigrant Children

VOLUME 21 NUMBER 1 SPRING 2011

A COLLABORATION OF THE WOODROW WILSON SCHOOL OF PUBLIC AND INTERNATIONAL AFFAIRS AT PRINCETON UNIVERSITY AND THE BROOKINGS INSTITUTION

The Future of Children seeks to translate high-level research into information that is useful to policy makers, practitioners, and the media.

The Future of Children is a collaboration of the Woodrow Wilson School of Public and International Affairs at Princeton University and the Brookings Institution.

The Future of Children would like to thank the Bill & Melinda Gates Foundation for their generous support for this volume.

ISSN: 1054-8289
ISBN: 978-0-9814705-6-6

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www.futureofchildren.org

Immigrant Children: Introducing the Issue

Marta Tienda and Ron Haskins

Large numbers of immigrant children are experiencing serious problems with education, physical and mental health, poverty, and assimilation into American society. The purpose of this volume is to examine the well-being of these children and what might be done to improve their educational attainment, health status, social and cognitive development, and long-term prospects for economic mobility.

The well-being of immigrant children is especially important to the nation because they are the fastest-growing segment of the U.S. population. In 2008, nearly one in four youth aged seventeen and under lived with an immigrant parent, up from 15 percent in 1990.[1] Among children younger than nine, those with immigrant parents have accounted for virtually all of the net growth since 1990.[2] What these demographic trends portend for the future of immigrant children, however, is highly uncertain for several reasons. First, whether they achieve social integration and economic mobility depends on the degree of access they have to quality education from preschool through college. Second, these young immigrants are coming of age in an aging society that will require unprecedented social expenditures for health and retirement benefits for seniors. Third, large numbers of these youth now live in communities where few foreign-born residents have previously settled. That more than 5 million youth now reside in households of mixed legal status, where one or both parents are unauthorized to live and work in the United States, heightens still further the uncertainty about the futures of immigrant children.[3] Although nearly three-fourths of children who live with undocumented parents are citizens by birth, their status as dependents of unauthorized residents thwarts integration prospects during their crucial formative years.[4] Even having certifiably legal status is not enough to guarantee children's access to social programs if parents lack information about child benefits and entitlements, as well as the savvy to navigate complex bureaucracies.

In this volume, we use the term *immigrant youth* to refer to children from birth to age seventeen who have at least one foreign-born parent. Because an immigrant child's birthplace—that is, whether inside or outside the United States—is associated with different rights and responsibilities and also determines

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eligibility for some social programs, to the extent possible contributors to the volume distinguish between youth who are foreign-born (designated the *first generation*) and those who were born in the United States to immigrant parents (the *second generation*). U.S.-born children whose parents also were born in the United States make up the *third generation*.[5]

The Problem

Contemporary immigrant youth are far more diverse by national origin, socioeconomic status, and settlement patterns than earlier waves of immigrants, and their growing numbers coincide with a period of high socioeconomic inequality.[6] Recent economic and social trends provide cause for concern. On most social indicators, children with immigrant parents fare worse than their native-born counterparts. For example, compared with their third-generation age counterparts, immigrant youth are more likely to live in poverty, forgo needed medical care, drop out of high school, and experience behavioral problems.[7] At the same time, however, immigrant youth are more likely than natives to reside with two parents, a family arrangement generally associated with better outcomes for youth than is residing with a single parent. The benefits of this protective family arrangement, however, are weakened for immigrant youth whose parents are not proficient in English, are not authorized to live and work in the United States, and have only limited earnings capacity.

The academic progress of the large majority of immigrant youth residing in households whose members speak a language other than English lags behind that of children whose parents were born in the United States. According to the U.S. Department of Education, the share of children aged five to seventeen living in families that speak a language other than English rose from 9 percent in 1979 to 21 percent in 2008. Of these youth in non-English-language households, who represent 5 percent of all school-aged youth in the United States, nearly one in four speaks English with difficulty.[8] Youth reared in homes where English is not spoken lag behind native youth in reading and math achievement, especially if their parents have little education. We underscore that it is the combination of poor parental schooling and not using English at home that is associated with poor scholastic outcomes for immigrant minority youth.[9]

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Historically immigrants have used schools not only to acquire the skills and knowledge needed for successful integration into U.S. society, but also, paradoxically, to achieve ethnic recognition. Even as the children of German, Italian, and Russian immigrants learned English and adopted American norms decades ago, their parents rallied around foreign-language instruction and bilingualism as a symbol of national identity.[10] Although contemporary immigrants largely hail from Latin America and Asia rather than from Europe, similar scenes play out

today in disputes between parents and school administrators about whether schools are responsible for maintenance of home languages and in the enactment of public laws that declare English the nation's official language. A crucial difference, however, is that the educational requirements for successful economic integration are higher now than in the past, when basic literacy and numeracy often provided entry to secure jobs that paid a family wage. Today, failure to master English in the early grades undermines scholastic achievement, educational attainment, and, ultimately, economic mobility.[11]

Although researchers and policy analysts agree that the educational attainment of immigrants rises between the first and the second generation, they are divided over whether educational gains plateau or perhaps even decline for the third generation and beyond.[12] The debate over that question remains largely academic because methodological and data problems prevent a definitive adjudication. Nor do studies of multiple generations of immigrants provide an answer, because the experiences of immigrants during the 1960s and 1970s do not reflect the diverse social and economic circumstances faced by contemporary immigrant youth. Although Mexicans are the nation's largest immigrant group and the subject of many studies, their experiences cannot be generalized to all recent immigrant groups, even those from Latin America.

Controversy about the most effective way to teach children whose first language is not English is anything but academic. Ideological and political debates about preserving home languages notwithstanding, both the contemporary and historical records show that regardless of whether immigrant youths are instructed in English or a combination of English and their home language, home language loss is virtually complete by the third generation, even in cities such as Los Angeles where the density of foreign-born populations permits bilingualism to proliferate in public venues.[13] What is not debatable is the responsibility of public schools to teach English so that immigrant youth can succeed in school. Pragmatically, that responsibility requires effective teaching of academic subjects in English so that students master increasingly complex concepts and vocabulary.

Researchers disagree about whether it is more effective to teach English to non-English speakers through bilingual instruction or English immersion. Indeed, in the debate over the better means to reach the end—academic achievement—the means sometimes becomes an end in itself. In their article in this volume, Margarita Calderón, Robert Slavin, and Marta Sánchez assert that the pedagogical strategy is less consequential than the quality of instruction, but this message has been slow to reach schools and districts mired in bureaucratic regulations for serving immigrant youth. Controversies about pedagogy aside, evidence is incontrovertible that children who begin kindergarten with limited proficiency in spoken English fall behind native speakers in both reading and math proficiency; moreover, early achievement gaps widen through primary school and carry over to middle school and beyond.[14] Sociologist Min Zhao claims, and we agree, that English mastery is the single most important prerequisite for academic success and socioeconomic assimilation of immigrant children.[15]

Analyses of the Early Childhood Longitudinal Study, Kindergarten Class of 1998–99 (ECLS–K), show that the reading skills of language-minority kindergarten students

who are proficient in spoken English are comparable to those of native speakers and that the two groups make comparable gains in skills as they move through school. Furthermore, math achievement gaps between native speakers and immigrant youth who are proficient in English when they begin school narrow over time.[16] By contrast, minority students who begin kindergarten with limited oral English proficiency fall behind native speakers in their reading ability, resulting in a substantial achievement gap by fifth grade.[17]

Despite ample evidence of upward educational mobility between the first and second generation, especially for immigrant youth from Latin America, the uneven progress by national origin is worrisome. Asian-origin migrants attain higher levels of education on average than native white youth, owing largely to their higher college attendance and completion rates. Most of Hispanics' intergenerational educational progress takes place at the secondary level; their postsecondary progress has been more limited.[18] College attendance, it must be said, is not a basic right nor is access to a postsecondary education guaranteed for academically qualified youth, regardless of their parents' or their own immigration status. The 1982 *Plyler v. Doe* Supreme Court decision that guarantees K–12 schooling for immigrant youth whose parents, or who themselves, are undocumented does not apply to postsecondary schooling, which is neither compulsory nor free.[19]

Findings of the Volume

The articles in this volume fall into three broad categories. The first two articles set the stage for the subsequent review of research about the well-being of immigrant youth in the United States and provide an overview of demographic trends and family arrangements. The following five articles address educational trends and differentials, including language fluency. The final three articles take a close look at youthful immigrants' health status, social integration, and participation in welfare and other public programs. We turn now to a summary of the articles in the volume.

Demographic Trends

Jeffrey Passel of the Pew Hispanic Center surveys demographic trends of the U.S. youth population, with an emphasis on trends among immigrant youth. Immigrant youth now account for one-fourth of the nation's 75 million children; by 2050 they are projected to make up one-third of more than 100 million U.S. children. The wave of immigration under way since the mid-1960s has made children the most racially and ethnically diverse age group in the United States in the nation's history. In 1960, Hispanic, Asian, and mixed-race youth made up 4 percent of all U.S. children; today their share is 28 percent. During that same period the share of non-Hispanic white children steadily dropped from about 80 percent to 57 percent. Demographers project that by 2050, when one-third of all U.S. children will be Hispanic, non-Hispanic whites will make up only 40 percent.

Because many immigrants arriving since 1970 are unskilled, and hence have low earnings capacity, the changing demography of America's youth presents policy makers with several challenges in coming decades, including high rates of youth poverty, particularly among foreign-born children and children of undocumented parents, dispersal of immigrants to new destinations, and a lack of political voice. In addition, youth and the elderly will compete for scarce societal resources such

as education funding, Social Security, and government health benefits.

Living Arrangements

Nancy Landale, Kevin Thomas, and Jennifer Van Hook, all of Pennsylvania State University, examine differences by country of origin in immigrant families' human capital, legal status, social resources, and living arrangements, focusing especially on children of Mexican, Southeast Asian, and black Caribbean origin. Problems common to immigrant families, such as poverty and discrimination, may be partially offset by the benefits of living in two-parent families, an arrangement that is more common among immigrants than among U.S.-born youth. But the strong marriage bonds that protect immigrant children erode as families in the second and subsequent generations become swept up in the same social forces that are increasing single parenthood among all American families.

Immigrant families face many risks. The migration itself sometimes separates parents from their children. Mixed legal status afflicts many families, especially those from Mexico. Parents' unauthorized status can mire children in poverty and unstable living arrangements. Sometimes unauthorized parents are too fearful of deportation to claim the public benefits for which their children qualify. Refugees, especially Southeast Asian immigrants, sometimes lose family members to war or hardship in refugee camps.

Education: Preschool Programs

Immigrant children are more likely than native children to face circumstances, such as low family income, poor parental education, and language barriers, that place them at risk of developmental delay and poor academic performance once they enter school. Lynn Karoly and Gabriella Gonzalez, both of the Rand Corporation, examine how early care and education (ECE) programs can offset these problems and promote the development of preschool immigrant children. Participation in center-based care and formal preschool programs has been shown to have substantial short-term benefits that may extend into adolescence and beyond. Yet immigrant children participate in nonparental care of any type, including center-based ECE programs, at lower rates than native children.

Affordability, availability, and access to ECE programs are structural barriers for many immigrant families, just as they are for disadvantaged families more generally. In addition, language barriers, bureaucratic complexity, and distrust of government programs, especially among undocumented workers, may discourage participation, even when children might qualify for subsidies. Cultural preferences for parental care at home can also be a barrier.

The authors make two policy recommendations for improving ECE participation rates among immigrant children. First, although federal and state ECE programs that target disadvantaged children in general are likely to benefit disadvantaged immigrant children as well, making preschool attendance universal, as some states have done, or making preschool available based on residence in targeted communities rather than based on targeted child or family characteristics, would likely further boost participation by immigrant children. Second, publicly subsidized programs can be structured and marketed to minimize such obstacles as language barriers, cultural sensitivities, informational gaps, and misperceptions about government services or ECE programs.

Education: K–12

Robert Crosnoe of the University of Texas–Austin and Ruth López Turley of Rice University examine the performance of immigrant children in K–12 education, paying special attention to differences by generational status, race and ethnicity, and national origin. Immigrant youths often outperform their native peers in school—an advantage known as the immigrant paradox, because it would not be predicted by the relatively higher rates of social and economic disadvantages among immigrant families. The paradox is more pronounced among the children of Asian and African immigrants than other groups, is stronger for boys than for girls, and is far more consistent in secondary school than in elementary school. School readiness appears to be one area of potential risk for children from immigrant families, especially those of Mexican origin. For many groups, including those from Latin America, evidence of the immigrant paradox usually emerges after researchers control for family socioeconomic circumstances and children's English language skills. For other groups, the immigrant paradox is at least partially explained by "immigrant selectivity," or the tendency for more advantaged and ambitious families to leave their home country for the United States.

Differences between immigrant and native youth in nonacademic outcomes are often more mixed. Adolescents from Asian immigrant families often rank higher than their peers in academic achievement but lower in socioemotional health. And kindergarteners from Mexican immigrant families often rank lower than their peers on academic skills but higher on classroom adjustment. Strong family ties help explain the immigrant advantages, but the poor quality of schools and immigrant neighborhoods may suppress these advantages and place immigrant children at risk for a host of negative developmental outcomes.

Crosnoe and Turley also discuss policy proposals targeting immigrant youth, especially those from Latin America. Among the proposals are the federal Development, Relief, and Education for Alien Minors (DREAM) Act, which would create a pathway to citizenship for undocumented youth who meet certain criteria, including completing two years of postsecondary education; culturally grounded programs to prepare immigrant adolescents for college; and programs to involve immigrant parents in young children's schooling.

Education: Community Colleges

Robert Teranishi, Carola Suárez-Orozco, and Marcelo Suárez-Orozco, all of New York University, explore how community colleges can better serve the specific educational needs of immigrant students.

A first priority is to boost the enrollment of such students. Because community colleges are conveniently located, cost much less than four-year colleges, often feature open admissions, and often try to accommodate the needs of students who work or have family responsibilities, immigrant students are already highly likely to enroll in two-year colleges. But through outreach programs, community colleges could attract even more immigrant students by providing mentors to help them apply and to overcome hurdles unique to their status as immigrants. Both government and private-sector groups could support campaigns to inform immigrant families about financial aid available for postsecondary studies and assist them in navigating the financial aid system. Community colleges themselves could raise funds

to provide scholarships for immigrants and undocumented students.

To ensure that immigrant students succeed and continue their studies, community colleges should provide high-quality counseling and academic planning tailored to their needs. To better serve those seeking to improve their English language skills, community college leaders and state policy makers should fund high-quality adult English as a Second Language (ESL) instruction. Federal reforms should also allow financial aid to cover tuition for ESL courses.

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Perhaps even more than for most of the topics covered in this volume, research on programs that are successful in improving the preparation, boosting the enrollment, or improving the performance of immigrant students in community colleges is notably thin. There is no shortage of good ideas, as this chapter shows, but it is difficult to know whether the programs are effective. Thus, policy recommendations for improving the role of community colleges in increasing the educational achievement of immigrant students require more research about what works and why.

Education: Four-Year Colleges

Sandy Baum of Skidmore College and Stella Flores of Vanderbilt University stress that it is in the nation's long-term economic interest to enable immigrants to complete a postsecondary education.

Some immigrant youth are well represented in the nation's colleges and universities. Others, notably those from Latin America, Laos, and Cambodia, are not. The underrepresentation of those groups is largely explained by the poor neighborhoods into which they settle, the low socioeconomic status of their parents, the poor quality of the schools they attend, discrimination, and legal barriers. For low-income students, whether of the first, second, or third generation, paying for college is an especially formidable barrier.

The sharp rise in demand for skilled labor over the past few decades has made it more urgent than ever to provide access to postsecondary education for all. Policy solutions, say the authors, require researchers to learn more about the differences among immigrant groups, regarding both their human capital and the social and structural environments into which they are received.

Removing the legal barriers to education faced by undocumented immigrants poses political, not conceptual, problems. Because federal efforts have stalled, it is up to state legislatures to address this issue. Providing adequate funding for postsecondary education through some combination of low tuition and grant aid is also straightforward, if not easy to accomplish. Assuring that Mexican immigrants and others who grow up in low-income communities and attend low-quality schools can prepare themselves academically to succeed in college is especially challenging. Policies to improve the elementary and

secondary school experiences of all children are likely the most important components of a strategy to improve the postsecondary success of all.

Education: English Learners

The fastest-growing student population in U.S. schools today is children of immigrants, half of whom do not speak English fluently. Wide and persistent achievement disparities between these English learners and English-proficient students indicate that schools must address the language, literacy, and academic needs of English learners more effectively. Margarita Calderón and Robert Slavin of Johns Hopkins University and Marta Sánchez of the University of North Carolina–Chapel Hill identify the elements of effective instruction and review a variety of successful program models.

Since the 1960s, most U.S. schools with large populations of Spanish-speaking English learners have developed a variety of bilingual programs to instruct English learners in both Spanish and English. Other schools have implemented English as a Second Language (ESL) programs in which teachers instruct only in English but use second-language acquisition instructional strategies (sometimes called "Structured English Immersion"). Researchers have fiercely debated the merits of both forms of instruction.

Calderón, Slavin, and Sánchez assert that the quality of instruction and programmatic features in a whole-school approach to instructing English learners is what matters most for promoting academic achievement. The authors examine English language instruction that has been proven effective, highlighting comprehensive reform models, as well as individual components of these models: school structures and leadership; language and literacy instruction; integration of language, literacy, and content instruction in secondary schools; cooperative learning; professional development; parent and family support teams; tutoring; and monitoring implementation and outcomes.

The authors conclude that because more and more English learners are enrolling in the public schools, schools must improve the skills of all K–12 educators through comprehensive professional development.

Physical and Mental Health

Health status is a vital aspect of human capital. Poor childhood health contributes to lower socioeconomic status in adulthood; unhealthy workers are less productive, more costly for employers, and earn less over their lifetimes. Subsequently, low socioeconomic status among parents contributes to poor childhood health outcomes in the next generation. This cycle can be particularly pernicious for low-income minority populations, including many children of immigrants, according to Krista Perreira of the University of North Carolina–Chapel Hill and India Ornelas of the University of Washington. For the children of immigrants, poverty, the stresses of migration, and the challenges of acculturation can substantially increase their risk for developing physical and mental health problems.

Despite their poorer socioeconomic circumstances and the stress associated with migration and acculturation, foreign-born children who immigrate to the United States typically have lower mortality and morbidity risks than U.S. children born to immigrant parents. Over time and across generations, however, the health advantages fade.

Access to health care substantially influences the physical and emotional health status of immigrant children. Less likely to have health insurance and regular access to medical care services than nonimmigrants, immigrant parents delay or forgo needed care for their children. When these children finally receive care, it is often in the emergency room after an urgent condition has developed.

By promoting the physical well-being and emotional health of immigrant children, health professionals and policy makers can ultimately improve the long-term economic prospects of the next generation. To that end, Perreira and Ornelas recommend that health researchers and reformers learn more about the unique experiences of immigrant children such as their language issues, family separations, and illegal status; increase access to medical care and the capacity of providers to work with multilingual and multicultural populations; and continue to improve the availability and affordability of health insurance for all Americans.

Assimilation

Alejandro Portes and Alejandro Rivas of Princeton University examine how young immigrants adapt to life in the United States. They describe two distinct ethnic populations of immigrant children: Asian Americans, whose parents generally are highly skilled migrants; and Hispanics, whose parents are mostly unskilled manual workers. Partly because of their settlement patterns, and in particular their residential concentration in poor, segregated neighborhoods with limited amenities, differences between these two groups both in human capital and in their reception in the United States mean large disparities in resources available to the families and ethnic communities raising the new generation.

Although poorly endowed immigrant families face distinct barriers to upward mobility, their children can overcome these obstacles through learning the language and culture of the host society while preserving, at least in part, their home country language, values, and customs. There is extensive evidence that immigrants adapt culturally and progress economically between the first and second generation. Because immigrant youth from professional families tend to achieve social and economic success, policy makers should focus on children from unskilled migrant families, many of whom are further handicapped by unauthorized legal status. Racial stereotypes produce a positive self-identity for white and Asian students but a negative one for blacks and Latinos, and racialized self-perceptions among Mexican American students endure into the third and fourth generations.

The authors cite two important policies that would help immigrant youth. One is to legalize unauthorized young migrants lest, barred from conventional mobility channels, they turn to unorthodox means of self-affirmation and survival. The other is to provide volunteer programs and other forms of outside assistance to guide the most disadvantaged members of this population and help them stay in school.

Poverty

Childhood poverty is linked with a range of negative adult socioeconomic outcomes, from lower educational achievement and behavioral problems to lower earnings in the labor market. But few researchers have explored whether exposure to a disadvantaged background affects immigrant children and native children differently. George Borjas of Harvard University uses Current Population Survey (CPS) data on two specific indicators

of poverty—the poverty rate and the rate of participation in public assistance programs—to examine this important question.

He finds that immigrant children have significantly higher rates both of poverty and of program participation than do native children. Nearly half of immigrant children are being raised in households that qualify for some type of means-tested assistance compared with roughly one-third of native children. Although the shares of immigrant and native children living in poverty are lower than the shares participating in means-tested assistance programs, for each measure the rate for immigrant children is nonetheless about 15 percentage points higher than that for native children. The higher immigrant participation in means-tested programs mainly reflects their receipt of Medicaid.

Poverty rates among children vary widely depending on whether their parents are immigrants. The rate for foreign-born children with two immigrant parents is nearly double that for native children. The rate for U.S.-born children of two immigrant parents is nearly as high as that for foreign-born children, but that of U.S.-born children with one immigrant parent is about the same as that for native children. Immigrant children's rates of poverty and participation in means-tested programs also vary by national origin, and the national origin groups with the highest measured poverty and program participation rates tend to be the largest immigrant groups.

According to Borjas's analysis of the CPS data, these native-immigrant differences persist into young adulthood. In particular, the program participation and poverty rates of immigrant children are strongly correlated with both rates when they become young adults. But it is not possible, says Borjas, to tell whether the link results from a set of permanent factors associated with specific individuals or groups that tend to lead to "good" or "bad" outcomes over time or from exposure during childhood to adverse socioeconomic outcomes, such as poverty or receipt of Medicaid. Future research must explore the causal impact of childhood poverty on immigrant adult outcomes and why the impact might differ between immigrant and native families. Developing successful policies to reduce the high correlations of poverty and program participation between immigrant parents and their children requires better understanding of this correlation.

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Securing the Future: Immigrant Dividend or Immigrant Division?

That today's immigrant children are coming of age in an aging society means that the well-being of future retirees will depend increasingly on the productivity of younger workers. Some 13 percent of the U.S. population today is aged sixty-five and over, and the elderly's share of the population will continue to climb as successive cohorts

of baby boomers approach retirement age. Even as the absolute number of youth aged eighteen and under soars to a historical high, estimated at around 75 million in 2009, young people represent a shrinking share of the U.S. population.[20]

The social and economic implications of this temporal coincidence cannot be overstated because the balance of public spending currently favors the burgeoning senior population, whose political clout is strengthened through powerful organizations like AARP. Unlike seniors, children do not vote, and if their parents are not citizens, they too have little say in the political and administrative decisions that affect their children's lives. Although many organizations support immigrants' rights, either individually or collectively, they lack the political muscle and focus that AARP and other organizations provide for seniors. These political realities are especially important now because Congress appears poised to begin attacking the federal government's long-ignored debt burden, in part by slashing social programs.

Declining birth rates and population aging have shifted the burden of economic dependence from the young to seniors. A study by Susmita Pati and her associates shows that the generational balance of public spending favors seniors over young people. Between 1980 and 2000, for example, social welfare spending grew in absolute terms and as a share of gross national product for both the young and the elderly; however, the distribution of spending remained fairly stable for seniors even as it fluctuated for children.[21] Furthermore, the per capita spending gap widened by 20 percent over the period owing largely to higher Medicare and Medicaid expenses for the elderly.[22] Worse, spending on health programs for the elderly will continue to explode; left unchecked, that spending will absorb almost all new federal revenues in the future and eventually bankrupt the federal government.[23]

Seniors enjoy another fiscal protection relative to youth in part because their social benefits are financed largely by federal payroll taxes; social programs for youth, notably education and health care, rely heavily on state and local tax revenue. Benefits do not shrink for seniors because no law requires federal legislators to maintain a balanced budget and federal legislators are politically loath to cut benefits. By comparison, most states do require a balanced budget, which forces state and local politicians to make tough choices in order to balance budgets. Unlike many programs for the poor, the universal social programs for seniors—Social Security and Medicare—do not shrink during periods of economic contraction. Simply put, seniors receive their Social Security benefits in both lean and prosperous times, but school and health budgets often shrink and expand with business cycles. The 2007–09 recession has been particularly harsh for state and local governments, many of which have demonstrated that no social program—not even education—is immune from the blades of fiscal pruning. Unfortunately for immigrant youth, the poorest school districts, where they are disproportionately concentrated, have fared much worse than the wealthy districts.[24]

As immigrant children become an ever greater share of the future U.S. workforce, the economic and social well-being of retirees will depend on the human capital and economic productivity of these younger workers to a much greater extent than ever before. Thus, at a critical juncture in its history, the United States has an opportunity to invest in

immigrant youth and enable them to contribute to national prosperity even as population aging unfolds. Concretely, such investment requires strengthening early education, including equalizing English proficiency by third grade, and reducing financial and nonfinancial barriers to college. Because language proficiency is the learning platform for subsequent academic success, closing English proficiency gaps is a necessary, if insufficient, condition for eliminating achievement gaps in math, reading, and higher-order skills. James Heckman argues that English language proficiency gaps must be closed before third grade because test score gaps are relatively stable after third grade. In other words, later remedial investments may do little to reduce such gaps.[25]

Poverty and low parental earnings capacity hurt all children, no matter what their own or their parents' legal status is. Because poorly educated parents are less likely to read to their children, a substantial share of immigrant youth, particularly those from Mexico and Latin America, has limited opportunity to acquire preliteracy skills. These gaps in school readiness are decidedly larger for Mexican-origin children, who make up the fastest-growing segment of the elementary school population. As we have emphasized already, immigrant children's lower preliteracy skills stem not from the language their families speak at home, but rather from their parents' low educational attainment.[26] Importantly, this disadvantage is remediable—by ensuring that second-generation Hispanic children have access to high-quality preschool programs.

Although a growing number of jobs require some postsecondary schooling, thousands of immigrant youth face financial and nonfinancial barriers to college attendance. Both because immigrant youth are the fastest-growing population group and because the returns to college relative to high school increased markedly during the 1980s and 1990s, it is essential to raise the college attendance and completion rates of immigrant youth to boost their economic mobility, foster social cohesion, and increase their contributions to the nation's economy and to federal and state revenues. Barriers to postsecondary education are especially hard to overcome for youth who lack legal status despite having attended U.S. schools and having achieved sufficiently high academic credentials to qualify for admission.

Several states, including Texas and California, have passed legislation that extends in-state tuition to undocumented youth who are admitted to public institutions, but taxpayer-funded financial aid remains off limits for these youth. Other states interpret the provisions of the 1996 Illegal Immigration Reform and Immigrant Responsibility Act to explicitly preclude undocumented youth from attending public institutions, especially since the surge in anti-immigrant sentiment following several failed federal attempts to pass comprehensive reform legislation.[27] Resolution of legal status for young people who have attended U.S. schools is essential both to enable them to enroll in postsecondary institutions and to garner economic returns from public investment in their education.

Well before the advent of the current gridlock over comprehensive immigration reform, the U.S. Congress considered several versions of the DREAM Act as a solution to the plight of immigrant youth whose legal status often bars them from access to jobs, college, and driver's licenses.[28] Jeanne Batalova and Margie McHugh estimate that more than 700,000 young adults would qualify for

conditional permanent residence under the provisions of the most recent bill, including about 110,000 who currently hold an associate's degree or higher but are unauthorized to work legally or to obtain a driver's license. Equally important, an additional 934,000 children now under age eighteen would be eligible in the future if they complete a high school degree.[29]

However compelling the wisdom of enhancing the future of the nation through investments in immigrant youth, lawmakers face three formidable challenges to do the right thing. Political debate over immigration is polarized by differences about how to resolve the legal status of 11 million undocumented residents. State and local budgets have been eroded during the severe recession. And education spending is the largest single item in most state and local budgets. Making educational investments in immigrant youth is likely to meet with considerable opposition, particularly in school districts unaccustomed to the presence of large numbers of foreign-born residents. Because disadvantaged youth often benefit disproportionately from universal social programs, investments in immigrant children should be targeted within universal programs, and goals could be set to increase participation rates of immigrant youth.

In summary, the papers in this volume provide compelling evidence that the development of immigrant children and their integration into American society will continue to lag unless some of the proposed recommendations are implemented. Most important are the investments in health and education. Although the future of immigrant children is uncertain, what is certain is that failure to make these investments will result in higher spending on means-tested assistance programs and lower tax revenues in the future. As the ratio of senior citizens to workers continues to climb, policies to ensure the productivity of future workers will safeguard the future of the nation as well as immigrant youth.

Endnotes

1. Jeffrey S. Passel and Paul Taylor, *Undocumented Immigrants and Their U.S.-Born Children* (Washington: Pew Hispanic Center, 2010).

2. Karina Fourtney, Donald J. Hernandez, and Ajay Chaudry, "Young Children of Immigrants: The Leading Edge of America's Future," Brief 3 (Washington: Urban Institute, August 2010).

3. Passel and Taylor, *Undocumented Immigrants and Their U.S.-Born Children* (see note 1).

4. In 2008, just under 7 percent of K–12 students had at least one parent who was undocumented; see Jeffrey S. Passel and D'Vera Cohn, *A Portrait of Unauthorized Immigrants in the United States* (Washington: Pew Hispanic Center, 2009).

5. Rubén Rumbaut refined discussions about immigrant generations and coined the decimal generations—those between the first and second generation—to acknowledge the great importance of age at migration in shaping youth integration prospects and, in particular, English mastery and academic performance. The most important of these distinctions is the "1.5-generation," which refers to youth who arrive around age twelve or before. On many social indicators, the 1.5 generation is indistinguishable from U.S.-born children of immigrants. See Rubén G. Rumbaut, "Ages, Life Stages, and Generational Cohorts: Decomposing the Immigrant First and Second Generation in the United States," *International Migration Review* 38, no. 3 (2004): 1160–1205.

6. Min Zhao, "Growing Up American: The Challenge Confronting Immigrant Children and Children of Immigrants," *Annual Review of Sociology* 23 (1997): 63–95.

7. Child Trends, "Child Trends Indicators," from Child Trends DataBank (2010) (http://childtrendsdatabank.org).

8. Susan Aud and others, *The Condition of Education 2010*, NCES 2010-028 (Washington: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, 2010).

9. Barbara Schneider, Sylvia Martinez, and Ann Owens, "Barriers to Educational Opportunities in the U.S.," in *Hispanics and the Future of America*, edited by Marta Tienda and Faith Mitchell (Washington: National Academy Press, 2006). Alejandro Portes and Rubén Rumbaut distinguish between English-dominant, Spanish-dominant, and fluent bilingualism. The latter is associated with the strongest academic outcomes, followed by English dominance. Spanish-dominant bilingualism is highly problematic for academic achievement; see Alejandro Portes and Rubén G. Rumbaut, *Legacies: The Story of the Immigrant Second Generation* (University of California Press, 2001).

10. Michael R. Olneck, "What Have Immigrants Wanted from American Schools? What Do They Want Now? Historical and Contemporary Perspectives of Immigrants, Language and American Schooling," *American Journal of Education* 115, no. 3 (2009): 379–406.

11. James L. Heckman, "Skill Formation and the Economics of Investing in Disadvantaged Children," *Science* 312, no. 5782 (2006): 1900–02.

12. Based on a longitudinal survey of Mexican Americans residing in Los Angeles and San Antonio during the late 1960s, Edward Telles and Vilma Ortiz find that educational achievement of the third- and fourth-

generation respondents are lower than that of their second-generation relatives. Brian Duncan and Steven J. Trejo question whether educational attainments of the third and later generations actually decline, or reflect the selective "opting out" of the most successful and assimilated Mexican Americans. See Edward Telles and Vilma Ortiz, *Generations of Exclusion: Mexican Americans, Assimilation and Race* (New York: Russell Sage, 2008); Brian Duncan and Stephen J. Trejo, "Ethnic Identification, Intermarriage, and Unmeasured Progress by Mexican Americans," in *Mexican Immigration to the United States*, edited by George J. Borjas (Chicago: National Bureau of Economic Research and University of Chicago Press, 2007).

13. Rubén Rumbaut, Douglas S. Massey, and Frank D. Bean, "Linguistic Life Expectancies: Immigrant Language Retention in Southern California," *Population and Development Review* 32, no. 3 (2006): 447–60.

14. Michael Kieffer, "Catching Up or Falling Behind? Initial English Proficiency, Concentrated Poverty, and the Reading Growth of Language Minority Learners in the United States," *Journal of Educational Psychology* 100, no. 4 (2008): 851–68; Sean F. Reardon and Claudia Galindo, "Patterns of Hispanic Students' Math Skill Proficiency in the Early Elementary Grades," *Journal of Latinos and Education* 6, no. 3 (2007): 229–51; Sean F. Reardon and Claudia Galindo, "The Hispanic-White Achievement Gap in Math and Reading in the Elementary Grades," *American Educational Research Journal* 46, no. 3 (2009): 853–91.

15. Zhao, "Growing Up American" (see note 6).

16. Reardon and Galindo, "The Hispanic-White Achievement Gap in Math and Reading in the Elementary Grades" (see note 14).

17. Kieffer, "Catching Up or Falling Behind?" (see note 14); Reardon and Galindo, "The Hispanic-White Achievement Gap in Math and Reading in the Elementary Grades" (see note 14).

18. Marta Tienda, "Hispanicity and Educational Inequality: Risks, Opportunities, and the Nation's Future," (25th Tomás Rivera Lecture, annual conference of the American Association of Hispanics in Higher Education, San Antonio, Texas, March 2009).

19. *Plyler v. Doe*, 457 U.S. 202 (1982). The court ruled that the state of Texas could not withhold funds to school districts that educate children of undocumented immigrants because, as people in the "ordinary sense of the term," they are protected by the Fourteenth Amendment and because the laws that restricted funds to districts serving children of undocumented immigrants did not serve a compelling state interest.

20. Jeffrey S. Passel, "Demography of Immigrant Youth: Past, Present, and Future," *The Future of Children* 21, no. 1 (2011): 22, figure 1.

21. Susmita Pati and others, "Public Spending on Elders and Children: The Gap is Growing," *LSI Issue Brief* 10, no. 2 (2004): 1–4.

22. Ibid.

23. Alice M. Rivlin and Joseph Antos, eds., *Restoring Fiscal Sanity 2007: The Health Spending Challenge* (Washington: Brookings Institution Press, 2007).

24. Kieffer, "Catching Up or Falling Behind?" (see note 14).

25. Heckman, "Skill Formation and the Economics of Investing in Disadvantaged Children" (see note 11).

26. Schneider, Martinez, and Owens, "Barriers to Educational Opportunities in the U.S." (see note 9).

27. Michael Olivas, "IIRIRA, the DREAM Act, and Undocumented College Student Residency," *Journal of College and University Law* 30, no. 2 (2004): 435–64.

28. The most recent version of the bill, introduced in March 2009, would make eligible for conditional permanent resident status all persons under thirty-five years of age who entered the United States before age sixteen, who lived in the country for at least five years, and who received a high school diploma or equivalent; see Jeanne Batalova and Margie McHugh, *Insight: DREAM vs. Reality: An Analysis of Potential DREAM Act Beneficiaries* (Washington: Migration Policy Institute, 2010).

29. Ibid.

Demography of Immigrant Youth: Past, Present, and Future

Jeffrey S. Passel

Summary

Jeffrey Passel surveys demographic trends and projections in the U.S. youth population, with an emphasis on trends among immigrant youth. He traces shifts in the youth population over the past hundred years, examines population projections through 2050, and offers some observations about the likely impact of the immigrant youth population on American society.

Passel provides data on the legal status of immigrant youth and their families and on their geographic distribution and concentration across the United States. He emphasizes two demographic shifts. First, immigrant youth—defined as those children under age eighteen who are either foreign-born or U.S.-born to immigrant parents—now account for one-fourth of the nation's 75 million children. By 2050 they are projected to make up one-third of more than 100 million U.S. children. Second, the wave of immigration under way since the mid-1960s has made children the most racially and ethnically diverse age group in the United States. In 1960 Hispanic, Asian, and mixed-race youth made up about 6 percent of all U.S. children; today that share is almost 30 percent. During that same period the share of non-Hispanic white children steadily dropped from about 81 percent to 56 percent, while the share of black children climbed very slightly to 14 percent. By 2050 the share of non-Hispanic white children is projected to drop to 40 percent, while that of Hispanic children will increase to about one-third.

This changing demographic structure in U.S. youth is likely to present policy makers with several challenges in coming decades, including higher rates of poverty among youth, particularly among foreign-born children and children of undocumented parents; high concentrations of immigrants in a handful of states; and a lack of political voice. A related challenge may be intergenerational competition between youth and the elderly for governmental support such as education funding, Social Security, and government health benefits. In conclusion, Passel notes that today's immigrants and their children will shape many aspects of American society and will provide virtually all the growth in the U.S. labor force over the next forty years. Their integration into American society and their accumulation of human capital thus require continued attention from researchers and policy makers.

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The youth population of the United States currently has several extreme demographic features. Youth are more numerous than ever before in the nation's history—almost 75 million U.S. residents were under age eighteen in 2009. Yet, because of overall population growth, youth represent just 24 percent of the total population, a smaller share than ever before. Immigrant youth are a significant factor in the growing numbers because they constitute nearly a quarter of the child population, the highest proportion in the last ninety years.

Changes in the number, proportion, and composition of the youth population over the past century largely reflect three key demographic events. Major waves of immigration bookend the twentieth century. Large-scale migration, mainly from southern and eastern Europe, changed the face of the United States at the beginning of the 1900s before being brought to an end by World War I and the restrictive legislation enacted shortly thereafter. Passage of landmark immigration legislation in 1965 spurred new immigration flows, mainly from Latin America and Asia, which increased through the end of the century. Fueled by both legal and unauthorized immigration, the foreign-born share of the U.S. population increased to levels last seen in the 1920s, and the racial and ethnic mix of the population, particularly the youth, changed dramatically.

Between these two immigration waves was the baby boom of 1946–64, a period of increased fertility rates and much higher numbers of annual births than had occurred in the nation's history or would occur for the rest of the century. This signature demographic period will continue to influence many aspects of American society well into the twenty-first century. As a result of the baby boom, the youth population reached a peak in the late 1960s and early 1970s; as the boomers moved into the labor force, the working-age population grew dramatically during the 1970s and 1980s. An "echo" of the baby boom in the 1980s, when boomers reached childbearing ages, combined with the children of the new immigrants, led to a rebound in the numbers of births and children in the population. The final impact of the baby boom will reach well into the twenty-first century as the boomers age. The first will reach age sixty-five in 2011, leading to significant growth in both the number and share of elderly into the 2030s.

In addition to contributing to population growth after the baby boom ended, post-1965 immigrants almost immediately increased racial and ethnic diversity among adults—more than three-quarters of the new immigrants were Latino or Asian. Their children, most of whom were born in the United States and are thus U.S. citizens, have led to an increasingly diverse youth population. Projections that account for generational structure and dynamics show that the racial and ethnic diversity of the nation's children will continue to increase (whether future immigration increases, holds steady, or even decreases somewhat). Moreover, because of the accumulation of a significant foreign-born population over the past three decades—now amounting to about one-sixth of the adult population—the share of immigrant youth will continue to grow in the future—from 23 percent of all children today to about one-third of an even larger number of children in twenty-five years. As these youth move into adulthood, they will shape many aspects of U.S. society, especially given the relatively low fertility of the native-born white and black populations. Almost all

growth in the young adult population (ages eighteen to forty-four years) will come from immigrants and their U.S.-born children. Thus, immigrants and their children will provide virtually all of the growth in the U.S. labor force over the next forty years.[1] Immigration-driven growth in the child population will be occurring at the same time as the aging baby boomers will increase the elderly population. The accompanying pressure on retirement and health care systems may lead to generational competition for societal resources.

This article provides a broad overview of immigrant youth in the United States, defined to include children who are themselves immigrants (the first generation) and the U.S.-born children of immigrants (the second generation). It assesses the size and growth of the current youth population in comparison with other key age groups and examines youth's generational composition, the legal status of immigrant parents and their children, the distribution of youth across the country, their racial and ethnic make-up, and their geographic origins. The article places today's youth population in the broad sweep of U.S. demographic history from 1900 to the present and maps a likely future through 2050. It concludes with some observations about the immigrant youth population's impact on society past, present, and future.

Data Sources and Terminology

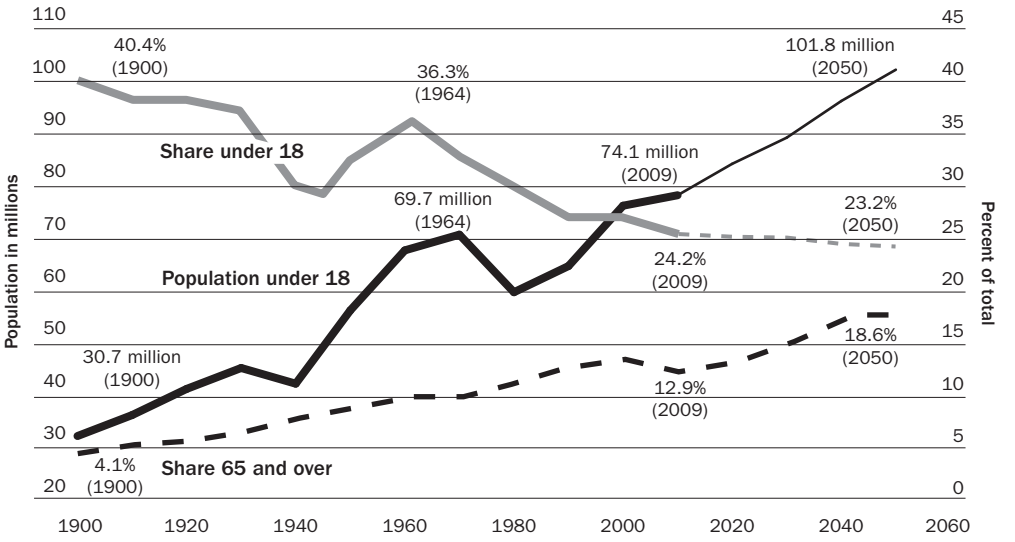
Three principal sources provide the bulk of the data analyzed here on demographic characteristics of immigrant youth. A set of generational population projections provides prospective data for 2010–50 as well as retrospective data for 1960–2000.[2] Data on characteristics of the current youth population are drawn from the March supplements to the Current Population Survey (CPS). Together with colleagues at the Urban Institute and the Pew Hispanic Center, I augmented these surveys in earlier work to classify immigrant respondents as legal or unauthorized and to adjust for omissions (see the technical appendix to this article).[3] The Census Bureau's historical population estimates provide the annual data on population for 1900–2009. Finally, tabulations of decennial census data for 1900–60 from the Integrated Public Use Microdata Series (IPUMS) are the principal source for historical data on characteristics of the youth population.[4]

I define generations on the basis of nativity, citizenship, and nativity of parents. The foreign-born population (immigrants to the United States) is considered to be the first generation. The native population includes the second generation (U.S.-born with at least one immigrant parent)[5] and the third and higher generations, generally referred to as the third generation (U.S.-born with two U.S.-born parents).[6] Persons born in Puerto Rico and other U.S. territories are U.S. citizens at birth; they and their U.S.-born children are considered part of the third and higher generations.[7]

Youth Population: Numbers and Shares

In 2009, 74.7 million children under age eighteen lived in the United States, representing just over 24 percent of the total population.[8] The number of children is an all-time high for the United States, but their share of the population is an all-time low (figure 1). The changing age structure of the U.S. population over the past century reflects the joint influences of fertility trends and mass immigration at the beginning and end of the 1900s. Although fertility rates dropped steadily from the founding of the nation

Figure 1. Population under Eighteen and Share of Total, 1900–2050



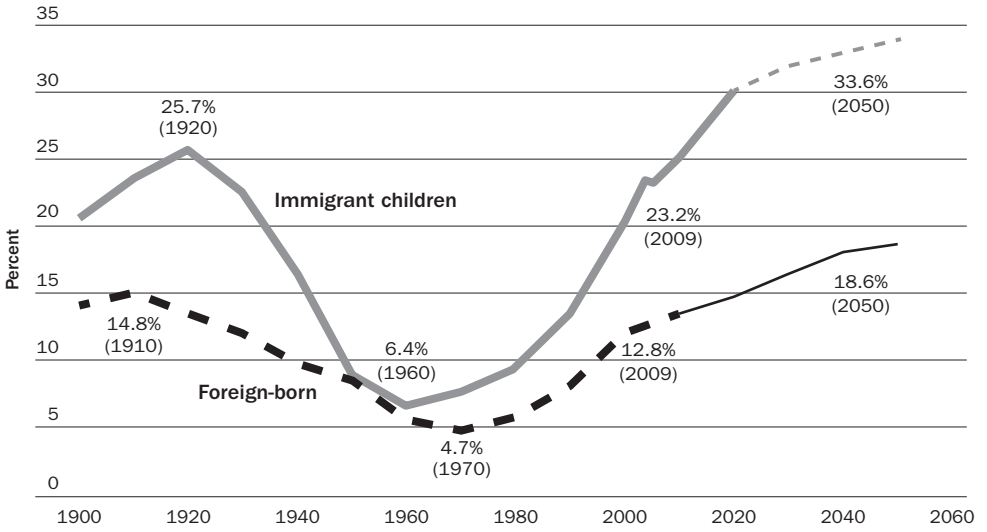
Sources: Census Bureau population estimates through 2009, projections for 2010–50 from Jeffrey S. Passel and D'Vera Cohn, *U.S. Population Projections: 2005–2010* (Washington: Pew Hispanic Center, 2008).

through the 1930s, the combination of relatively high fertility and mortality rates resulted in a young population with a high percentage of children (over 40 percent in 1900).[9] Even with continuing declines in fertility rates, the relative youth of the population resulted in increasing numbers of children through 1929. The very low fertility rates during the Great Depression, combined with a virtual cessation of immigration, led to a shrinking child population through 1942. The share of children in the population dropped steadily to just under 30 percent in 1946.

The baby boom of 1946–64 reversed these trends sharply. Annual births exceeded 4 million every year from 1954 to 1964.[10] The child population grew rapidly to just under 70 million children in 1964 and essentially remained at that level through 1972. With the advent of the baby bust of the 1970s, the child population began to shrink again. During the boom the child population increased faster than the overall population, so the share of children increased steadily from 1946 through 1964, when the proportion of the population under age eighteen reached 36.3 percent.

Fertility rates and number of births both dropped dramatically in the 1970s. Although fertility rates have risen only slightly since then, the number of births began to grow in the late 1970s as large numbers of baby boomers began to have children. Since the mid-1980s three trends have contributed to increases in the youth population: small increases in fertility rates from the very low levels of the 1970s; a baby boom echo, as the very large boomer cohorts moved into prime childbearing ages; and growing numbers of new immigrants, who tend to be concentrated in young adult ages and to have higher fertility rates than natives. By 1996 the number of children under eighteen passed

Figure 2. Total Foreign-Born as Share of Total Population and Immigrant Children as Share of All Children, 1900–2050



Source: Population estimates for 1900–50 are based on Integrated Public-Use Microdata Series and Barry Edmonston and Jeffrey S. Passel, "Ethnic Demography: U.S. Immigration and Ethnic Variations," in *Immigration and Ethnicity: The Integration of America's Newest Arrivals,* edited by Edmonston and Passel (Washington: Urban Institute Press, 1994). Data for 1960–2000 and 2010–50 are from Passel and Cohn, *U.S. Population Projections: 2005–2010* (Washington: Pew Hispanic Center, 2008). Data for 2001–09 are from tabulations of the March Current Population Survey with imputations for legal status and corrections for undercoverage. See technical appendix.

70 million for the first time in American history, exceeding the peak levels of the baby boom. Although the number of children is still rising, youth's share of the population has continued to drop, reaching a low of 24.2 percent in 2009. Population projections show that the number of children will continue to increase, reaching more than 100 million by 2050.[11] Even with these growing absolute numbers, however, children will represent only about 23 percent of the population.

Because of its low fertility and mortality rates, the U.S. population has been aging and will continue to do so for another twenty or so years. The burgeoning elderly population may well compete with children for societal resources, especially at the federal level. In 1900 the population aged sixty-five and older represented about 4.1 percent of the population. By 2009 this share had more than tripled to 12.9 percent. Beginning in 2011, when the leading edge of the baby boom turns sixty-five, the elderly share of the population will increase rapidly through 2030, when it will exceed 18 percent, and will then level off for the next twenty years (see figure 1). In 1900 the ratio of children to elderly was almost 10 to 1; after 2030 the ratio is expected to be 1.25 to 1.

Immigrant Youth

Trends in the numbers of immigrant youth and their share of the youth population are a complex interplay of fertility trends among foreign-born and native women, as well as of current and historic levels of immigration. By the early 1900s the United States had already experienced relatively high levels of immigration for more than half a century. Immigrants represented 13–15 percent of the population from 1870 through 1920. Immigrant youth,

the children of this immigrant wave, became a large and increasing share of all youth. The first and second generations represented more than one-quarter of all children by 1920 (figure 2). The advent of World War I and restrictive immigration legislation enacted in the late 1910s and early 1920s caused the flow of immigrants to drop dramatically. As a result the foreign-born share of the population began to drop by 1920, and the absolute size of the foreign-born population peaked in 1930.

With almost no immigration in the 1930s and relatively little in the decades immediately after World War II, the share of the foreign-born population fell to 4.7 percent in 1970—the lowest it had been since 1850 when the Census began collecting data on birthplace. The aging and shrinking foreign-born population, combined with a drop in the fertility rate induced by the Great Depression, meant that the second generation was not being replenished, so the number of immigrant youth decreased, as did their share of the youth population. By 1960 immigrant youth numbered only 4.1 million—the low point of the twentieth century—down substantially from the high of 10.1 million in 1920. They represented only slightly over 6 percent of all children, or about one-fourth of their share in the early 1900s (see figure 2).

With the passage of legislation in 1965 that expanded immigration, the foreign-born population began to grow again. The origins of immigrants shifted as new laws placed potential immigrants from Asia and Latin America on an equal footing with the traditional European and Canadian sources of immigrants. Combined with the emergence of large-scale unauthorized immigration in the 1970s, mainly from Mexico and other parts of Latin America, this new wave of immigration led to fundamental shifts in the

Table 1. Population under Eighteen, by Generation and Age, 2009

Category	Under 18 years	Under 6 years	6–11 years	12–17 years
Number (thousands)				
All children	74,699	25,293	24,066	25,341
Immigrant youth	17,326	6,207	5,660	5,459
Share of all children (percent)				
Immigrant youth	**23.2**	**24.5**	**23.5**	**21.5**
First generation	3.8	1.5	4.0	5.9
Legal Immigrant	2.3	1.0	2.4	3.6
Unauthorized immigrant	1.5	0.4	1.6	2.4
Second generation	19.4	23.1	19.5	15.6
Legal parent(s)	14.0	15.4	14.3	12.3
Unauthorized parent(s)	5.4	7.7	5.2	3.3
Third and higher generations	**76.8**	**75.5**	**76.5**	**78.5**
Native parents	75.8	74.4	75.6	77.4
Puerto Rican–born*	0.2	0.1	0.2	0.3
Puerto Rican parent(s)*	0.8	0.9	0.7	0.8
U.S.-born as % of immigrant youth	**84**	**94**	**83**	**73**

Source: Author's tabulations of augmented March 2009 Current Population Survey. Data are adjusted for omissions from the survey. See technical appendix.
*Includes persons born in all U.S. territories.

composition of the American population. By the late 1990s annual inflows of unauthorized immigrants began to exceed inflows of legal immigrants and continued to do so for about a decade.[12] Since 1980 more immigrants, both legal and unauthorized, have come from Mexico than from any other country. By 2007 more than 12.5 million Mexican immigrants were living in the United States; about 55 percent of them were unauthorized.[13] Other leading sources of immigrants, by volume, were India, the Philippines, China, El Salvador, Cuba, Vietnam, and Korea. By 2009 almost 40 million residents, or 12.8 percent of a U.S. population of more than 300 million, were foreign-born. This share was only slightly below the twentieth-century peak of 14.8 percent attained in 1910, when 13.5 million residents, of a total population of 92 million, were foreign-born.

The immigrants of the late 1990s were young—the median age of the foreign-born population dropped from more than sixty in 1960 to just over forty after 2000. Immigrant women, especially those from Latin America, had higher fertility rates than U.S. natives. As the number of new immigrants in the country began to grow, so too did the number of immigrant youth. By 1990 children of immigrants accounted for 13 percent of all youth, or double the 1960 low. By 2000 the number of immigrant youth reached almost 15 million, greatly surpassing the previous high of 10.1 million in 1920. Their share of the under-eighteen population passed 20 percent. By 2009 the number of immigrant youth had risen to 17.3 million, or 23.2 percent of all children in the United States.

Even though immigration has slowed since 2005,[14] the number and share of immigrant youth will continue to grow. The country is still receiving large numbers of immigrants, the foreign-born population is large and young, and immigrant fertility rates remain higher than native rates. In recent years about one-quarter of U.S. births were to foreign-born mothers.[15] Generation-based projections show that the proportion of foreign-born youth in the country will continue to increase with even modest levels of immigration. By 2050 immigrant youth are likely to represent about one-third of all children (see figure 2).[16]

Generations in the Immigrant Youth Population

Children who are themselves immigrants, usually brought to the United States by their parents, account for a relatively small share of arriving immigrants—about 20 percent in recent years.[17] In contrast, over half of all newly arriving immigrants are of childbearing age. Because of this demographic dynamic, about five-sixths of the children of immigrants are born in the United States (table 1).

The U.S.-born children of immigrants—the second generation—enter the population at birth, by definition, and are considered immigrant youth for eighteen years; in 2009 about 84 percent of immigrant children were born in the United States (table 1, last line). In contrast, first-generation immigrant youth are those born overseas who enter the U.S. population at any age up to eighteen. About two-fifths of these first-generation children are thirteen to seventeen years old and thus "age out" of the youth population within five years of arrival. As a result, first-generation youth as a group are older than second-generation youth; the median ages in 2009 were 12.5 and 7.6 years, respectively. Moreover, the younger the age group, the higher the percentage of immigrant youth who are U.S.-born. About 94 percent of immigrant children under age six, about 83 percent of those aged six to eleven,

and 73 percent of those aged twelve to seventeen were born in the United States. The different age structures of the first and second generations affect socioeconomic characteristics of the groups and can have significant implications for education and social service programs.

Legal Status and Family Structure

The number of unauthorized immigrants residing in the United States grew by an average of roughly half a million a year, from 3.5 million in 1990 to about 12 million in 2007.[18] The growth has since stopped. Inflows of unauthorized immigrants have dropped by two-thirds, largely because of a lack of jobs and increased enforcement (both at the southern border and in the interior). In addition, the number of unauthorized immigrants leaving the country has increased for those from countries other than Mexico but not for Mexican unauthorized immigrants. As a result of diminished inflows and increased outflows, the unauthorized immigrant population dropped to about 11 million by March 2009.[19]

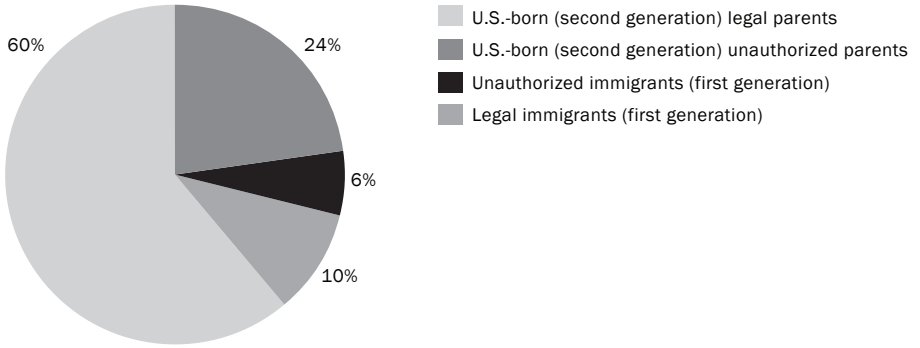
This population is very young: about one-quarter of the total are young, unaccompanied men (6 percent are unaccompanied women); and more than 60 percent of undocumented adults are in couples. Not only did many of these couples bring children with them, but many have had children in the United States. By 2009 about 1.1 million unauthorized (foreign-born) children and 10.0 million unauthorized adults lived in the United States. In addition, these adults had 4 million children who were U.S. citizens by virtue of being born in the United States, almost three-quarters of all

Table 2. Population under Eighteen, by Generation and Race or Hispanic Origin, 2009

			Non-Hispanic origin			
Category	**All children**	**Hispanic origin**	**White**	**Black**	**Asian**	**Mixed race**
Number (thousands)						
All children	74,699	16,587	41,545	10,713	3,197	2,120
Immigrant youth	17,326	10,009	2,876	1,361	2,717	355
Share of all children (percent)						
Immigrant youth	**23.2**	**60.3**	**6.9**	**12.7**	**85.0**	**16.7**
First generation	3.8	9.0	1.0	2.0	21.1	z
Legal immigrant	2.3	3.9	0.9	1.7	17.4	z
Unauthorized immigrant	1.5	5.1	0.2	0.3	3.7	z
Second generation	19.4	51.3	5.9	10.7	63.9	16.3
Legal parent(s)	14.0	30.2	5.5	9.4	56.5	16.0
Unauthorized parent(s)	5.4	21.1	0.4	1.3	7.4	z
Third and higher generations	**76.8**	**39.7**	**93.1**	**87.3**	**15.0**	**83.3**
Native parents	75.8	35.8	93.0	87.0	14.5	82.6
Puerto Rican–born*	0.2	1.0	z	z	z	z
Puerto Rican parent(s)*	0.8	2.9	0.1	0.3	**z**	0.6
U.S.-born as % of immigrant youth	**84**	**85**	**85**	**84**	**75**	**97**

Source: Author's tabulations of augmented March 2009 Current Population Survey. Data are adjusted for omissions from the survey. See technical appendix.
Notes: White, black, and Asian include persons reporting only single races; Asian includes Native Hawaiians and other Pacific Islanders. American Indians not shown separately.
z Less than 10,000 population.
*Includes persons born in all U.S. territories.

Figure 3. Immigrant Youth, by Generation and Legal Status of Parents, 2009



Source: Author's tabulations of augmented March 2009 Current Population Survey. Data are adjusted for omissions from the survey. See technical appendix.

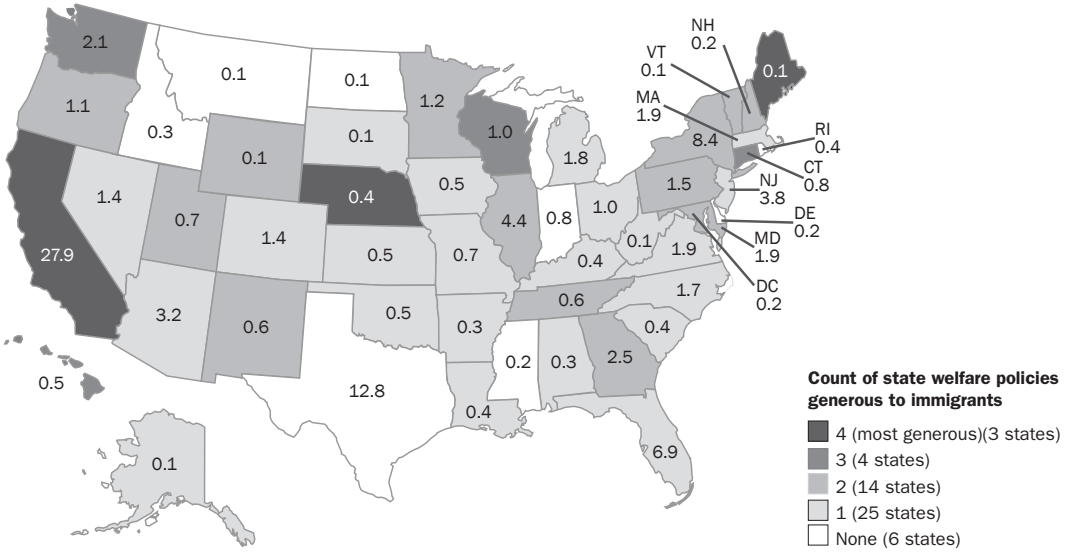
children of unauthorized immigrants (table 2).[20] The number of U.S.-born children of unauthorized immigrants has been growing in recent years, with about 300,000–350,000 births a year to undocumented immigrant parents, representing about 8 percent of all U.S. births.[21]

Families that include one or more U.S.-citizen children and one or two unauthorized immigrant adults are known as "mixed-status" families. They include all U.S.-born children of undocumented immigrants, about 450,000 unauthorized children (foreign-born siblings of the U.S.-born), and 3.8 million unauthorized adults representing more than one-third (38 percent) of adult unauthorized immigrants.[22] There are about 2.3 million mixed-status families with an average of about 1.7 U.S.-born children and 0.2 unauthorized immigrant children.

Latinos dominate the unauthorized population (almost 60 percent of all undocumented immigrants are from Mexico alone, and another 20 percent are from other parts of Latin America), so most of the children of unauthorized immigrants are Latino.[23] About three-quarters of unauthorized foreign-born children and more than 85 percent of the U.S.-born children of unauthorized immigrants are Latino. The Mexican unauthorized population stands at about 6.7 million, compared with about 500,000 for the next-largest source country (El Salvador), and as a group, unauthorized Mexicans have been in the country longer than others. Consequently, this group dominates the children of unauthorized immigrants. About two-thirds of unauthorized children are from Mexico, and about 3 million U.S.-born Mexican-origin children have at least one unauthorized parent, accounting for almost three-quarters of the U.S.-born children of unauthorized immigrants. The 450,000 U.S.-born children of unauthorized immigrants from Central and South America make up the next largest group.

Altogether, foreign-born and U.S.-born children of unauthorized immigrants represented about 6.9 percent of all children in 2009 (see table 2). However, they are about 30 percent of immigrant youth, with unauthorized foreign-born children accounting for about 6 percent of immigrant youth and the U.S.-born children of unauthorized

Figure 4. State Share of U.S. Immigrant Children and Generosity of Welfare Programs for Immigrants



Source: Author's tabulation of augmented March 2008 and 2009 Current Population Survey. Data are adjusted for omissions; see technical appendix. See text for welfare policies.
Note: Values indicate share of U.S. immigrant youth living in state based on average of 2008–09 data.

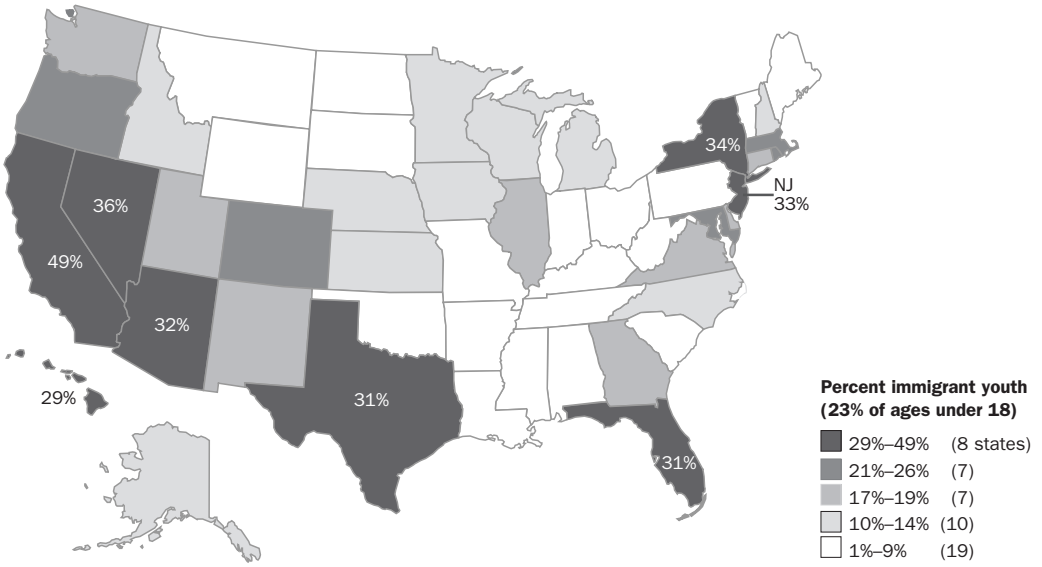
immigrants making up about 24 percent (figure 3). The mixed-status families present a number of special challenges, especially for social programs and schools. Because the U.S.-born children in the mixed-status families are U.S. citizens, they, but not their undocumented foreign-born siblings, are eligible for welfare programs, various social services, and education programs (including scholarships). Despite their children's eligibility, unauthorized immigrant parents may be reluctant to take advantage of needed programs or services for fear that government program administrators might discover their status. At the extreme are cases where undocumented parents have been subject to deportation, leaving them with difficult decisions about taking their U.S.-born children with them or leaving them in the United States where their range of opportunities would presumably be better than in the home country.[24]

Where Immigrant Youth Live

Children of immigrants live in every state, but their numbers and shares differ dramatically from state to state. Three-fourths of immigrant children live in just ten states—Arizona, California, Florida, Georgia, Illinois, Massachusetts, New Jersey, New York, Texas, and Washington. Nearly half of all immigrant children live in just three states (California, Texas, and New York), and California alone is home to 28 percent of this group (figure 4). At the other extreme, the twenty-five states with the smallest number of immigrant youth account for less than 7 percent of all immigrant youth in the United States.

California has not only the largest number of immigrant youth but also the highest concentration; roughly half of the children in the state are children of immigrants, more than twice the national share of 23 percent (figure 5). In another five states (Arizona,

Figure 5. Percent of Youth (under Eighteen) in State Who Are Children of Immigrants, 2008



Source: Author's tabulation of augmented March 2008 Current Population Survey.

New Jersey, New York, Nevada, and Texas), about one-third of the children are immigrant youth.[25] In nineteen states immigrant youth make up less than 10 percent of the child population.

States have taken different approaches to social welfare programs for immigrants and their children. Some states extend benefits to legal resident noncitizens, others allow access to legal immigrants only after a period of U.S. residency; and none routinely gives benefits to unauthorized immigrants. Figure 4 shows the "generosity" of state support programs toward noncitizens based on four access rules pertaining to noncitizens' eligibility for state-funded Temporary Assistance for Needy Families (TANF), food assistance, and Supplemental Security Income (SSI).[26] California, the state with the largest number and concentration of immigrant youth, is among the three most generous states, offering access under all four rules; the other two states are Maine and Nebraska, which together are home to just half a percent of the nation's immigrant youth. Texas, the state with the second-largest number and concentration of immigrant youth, is among the six least generous states that offer no access for legal noncitizens; the other five—Idaho, Indiana, Mississippi, Montana, and North Dakota—are among the states with the smallest numbers and concentrations of immigrant youth. The remaining eight states with the largest immigrant youth populations offer access under one or two of the rules. Twenty-four states and the District of Columbia offer access to TANF only to immigrants who have been in the United States for more than five years; about one in every six children in these states is the child of an immigrant. Overall, the relationship between generosity and either the number or share of immigrant youth is not very strong (with correlations of about 0.25 between immigrant youth size or concentration and noncitizen access).

Racial and Ethnic Composition

The youth of today are more diverse racially and ethnically than at any other time in the nation's history; they are also more diverse than any other age group today, and the principal source of this diversity is immigrant youth. In 2009 white, non-Hispanic children accounted for 56 percent of all children under eighteen; black children, 14 percent; Hispanic children, 22 percent; Asian, 4 percent; and mixed races, 2.8 percent.[27] The proportion of white children has been falling rapidly since 1970 when four in five children (79 percent) were white; in the first half of the 1900s, more than 85 percent of children were white. The percentage of black children was about 11–13 percent between 1900 and 1960; since then their share has increased slowly to about 14–15 percent. These patterns mean that for the first half of the twentieth century the share of children who were neither white nor black was well under 4 percent. The pattern began to change in the 1950s, and since then the number of both Asian and Hispanic children has increased steadily and rapidly. The proportion neither white nor black increased from 6 percent in 1960 to 12 percent in 1980, 25 percent in 2000, and 30 percent in 2009. By 1990 black children represented less than half of minority children, and as of 2000 Latino children outnumbered black children.

The racial and ethnic composition of immigrant youth differs substantially from the overall population and from third-generation youth. Not surprisingly, immigrant youth (first and second generation) most closely resemble their parental generation, the adult first generation. In 2009 only 17 percent of immigrant youth and 21 percent of adult immigrants were white, non-Hispanic (the majority group in the overall population), compared with 67 percent of third-generation youth and 65 percent of the total U.S. population (see table 3). The representation of Hispanics and Asians is substantially greater among immigrant youth and adults than among U.S.-born children with native parents and the total population. Fifty-eight percent of immigrant youth are of Hispanic origin, or about five times the 11 percent found among third-generation youth. About 16 percent of immigrant youth are Asian, compared with less than 1 percent of third-generation youth. These two groups are prevalent because about 80 percent of immigrants over the past four decades have come from Asia and Latin America. Hispanic immigrant children are more prevalent (58 percent) than Hispanic immigrant adults (49 percent), whereas the reverse is true for Asians (16 percent among children and 23 percent among adults). This pattern reflects the fact that Latino fertility rates are substantially higher than Asian fertility rates.

Within each of the racial and ethnic groups, the generational composition of the youth population reflects fertility rates and the group's demographic history. Sixty percent of Hispanic children and 85 percent of Asian children in the United States are children of immigrants. The higher percentage among Asians can be attributed to the very low fertility rate of U.S.-born Asians, the higher fertility rate of U.S.-born Latinos, and the substantially larger Latino population already living in the United States before the latest immigration wave began in 1965 (see table 2.)

Among whites and blacks, the share of children who are foreign-born is very small (1.0 percent and 2.0 percent, respectively), and the second generations are only a little larger (5.9 percent and 10.7 percent). Most white and black children are U.S.-born with U.S.-born parents (see table 2). The share

Table 3. Various Populations, by Race or Hispanic Origin, 2009

Category	Hispanic origin	Non-Hispanic origin			
		White	Black	Asian	Mixed race
Share of generation group by race/ethnicity					
All children	22.2	55.6	14.3	4.3	2.8
Immigrant youth	57.8	16.6	7.9	15.7	2.0
First generation	52.9	15.2	7.7	23.9	0.3
Second generation	58.7	16.9	7.9	14.1	2.4
Third and higher generations	11.5	67.4	16.3	0.8	3.1
Total population	16.1	65.1	12.1	4.7	1.5
Immigrant adults	48.8	20.6	7.5	22.8	0.3

Source: Author's tabulations of augmented March 2009 Current Population Survey. Data are adjusted for omissions from the survey. See technical appendix.
Note: White, black, and Asian include persons reporting only single races; Asian includes Native Hawaiians and other Pacific Islanders. American Indians not shown separately.

of foreign-born among white adults (20 percent) is much larger than among white children because a large proportion of the adults immigrated before the 1965 legislative reforms, so they are older and have not had children recently.[28]

Individuals who identify themselves as being of two or more major races illustrate an important feature of American society—that the terms, definitions, identities, concepts, and even the words used to specify racial groups can be very different from those used in other countries. Almost no mixed-race children are immigrants. Among those children of immigrants who do identify with multiple races, almost all (97 percent) are U.S.-born.[29] Persons who identify with more than one race are usually children whose mother and father (or more distant ancestors) identified with different races. In most cases these ancestors were U.S. natives. Immigrants tend to marry other immigrants, usually from the same country, and are considerably less likely to marry persons from different racial or ethnic groups.[30] Consequently, their children are less likely than children of natives to have ancestors from multiple racial groups.

Increasing diversity in the future is built into the country's current demographic structure. Regardless of levels of undocumented immigration, legal immigration will continue to bring mainly immigrants from minority backgrounds. Fertility rates are relatively high for Latinos, moderate for blacks and Asian immigrants, and low for whites and native-born Asians. Among the youth population, the majority race (white, non-Hispanic) will continue to drop, falling to 40 percent of all children by 2050. Black children will remain in the range of 14–16 percent of the total, and Latino children will increase to more than one-third. These projections assume that today's racial identities will persist and that children will be in the same racial or ethnic group as their parents. However, because the prevalence of racial and ethnic intermarriages is likely to continue increasing in the future, a higher proportion of the population will have ancestors in two or more groups, further blurring the lines separating racial and ethnic groups.

Table 4. Population under Eighteen, by Generation and Type of Hispanic Origin, 2009

Category	Hispanic origin	Mexican	Puerto Rican	Cuban	Central, South American	Other Hispanic
Number (000s)						
All children	16,587	11,739	1,503	332	2,307	705
Immigrant youth	10,009	7,485	116	206	2,012	189
Share of all children						
Immigrant youth	**60.3**	**63.8**	**7.7**	**62.1**	**87.2**	**26.8**
First generation	9.0	9.2	z	18.2	15.2	z
Legal immigrant	3.9	2.9	z	17.5	10.7	z
Unauthorized immigrant	5.1	6.3	z	z	4.6	z
Second generation	51.3	54.6	7.4	44.0	72.0	25.8
Legal parent(s)	30.2	29.2	6.8	42.9	52.8	18.6
Unauthorized parent(s)	21.1	25.4	z	z	19.2	7.2
Third and higher generations	**39.7**	**36.2**	**92.3**	**37.9**	**12.8**	**73.2**
Native parents	35.8	36.1	51.5	37.9	12.6	71.8
Puerto Rican–born*	1.0	z	10.2	z	z	z
Puerto Rican parent(s)*	2.9	0.1	30.5	z	z	z
U.S.-born as % of immigrant youth	**85**	**86**	**96**	**71**	**83**	**96**

Source: Author's tabulations of augmented March 2009 Current Population Survey. Data are adjusted for omissions from the survey. See technical appendix.
Notes: White, black, and Asian include persons reporting only single races; Asian includes Native Hawaiians and other Pacific Islanders. American Indians not shown separately.
z Less than 10,000 population.
* Includes persons born in all U.S. territories.

Type of Hispanic Origin

A substantial amount of diversity exists within the Hispanic population; the data permit researchers to differentiate among Mexican, Puerto Rican, Central and South American, and "other Hispanic" origins. Within each of these Hispanic-origin types, generational patterns among children depend primarily on the group's immigration history, fertility levels, and age structure. Immigrant youth account for about 60 percent of Mexican- and Cuban-origin children, only about 8 percent of Puerto Rican–origin children,[31] almost 90 percent of Central and South American children, and about one-quarter of other Hispanic children (table 4).

Mexican immigrants have been coming to the United States for well over 100 years but the contemporary wave of large-scale immigration dates to the 1960s and 1970s. Cuban migration became significant in the early 1960s. For both of these groups, more than 40 percent of adults of childbearing age are U.S.-born. As a result, about one-third of Mexican- and Cuban-origin children are third generation. Because most Puerto Ricans are U.S. natives, well over 90 percent of Puerto Rican children are also third generation; about 8 percent of Puerto Rican–origin children have an immigrant parent and so are second generation. Significant migration from Central and South America began only in the 1980s, so the childbearing-age population of this group is still dominated by immigrants (about 80 percent), and only about one in eight children of Central and South American origin is third generation—the smallest share among the Hispanic-origin groups. Finally, few adults or children in

the "other Hispanic" origin group are immigrants; only 20 percent of the adults are immigrants, while almost 75 percent of the children who identify themselves as "other Hispanic" are at least third generation.

Intergenerational Competition

The changing demographic structure of U.S. society will play an important role in the challenges, fiscal and otherwise, facing the country in coming decades. Generational competition, exacerbated by differing racial and ethnic composition across the age spectrum, is likely to be a factor in resolving many of these issues. The number of children in the United States is projected to increase from about 75 million in 2009 to 100 million in 2050. Immigrant youth and children of minorities will make up an increasing share of this growing population. At the same time, the other dependent age group—the elderly—will also greatly increase. Between 2009 and 2030 the number of people aged sixty-five and over will increase by more than three-quarters to almost 70 million, or 18.4 percent of the population.

Contemporary society provides children and the elderly significant governmental supports, many of which were not available in the early 1900s (the beginning of this demographic assessment) and all of which impose financial burdens on taxpayers. The most notable support for children is the provision of universal education. Today virtually all children aged six to fourteen are enrolled in school, but in 1900 only two-thirds attended school. The difference is even more extreme for children aged fifteen to seventeen—only 41 percent were enrolled in school in 1900 compared with 96 percent in 2008.[32] Other direct supports for children are Medicaid (including the State Children's Health Insurance Program, or SCHIP); Temporary Assistance for Needy Families; the Supplemental Nutrition Assistance Program (formerly known as food stamps); the Women's, Infants, and Children program; school lunch programs; and financial assistance for higher education. None of these existed at the beginning of the twentieth century.

Governmental support for children and their families notwithstanding, children have higher poverty rates than any other age group—a pattern that developed in the mid-1970s and has persisted since.[33] Children of immigrants have a higher poverty rate (23 percent) than children of natives (18 percent).[34] However, U.S.-born children of legal immigrants are no more likely to be poor than children of natives. But 29 percent of the foreign-born children of legal immigrants and 33 percent of the children of unauthorized immigrants are in poverty, pushing up the overall rate for immigrant youth. (See also the article in this issue by George Borjas on poverty rates among immigrant children.)

Notably, many of these children with higher poverty rates and their families are generally not eligible for many of these social welfare programs, because eligibility is determined by legal status and, more importantly, citizenship. Birth in the United States confers citizenship, making U.S.-born immigrant children eligible for these social welfare programs even if their parents and their foreign-born siblings are not. The ineligibility of many parents of immigrant youth and the unauthorized status of some complicates outreach to and participation of children in these programs, as the articles in this volume by Lynn Karoly and Gabriella Gonzalez and by Borjas discuss in more detail.

Support for the elderly comes mainly through Social Security, enacted in 1935,

and Medicare, enacted in 1965. Even though there are more than twice as many children today as the elderly, governmental spending on the elderly exceeds spending on children because per capita elderly costs are more than double those for children.[35] In an era of high deficits and constrained resources, some competition for societal resources is inevitable between the growing youth population and the rapidly increasing elderly population. Moreover, both Social Security and Medicare are financed through payroll taxes, paid mainly by working adults (and their employers). As the baby boomers age into retirement, immigrant children will be aging into adulthood, where they will make up a greater share of the workforce and will carry a greater share of this financing burden.

This generational struggle has several dimensions—demographic, governmental or fiscal, geographic, and political. Demographically, larger shares of children and younger workers are either immigrants, children of immigrants, or racial and ethnic minorities; older workers and retirees are much more likely to be U.S. natives (especially third and higher generations) and members of the majority white, non-Hispanic population. The bulk of government spending on the elderly comes from the federal government. Even in difficult economic and budgetary periods, political pressures make cuts in Social Security and Medicare benefits rare. In contrast, state and local governments provide most of the spending for children, especially for education. These governments tend to have fewer resources than the federal government and generally cannot engage in deficit spending. Consequently, during economic downturns state and local governments are often forced to cut back spending, including spending on education and other children's programs.

Demographic differences are reflected in political and racial dimensions of these potential generational imbalances. The elderly are more likely to vote than other age groups and tend to resist cuts in spending on Social Security and Medicare.[36] Children do not vote at all and their parents, if citizens, are less likely to register and vote than the elderly. Moreover, 40 percent of immigrant youth have parents who cannot vote because they are legal immigrants who have not become U.S. citizens, and another 32 percent have parents who cannot vote because they are unauthorized immigrants. Clearly, immigrant children have less voice in spending choices than the elderly. In addition to the imbalance in political power, large racial and ethnic differences exist between children, the elderly, and the voting population. Forty-three percent of children in the United States belong to a racial or ethnic minority, making children the most ethnically diverse group in the population; more than four of every five immigrant children belong to a minority.[37] In contrast, only one-third of adults are members of minority racial and ethnic groups, and less than a quarter of voters in 2008 were minorities. These differences will lessen in the future but will persist for decades.

Finally, immigrant youth are very concentrated geographically. California is home to more than one-fourth of them, while nine other states are home to another 50 percent. Differences in state fiscal health and in approaches to education and spending on social programs vary considerably. These differences will undoubtedly play a role in the future prospects for immigrant youth in the United States.

In sum, more children live in the United States than ever before, but they represent the smallest share of the population in U.S.

history. Children are the most diverse racially and ethnically of any age group now or in the country's history. Immigrant youth—those who migrated to the United States or who were born to immigrant parents—currently account for about one-quarter of all children, slightly below their share in the early 1900s but much higher than their share in the mid-1900s. Immigrant children, particularly from Asian and Latin American countries, are the principal source of the racial and ethnic diversity. Four of every five immigrant children are U.S.-born; three-quarters of the children of unauthorized immigrants are also born in the United States.

Within about twenty-five years, immigrant youth will represent about one-third of an even larger number of children. Because of their numbers and the challenges facing the country, immigrant youth will play an important role in the future of the United States. Their integration into American society and their accumulation of human capital require continued attention from researchers, policy makers, and the public at large.

Technical Appendix

Generational Population Projections

The population projections used here, extracted from work by Jeffrey Passel and D'Vera Cohn, use a variant of standard cohort-component projections modified by Barry Edmonston and Jeffrey Passel to incorporate immigrant generations.[38] The projections define five groups by place of birth and parentage, each by age, sex, and race or Hispanic origin: foreign-born (the first generation); U.S.-born of foreign (or mixed) parentage (the second generation); born in Puerto Rico and other U.S. territories; U.S.-born of Puerto Rican (or mixed) parentage; and U.S.-born of U.S.-born parents. Because children born in the United States and its territories are citizens by right, the last three groups combined form the third and higher generations.

Each of the five groups is carried forward from 2005 to 2050 separately. Immigrants entering the country are added to the first generation, and foreign-born emigrants leaving the country are subtracted from the first generation; migrants from Puerto Rico are counted with the Puerto Rican–born population (and Puerto Rican emigrants subtracted). Births are assigned to generations according to the mother's generation and a matrix allowing for cross-generational fertility. All births to immigrant women are assigned to the second generation. Most births to second- and third-generation women are assigned to the third generation, but some are assigned to the second generation to allow for mixed-generation couples that include immigrant men.

Assumptions about future immigration are based on analysis of historical patterns and future population growth; in these projections, legal immigrants and unauthorized immigrants are not differentiated, so the assumptions about future levels of immigration combine both. For the initial 2005–10 period, total immigration, combining legal and unauthorized, is set at roughly the current level of 1.4 million a year. The projections assume that the immigration

rate will remain roughly constant over the forty-five-year projection horizon, meaning that immigration levels will increase by approximately 5 percent for every five-year period and reach about 2.1 million a year in 2045–50.[39]

Future fertility trends are developed separately for each race and generation group. Generally, first-generation fertility rates exceed those for the second generation, which in turn are higher or the same as third-generation rates. Hispanic fertility rates at the beginning of the projection period (that is, 2005–10) are 25–35 percent higher than those for whites (which are slightly below replacement level); rates for Asians are roughly the same as for whites, while those for blacks fall in between those for whites and those for Hispanics. Over the projection horizon, rates are assumed to move toward 2.0 children per woman, declining for groups starting with above-replacement-level fertility and remaining roughly constant or increasing very slightly for others. Although the fertility projections involve a complex series of assumptions with differences in level and trend for race and generation groups, overall future fertility ultimately shows little movement, remaining in a range of 1.99 to 2.03 for the entire 2005–50 period.

Unauthorized Immigrants: Numbers and Characteristics

Information presented for the size of the unauthorized immigrant population and its characteristics are developed through a multistage estimation process, principally using March Supplements to the Current Population Survey (CPS) and methods developed initially at the Urban Institute and refined and extended by others.[40] The first step involves estimating the number of unauthorized immigrants in the CPS using a residual estimation methodology. This method compares an estimate of the number of immigrants residing legally in the country with the total number in the CPS; the difference is assumed to be the number of unauthorized immigrants in the CPS. The size of the legal immigrant population is estimated by applying demographic methods to counts of legal admissions obtained from the Department of Homeland Security's Office on Immigration Statistics and its predecessor at the Immigration and Naturalization Service covering the period from 1980 to the present.[41] The initial estimates of the number of unauthorized immigrants appearing in the CPS are calculated separately for each of six states (California, Florida, Illinois, New Jersey, New York, and Texas) and the balance of the country and for thirty-five countries or groups of countries of birth. The next step adjusts these estimates of legal and unauthorized immigrants counted in the CPS for omissions.

Once the numbers of legal and unauthorized immigrants in the CPS have been estimated, individual respondents in the survey are assigned a status based on the individual's demographic, social, economic, geographic, and family characteristics. The resulting number assigned as unauthorized in the CPS (weighted) is forced to agree with specific totals from the residual estimates (done in the first step) for three categories: the number born in Mexico or born in another country; the number living in each of the six specific states and in the balance of the nation; and the number of children and adult men and women. The status assignments assume that all immigrants entering the United States before 1980 and that all naturalized citizens from countries other than Mexico and Central America are legal. Persons entering the United States as

refugees are legal and are identified on the basis of country of birth and period of arrival to align with known totals of refugee admissions. Individuals holding certain types of legal temporary visas (such as foreign students or various categories of temporary work visas) are identified in the survey using information on country of birth, date of entry, occupation, education, and certain family characteristics. Finally, some individuals are categorized as legal immigrants because they are in certain occupations (such as police officer, lawyer, the military, federal jobs) that require legal status or because they are receiving public benefits (such as welfare or food assistance) that are limited to legal immigrants.

After these initial assignments of "definitely legal" immigrants are made, a pool of "potentially unauthorized" immigrants remains. This group typically exceeds the target residual estimates by 20–35 percent. From this group, probabilistic methods are used to classify these individuals as either legal or unauthorized. This last step involves checks to ensure consistent statuses within families and several iterations to reach agreement with the various residual targets. Finally, the survey weights for individuals classified as legal or unauthorized are adjusted to agree with the corrected totals from the second step. The end product is a survey data set (of about 80,000 households) with individual respondents identified by nativity and legal status. Information presented here on youth by nativity, legal status, and parents' characteristics are based on tabulations from these data sets.

Endnotes

1. Jeffrey S. Passel and D'Vera Cohn, *U.S. Population Projections: 2005–2050* (Washington: Pew Hispanic Center, February 11, 2008) (http://pewhispanic.org/files/reports/85.pdf), show that in the absence of immigration, the working-age population would decline after about 2015.

2. Passel and Cohn, *U.S. Population Projections* (see note 1). The retrospective data for 1960–2000 represent a historical reconstruction that employs generational projection methodology to fit the time series of decennial census data.

3. Jeffrey S. Passel and D'Vera Cohn, *Trends in Unauthorized Immigration: Undocumented Inflow Now Trails Legal Inflow* (Washington: Pew Hispanic Center, October 2, 2008) (http://pewhispanic.org/files/reports/94.pdf); Jeffrey S. Passel and D'Vera Cohn, *A Portrait of Unauthorized Immigrants in the United States* (Washington: Pew Hispanic Center, April 14, 2009) (http://pewhispanic.org/files/reports/107.pdf); and Jeffrey S. Passel and D'Vera Cohn, *U.S. Unauthorized Immigration Flows Are Down Sharply since Mid-Decade* (Washington: Pew Hispanic Center, September 1, 2010) (http://pewhispanic.org/files/reports/126.pdf).

4. Steven Ruggles and others, *Integrated Public Use Microdata Series: Version 5.0* [Machine-readable database] (Minneapolis: University of Minnesota, 2010) (http://usa.ipums.org/usa/). For some historical data from 1900 to 1950, a set of historical projections provides useful information where the IPUMS data are deficient. Barry Edmonston and Jeffrey S. Passel, "Ethnic Demography: U.S. Immigration and Ethnic Variations," in *Immigration and Ethnicity: The Integration of America's Newest Arrivals*, edited by Edmonston and Passel (Washington: Urban Institute Press, 1994).

5. In some tabulations used here, the second generation is differentiated by legal status of the parent(s). However, all U.S.-born children of immigrants are U.S. citizens at birth even if the parents are unauthorized immigrants.

6. Persons who are born in foreign countries to parents who are U.S. natives are U.S. citizens at birth. They are treated in most tabulations as U.S. natives with U.S.-born parents and are part of the third generation.

7. Except for U.S. citizenship, Puerto Ricans share many sociocultural traits of immigrants from Latin America, especially the Spanish language. Thus, in terms of adaptation to the United States, it can make sense to treat persons born in Puerto Rico as part of the first generation and persons born in the United States to Puerto Rican–born parent(s) as second generation. However, because U.S. citizenship is now the gateway to many social programs, I have chosen to put Puerto Rican-born youth into the third generation. For historical data, so few Puerto Ricans migrated to the United States before the 1950s that the choice makes little difference. Even in 2008, counting Puerto Rican-born youth as first generation would add only about 1.1 percent to the immigrant youth population, and treating U.S.-born children of Puerto Rican parents as second generation would add only another 3.0 percent. (Note that even though Puerto Rican births are treated the same as U.S. births, some persons born in Puerto Rico are in the second generation if one or both of their parents is an immigrant to Puerto Rico, that is, in the first generation.)

8. These population data are from the March 2009 CPS with an adjustment for omissions of immigrants from the survey. This survey is the basis for detailed analysis of generational and racial-ethnic composition. It is based on U.S. Census Bureau, *Vintage 2008 Population Estimates Archives* (www.census.gov/popest/archives/2000s/vintage_2008/Bureau). The data plotted in figure 1 do not include the adjustment for survey omissions and show 74.1 million children in 2009.

9. Ansley J. Coale and Melvin Zelnik, *New Estimates of Fertility and Population in the United States: A Study of Annual White Births from 1855 to 1960 and of Completeness of Enumeration in the Censuses from 1880 to 1960* (Princeton University Press, 1963).

10. The peak number of births—4.3 million—was not reached again until 2007, when the population was 70 percent larger than it had been in 1957.

11. Passel and Cohn, *U.S. Population Projections* (see note 1).

12. Passel and Cohn, *Trends in Unauthorized Immigration* (see note 3).

13. Passel and Cohn, *U.S. Unauthorized Immigration Flows Are Down Sharply since Mid-Decade* (see note 3).

14. Ibid. See also Jeffrey S. Passel and D'Vera Cohn, *Mexican Immigrants: How Many Come? How Many Leave?* (Washington: Pew Hispanic Center, April 14, 2009) (http://pewhispanic.org/files/reports/112.pdf).

15. Jeffrey S. Passel and Paul Taylor, *Unauthorized Immigrants and Their U.S.-Born Children* (Washington: Pew Hispanic Center, August 11, 2010) (http://pewhispanic.org/files/reports/125.pdf).

16. Passel and Cohn, *U.S. Population Projections* (see note 1).

17. Department of Homeland Security, *2008 Yearbook of Immigration Statistics* (Office of Immigration Statistics, 2009), table 8 (www.dhs.gov/files/statistics/publications/yearbook.shtm).

18. Passel and Cohn, *U.S. Unauthorized Immigration Flows Are Down Sharply since Mid-Decade* (see note 3).

19. Ibid., and Passel and Cohn, *Mexican Immigrants* (see note 14).

20. See Passel and Cohn, *A Portrait of Unauthorized Immigrants* (see note 3), for detailed information on characteristics of the unauthorized immigrant population.

21. Passel and Taylor, *Unauthorized Immigrants and Their U.S.-Born Children* (see note 15).

22. The mixed-status families also include more than 500,000 adults who are U.S. citizens or legal immigrants, most of whom are spouses of unauthorized immigrants, but about one-quarter are U.S.-born children ages 18 and over.

23. The terms "Latino" and "Hispanic" are used interchangeably to refer to persons of Hispanic origin.

24. Randolph Capps and others, *Paying the Price: The Impact of Immigration Raids on America's Children* (Washington: Urban Institute Press, 2007) (www.urban.org/publications/411566.html).

25. Another eight states—Florida, Hawaii, Illinois, Massachusetts, Maryland, Oregon, Rhode Island, and Washington—and the District of Columbia have above-average concentrations of immigrant youth.

26. The four indicators of state generosity are whether "qualified" noncitizens in the country for less than five years can receive TANF; whether "qualified" noncitizens in the country for more than five years can receive TANF; whether noncitizens not eligible for federal assistance can receive food assistance; and whether noncitizens not eligible for federal assistance can receive state SSI. These rules come from the Urban Institute's *Welfare Rules Databook Tables by Year,* tables I.B.6 and I.B.7 for 2008 (http://anfdata.urban.org/wrd/maps.cfm) and the National Immigration Law Center's *Guide to Immigrant Eligibility for Federal Programs*, 4th ed. (Washington: 2002), *Update Page,* tables 8, 9, and 12 (www.nilc.org/pubs/Guide_update.htm).

27. Throughout this chapter, race groups—that is, white, black, Asian, and two or more major races (mixed race)—refer to persons who are not of Hispanic origin and, in the case of data from 2000 and later, refer only to single races. The Asian category includes "Native Hawaiians and Other Pacific Islanders." The term "not Hispanic" is generally omitted from the text.

28. The median age is forty-nine years for white adult immigrants and thirty-nine years for Hispanic adult immigrants.

29. The overall numbers of persons with two or more races published in the Current Population Survey and the American Community Survey are not the product of individual responses to the surveys but rather result from Census Bureau population estimates of this group based on Census 2000 figures carried forward. If response and self-identification patterns have changed since 2000, the data from the 2010 Census could differ significantly from figures shown for 2009.

30. For intermarriage trends over the past forty years, see Jeffrey S. Passel and others, *Marrying Out: One-in-Seven New U.S. Marriages Is Interracial or Interethnic* (Washington: Pew Research Center, June 4, 2010) (http://pewsocialtrends.org/assets/pdf/755-marrying-out.pdf).

31. Because persons born in Puerto Rico are considered to be U.S. natives, children born in Puerto Rico (or the U.S. mainland) to parents born in Puerto Rico are part of the third and higher generation group; that is, they are U.S. natives born to parents who are U.S. natives. Immigrant youth of Puerto Rican origin have a parent who is an immigrant (see also note 7).

32. Author's tabulations from 1900 Census and 2008 American Community Survey using the Integrated Public Use Microdata Series (IPUMS). Ruggles and others, *Integrated Public Use Microdata Series* (see note 4).

33. Carmen DeNavas-Wait, Bernadette D. Proctor, and Jessica C. Smith, *Income, Poverty, and Health Insurance Coverage in the United States: 2008,* Current Population Reports: Consumer Income, Series P60-236 (RV) (U.S. Census Bureau, September 2009), table B-1, p. 44 (www.census.gov/prod/2009pubs/p60-236.pdf).

34. Poverty rates for children based on their parents' status come from Passel and Cohn, *A Portrait of Unauthorized Immigrants* (see note 3) and supporting unpublished data.

35. For a thorough discussion of spending and differences by age group, see Susmita Pati and others, "Generational Differences in U.S. Public Spending, 1980–2000," *Health Affairs* 23, no. 5 (2004): 131–41.

36. Thom File and Sarah Crissey, *Voting and Registration in the Election of November 2008,* Current Population Reports, Series P20-562 (U.S. Census Bureau, May 2010), table 3, p. 4 (www.census.gov/prod/2010pubs/p20-562.pdf).

37. The "majority" racial and ethnic group is the white, non-Hispanic population. "Minority" race groups are the balance of the population.

38. Passel and Cohn, *U.S. Population Projections* (see note 1). Barry Edmonston and Jeffrey S. Passel, "Immigration and Immigrant Generations in Population Projections," *International Journal of Forecasting* 8, no. 3 (1992): 459–76.

39. Although immigration levels are assumed to increase over the projection horizon, the rate of increase is substantially less than observed over the previous forty-five years (1960–2005), when both the number of immigrants and the rate of immigration grew significantly.

40. Jeffrey S. Passel and Rebecca L. Clark, *Immigrants in New York: Their Legal Status, Incomes and Taxes* (Washington: Urban Institute, April 1998) (www.urban.org/publications/407432.html). For a detailed description of methods and specific citations for methods development, see Jeffrey S. Passel, "Unauthorized Migrants in the United States: Estimates, Methods, and Characteristics," *OECD Social, Employment and Migration Working Papers 57* (Paris: Organization for Economic Cooperation and Development Working Party on Migration, September 2007) (www.oecd.org/dataoecd/41/25/39264671.pdf).

41. U.S. Department of Homeland Security, *Yearbook of Immigration Statistics* (Office of Immigration Statistics, various years) (www.dhs.gov/files/statistics/publications/yearbook.shtm).

The Living Arrangements of Children of Immigrants

Nancy S. Landale, Kevin J. A. Thomas, and Jennifer Van Hook

Summary

Children of immigrants are a rapidly growing part of the U.S. child population. Their health, development, educational attainment, and social and economic integration into the nation's life will play a defining role in the nation's future.

Nancy Landale, Kevin Thomas, and Jennifer Van Hook explore the challenges facing immigrant families as they adapt to the United States, as well as their many strengths, most notably high levels of marriage and family commitment. The authors examine differences by country of origin in the human capital, legal status, and social resources of immigrant families and describe their varied living arrangements, focusing on children of Mexican, Southeast Asian, and black Caribbean origin. Problems such as poverty and discrimination may be offset for children to some extent by living, as many do, in a two-parent family. But the strong parental bonds that initially protect them erode as immigrant families spend more time in the United States and are swept up in the same social forces that are increasing single parenthood among American families. The nation, say the authors, should pay special heed to how this aspect of immigrants' Americanization heightens the vulnerability of their children.

One risk factor for immigrant families is the migration itself, which sometimes separates parents from their children. Another is the mixed legal status of family members. Parents' unauthorized status can mire children in poverty and unstable living arrangements. Sometimes unauthorized parents are too fearful of deportation even to claim the public benefits for which their children qualify. A risk factor unique to refugees, such as Southeast Asian immigrants, is the death of family members from war or hardship in refugee camps.

The authors conclude by discussing how U.S. immigration policies shape family circumstances and suggest ways to alter policies to strengthen immigrant families. Reducing poverty, they say, is essential. The United States has no explicit immigrant integration policy or programs, so policy makers must direct more attention and resources toward immigrant settlement, especially ensuring that children have access to the social safety net.

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Children of immigrants—defined as children with at least one foreign-born parent—are a large and growing segment of the child population of the United States. Today more than one in five U.S. children has one or more foreign-born parents. Furthermore, since 1990 the children of immigrants have accounted for more than three-quarters of the growth in the size of the U.S. child population.[1] Children of immigrants need not be immigrants themselves: most, in fact, are U.S. citizens by virtue of being born in the United States. In 2007, 87 percent of the children of immigrants were citizens; among the youngest of such children (those up to age five) fully 96 percent were citizens.[2] Because of its size and growth, this new group of U.S. citizens warrants the attention of policy makers, researchers, and advocates who are seeking to improve the well-being of children in the United States.

Immigrant families face unique challenges as they adapt to their new country, yet they also bring with them many strengths, most notably high levels of marriage. U.S. immigration policy shapes immigrants' family circumstances by selecting the types of immigrants permitted to come into and to remain in the United States, often on the basis of marriage and family relationships. But immigration policy does not consistently nurture these relationships: in some ways it can weaken them. Furthermore, the nation's acknowledged lack of a well-developed integration policy may exacerbate immigrants' challenges and put their children's outcomes at risk.

Children of immigrants have much in common as a result of their parents' experiences with immigration and their status as relative newcomers. But their individual situations vary widely because of differences in their parents' human and financial capital, legal status, social resources, and degree of assimilation, all of which are tied closely to their country or region of origin.

The majority of children of immigrants in the United States today are of Latin American origin, and more than 40 percent have parents from a single country—Mexico. Mexican immigrant families face challenges with respect to assimilation because of low parental education, poverty, and language barriers, and because a relatively high share of parents are unauthorized. In his article in this volume, Jeffrey Passel estimates that about one-third of Mexican children of immigrants are either unauthorized themselves or have unauthorized parents. The next largest group, about 20 percent of all children of immigrants, is those children whose parents have migrated from Asia, most commonly from the Philippines, China, India, Vietnam, and Korea.[3] Asian immigrant families vary widely by parental education and skills. Parents from China, India, Korea, and the Philippines tend to be highly educated, skilled professionals, while those from Vietnam and other Southeast Asian countries, such as Cambodia and Laos, generally have low education and skills.[4] Although they are less dominant numerically, the children of black immigrants face special challenges because of their skin color. Most are of Caribbean origin, with parents coming from Jamaica, Haiti, and Trinidad and Tobago. Poverty and the dynamics of race in the United States combine to make some of these children especially vulnerable to negative outcomes.

In this article, we describe and discuss the implications of the living arrangements of children of immigrants, with an emphasis on three highly vulnerable groups: Mexican-origin children; Southeast Asian children

(Vietnamese, Cambodian, Laotian); and black Caribbean-origin children. As noted, children in these groups face risk factors related to their parents' low human capital, mode of entry into the United States (for example, as a refugee or unauthorized migrant), or status as a racial minority. We highlight family circumstances that may either counter or exacerbate the negative impacts of these risk factors. Although most children of immigrants live with their parents, the share varies by immigrant group and by generation. We also consider the living arrangements of youths—often foreign-born labor migrants who enter the United States alone as adolescents—who live in households with no parents. We conclude by discussing specific ways that U.S. immigration and integration policies shape immigrants' family circumstances, and we suggest ways to alter policies to strengthen immigrant families.

Why Children's Living Arrangements Matter

Children depend on their families, who are at the center of their everyday life. Although children's families are not necessarily restricted to those who live in their households, the household is the site of daily activities and typically is the unit that provides most of their resources. Consequently, disparities in children's outcomes are rooted in their divergent family circumstances.

Living arrangements may be particularly important in shaping the ways in which immigrants and their children are integrated into the social and economic life of the United States. Key features of living arrangements include parental marital and residential status as well as the presence or absence of grandparents, other relatives, or nonrelatives in the household. Many immigrant families are poor, face discrimination, and have limited access to resources because of their legal status, yet these problems may be offset for children to some extent by benefits associated with their household and family structures, such as living in a two-parent family. A significant finding in this regard is that children of immigrants are more likely to live in two-parent families than their co-ethnic counterparts who have native-born parents.[5] Not only do two-parent families fare better economically than single-parent families, but also children living with both biological parents are less likely to experience a range of cognitive, emotional, and social problems that have long-term consequences for their well-being.[6]

Some children of immigrants live in extended families, although patterns of family extension vary widely by parental duration of residence in the United States. Although not specifically focused on children, some research shows that recent immigrants are more likely than more settled immigrants to live in extended families. Such arrangements more often involve lateral extension (for example, co-residence with a relative in a similar stage in the life course, such as a sibling) than vertical extension (co-residence of adults with their parents) because immigrants often leave older family members behind in the country of origin.[7] Living in a laterally extended family may offer some benefits to individuals or families, although the choice of such a living arrangement may be driven more by the short-term instrumental needs of recent immigrants than by its potential long-term benefits. To the extent that extended-family living arrangements are unstable or are an indirect indicator of hardship, they may not benefit children over the long run.

In what ways do children's living arrangements influence their short-term and long-term well-being? Researchers conclude

Table 1. Children's Living Arrangements by Parental Race and Ethnicity, by Percent

	Parental marital and residential status				Other adults in household			
Parental race and nativity	**Married**	**Cohabiting**	**Single**	**No resident parent**	**Grandparent**	**Other relative**	**Nonrelative**	**Number in sample**
Children of immigrants	55.9	19.7	21.2	3.3	8.8	19.9	3.6	69,819
Hispanic	52.5	19.6	24.0	3.8	8.3	23.0	4.6	40,393
Asian	64.8	20.2	12.4	2.6	12.8	16.8	2.0	11,521
Black	44.4	16.9	34.8	3.8	9.8	20.0	2.6	4,621
Non-Hispanic white	63.1	20.7	14.3	1.9	6.0	13.3	2.4	13.140
Children of natives	50.0	18.3	27.1	4.5	8.4	13.1	4.0	239,740
Hispanic	43.6	18.1	32.2	6.1	14.0	14.5	4.8	21,641
Asian	50.5	22.1	23.3	4.1	10.8	11.5	5.1	6,770
Black	23.9	11.4	55.3	9.4	14.7	15.8	4.3	33,018
Non-Hispanic white	58.0	20.0	19.0	3.0	5.9	12.2	3.7	174,618

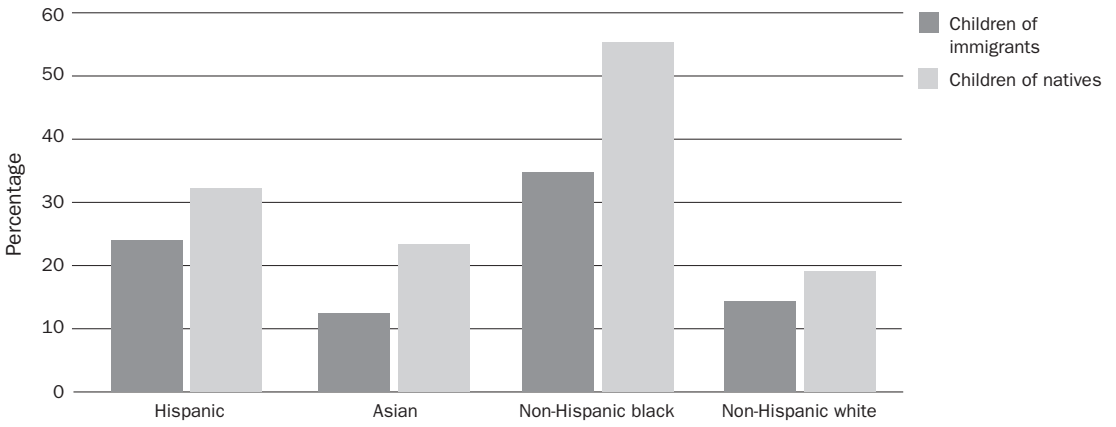
Source: 2005–2009 March Current Population Survey.
Note: The sample included children from birth to age seventeen.

unequivocally that single-parent families have markedly higher child poverty rates than married-parent families, both for children as a whole and within different racial and ethnic groups. Cohabiting-couple families generally have child poverty rates between the two. Explanations for these differences include the number of potential adult earners in the household, the frequent failure of noncustodial parents to provide child support, and economies of scale for parents living together.[8] Whether the link between family structure and family resources is causal is a matter of debate. Skeptics suggest that men and women with the greatest earning potential or resources are most likely to marry, while those with intermediate earning potential are most likely to cohabit and those with low earning potential are most likely to become single parents. Studies that make rigorous attempts to control for such self-selection into those three family types find evidence that family structure has causal effects on family income. From the point of view of children, however, the debate is largely academic. For them, what is important is that living with two married parents generally results in a higher standard of living and access to more opportunities than living in other arrangements.

The role of extended-family living arrangements in child poverty is less clear, both because researchers have paid it less attention and because of analytical complexities related to different types of extension, assumptions about income pooling, and potential variation by race and ethnicity or by whether parents are native- or foreign-born. Nonetheless, by assuming that the incomes of all household members are pooled, one recent study showed that the economic standing of children living with single mothers (those with no spouse present) was substantially better when they were living in extended families than when no other adults were present in the household.[9]

Beyond their impact on children through economic resources, living arrangements may shape child outcomes through their influence

Figure 1. Percentage of Children Living with Single Parents



Source: Same as table 1.
Note: The sample included children from birth to age seventeen.

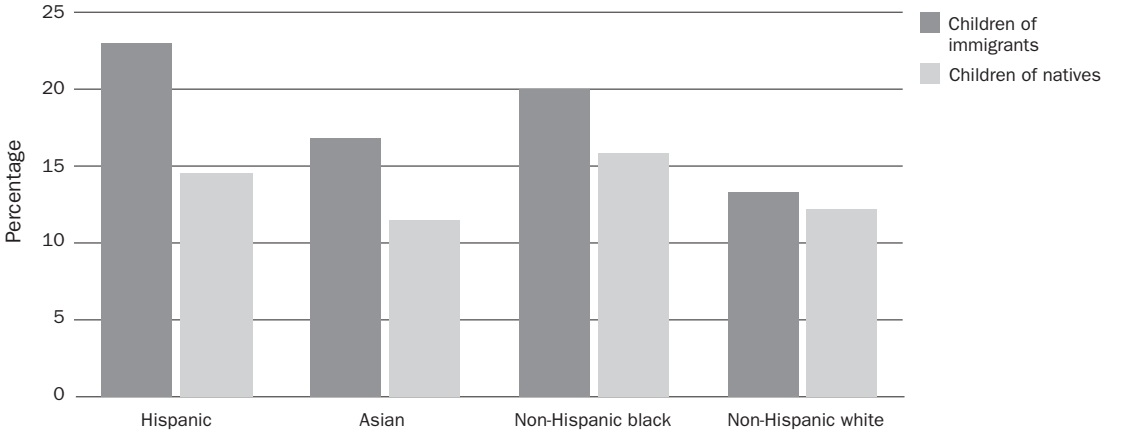
on family stress, the availability of adult supervision and attention, and the quality of parenting.[10] Burdened with both economic and time challenges, single-parent families tend to be less effective at parenting and to be subject to greater stress than two-parent families are. In addition, children in single-parent or cohabiting families must often undergo more family transitions than those in married-couple families. Extended-family living arrangements may compensate for some of the difficulties faced by single parents or other overburdened families. By providing child care or helping with household tasks, extended-family members may ease family stress and ensure that children's needs are met, thereby making child outcomes more positive. Some studies, however, indicate that parents who live with extended kin often are those least able to care for themselves and their children—and this may be the case in immigrant families. Complex living arrangements may be most common among recently arrived immigrants, who need help as they adapt to life in the United States. Extended-family members may band together as a survival strategy, but such households may be unstable and provide few resources for children.[11]

Living Arrangements of Children of Immigrants

We combine five years of data (2005–09) from the Current Population Survey (CPS), a large nationally representative data set, to document the living arrangements of children under age eighteen. We emphasize two aspects of living arrangements: parental marital and residential status (married co-resident parents, cohabiting co-resident parents, single parent, no resident parents) and the presence of other adults in the household (grandparent, other relative, nonrelative). We focus first on differences in children's living arrangements by parental nativity (whether parents are native- or foreign-born) for four racial and ethnic groups: Hispanics, Asians (including Pacific Islanders), non-Hispanic whites, and non-Hispanic blacks (table 1).

Despite differences across the broad groups, one pattern consistently emerges. Children

Figure 2. Percentage of Children Living with Extended Kin other than Grandparents



Source: Same as table 1.
Note: The sample included children from birth to age seventeen.

of immigrants are considerably more likely to live with married parents than are children of natives (52 percent versus 44 percent for Hispanics; 65 percent versus 50 percent for Asians; 63 percent versus 58 percent for non-Hispanic whites; 44 percent versus 24 percent for non-Hispanic blacks). As illustrated in figure 1, the greater likelihood that children of natives will live with a single parent explains most of this difference, although such children are also slightly more likely to live in a household with no resident parents.

Differences by parental nativity in extended-family living arrangements are less consistent across racial and ethnic groups. For example, among Hispanics and blacks, children of immigrants are less likely to live with grandparents than are children of natives (8 percent versus 14 percent for Hispanics; 10 percent versus 15 percent for blacks). Among Asians and non-Hispanics, the share living with grandparents differs little by parental nativity. In contrast, as figure 2 shows, children of immigrants are much more likely to live with extended kin other than grandparents in all groups except non-Hispanic whites. Among Hispanics, for example, 23 percent of children of immigrants have other extended kin living in their households, compared with 14 percent of children of natives. On balance then, children of immigrants are more, but only slightly more, likely to live with either grandparents or other extended-family members than children of natives, except among blacks (31 percent versus 29 percent among Hispanics, 19 percent versus 18 percent among non-Hispanic whites, and 30 percent versus 22 percent among Asians). Among blacks the division is equal at 30 percent.

Finer distinctions among immigrants' children reveal somewhat different living arrangements by the child's generational status (table 2), which is based on the nativity of the child as well as of his or her parents.[12] Table 2 separates children with immigrant parents into three groups: the first generation, the second generation, and the 2.5 generation. First-generation children were born outside the United States and had at least one

Table 2. Children's Living Arrangements by Race, Ethnicity, and Generational Status, by Percent

	Parental marital and residential status				Other adults in household			
Race, nativity, and generational status	**Married**	**Cohabiting**	**Single**	**No resident parent**	**Grandparent**	**Other relative**	**Nonrelative**	**Number in sample**
Hispanic								
1st generation	51.6	17.7	23.2	7.5	5.4	29.6	6.2	7,099
2nd generation	53.7	20.9	22.5	2.9	7.7	24.4	4.6	24,393
2.5 generation	49.9	17.5	29.1	3.5	12.5	13.8	3.4	8,901
3rd+ generation	43.6	18.1	32.2	6.1	14.0	14.5	4.8	21,641
Asian								
1st generation	62.9	19.7	12.7	4.7	7.7	21.2	3.0	2,595
2nd generation	66.5	20.2	11.4	1.9	14.9	16.3	1.5	6,709
2.5 generation	60.8	20.7	16.0	2.5	11.8	12.1	2.7	2,217
3rd+ generation	50.5	22.1	23.3	4.1	10.8	11.5	5.1	6,770
Black								
1st generation	44.8	14.2	34.7	6.2	5.8	31.2	1.6	954
2nd generation	48.6	18.0	30.6	2.8	10.4	19.6	2.2	2,250
2.5 generation	36.6	16.8	42.6	4.0	11.2	13.5	3.9	1,417
3rd+ generation	23.9	11.4	55.3	9.4	14.7	15.8	4.3	33,018
Non-Hispanic white								
1st generation	63.7	19.2	13.1	4.0	3.1	19.1	3.1	2,281
2nd generation	65.1	21.6	12.1	1.2	7.7	14.8	1.6	3,979
2.5 generation	61.6	20.6	16.2	1.7	5.9	10.1	2.6	6,880
3rd+ generation	58.0	20.0	19.0	3.0	5.9	12.2	3.7	174,618

Source: Same as table 1.
Note: The sample included children from birth to age seventeen.

foreign-born parent. Second-generation children were born in the United States and had two foreign-born parents. U.S.-born children with one foreign-born and one U.S.-born parent are the 2.5 generation. Finally, third- or higher-generation children were born in the United States and had two U.S.-born parents.

In general, the share of children living with married parents declines with each generation in the United States, but first-generation children are slightly less likely to live with married parents than are second-generation children. Living with a married parent who has an absent spouse (not shown) is also particularly prevalent among first-generation children. In addition, such children are distinctive in being more likely than other children of immigrants to live in households with no resident parent. These various arrangements suggest that newly arrived immigrant families may encounter complications that reduce children's chances of living with both parents and lead some children to live in households that provide no parental supervision. However, with the exception of first-generation Asian children (who make up 22.5 percent of Asian children of immigrants), first-generation children account for no more than 20 percent of children of immigrants in the major racial and ethnic groups.

Important distinctions also exist by country (or region) of origin within each broad racial

Table 3. Children's Living Arrangements by Parental Nativity for Selected National-Origin Groups, by Percent

	Parental marital and residential status				Other adults in household			
Parental nativity and national-origin group	**Married**	**Cohabiting**	**Single**	**No resident parent**	**Grandparent**	**Other relative**	**Nonrelative**	**Number in sample**
Mexican children of immigrants	55.6	20.1	20.6	3.6	7.8	23.7	4.6	27,558
Mexican children of natives	45.2	17.7	30.9	6.2	14.6	14.2	4.8	14,806
Southeast Asian children of immigrants	58.4	20.2	16.1	5.2	13.3	23.6	2.3	1,238
Cambodian	60.0	11.2	24.1	4.6	23.3	23.8	4.1	278
Laotian	53.0	25.4	19.1	2.5	7.0	39.7	0.4	224
Vietnamese	59.2	21.9	12.8	6.1	11.5	19.7	2.2	736
Southeast Asian children of natives	49.2	38.9	11.8	0.0	10.5	6.4	1.3	126
Black children of immigrants	44.4	16.9	34.8	3.8	9.8	20.0	2.6	4,621
Caribbean	33.1	18.9	42.6	5.4	15.2	24.9	2.2	1,238
African	55.5	14.6	27.8	2.2	5.9	18.2	2.1	1,512
Other black	45.1	17.1	34.0	3.8	8.4	17.6	3.2	1,871
Black children of natives	23.9	11.4	55.3	9.4	14.7	15.8	4.3	33,018

Source: Same as table 1.
Note: The sample included children from birth to age seventeen.

or ethnic group. Children in the three specific groups that we highlight (Mexicans, Southeast Asians, and Caribbean blacks) share common disadvantages that stem from their parents' relatively low education and income. Because of the histories and broader contexts of immigration from their countries of origin, however, the groups differ in parental legal status (for example, unauthorized versus authorized), parental work patterns, the types of communities in which they live, and their reception by the native-born population. We thus discuss the family situations and living arrangements of each group separately.

Children in Mexican Immigrant Families

Given the volume of immigration from Mexico, the predominance of children of immigrants among Mexican-origin children, and the comparative youth of the Mexican-origin population, children of Mexican immigrants are of special importance in shaping the future of the U.S. population. According to Census Bureau projections, the Hispanic population will account for nearly one-quarter of the nation's total population by 2040. Jennifer Glick and Jennifer Van Hook estimate that the Mexican-origin population alone will account for 15–17 percent of the U.S. population by then.[13] It is therefore important to understand the circumstances that may influence the future outcomes of today's Mexican-origin children.

The major challenge facing Mexican immigrants and their children is their limited opportunity for economic integration, owing in large part to their low education, skills, and financial resources. On average, foreign-born

Table 4. Children's Living Arrangements by Generational Status for Selected National-Origin Groups

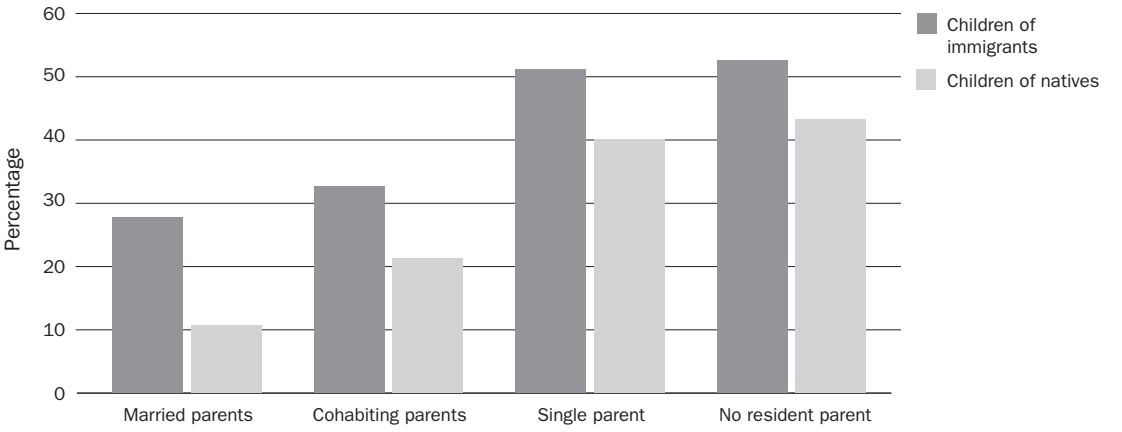
	Parental marital and residential status				Other adults in household			
Parental nativity and national-origin group	**Married**	**Cohabiting**	**Single**	**No resident parent**	**Grandparent**	**Other relative**	**Nonrelative**	**Number in sample**
Mexican								
1st generation	55.3	18.4	18.4	7.9	4.4	32.5	6.4	4,455
2nd generation	57.0	21.5	19.0	2.6	6.9	24.8	4.5	17,357
2.5 generation	51.9	17.1	27.3	3.6	13.1	13.8	3.6	5,746
3rd+ generation	45.2	17.7	30.9	6.2	14.6	14.2	4.8	14,806
Southeast Asian								
1st generation	59.9	20.2	13.5	6.4	7.9	28.7	5.7	213
2nd generation	59.8	20.6	15.4	4.1	14.9	25.5	1.1	793
2.5 generation	51.6	18.7	21.4	8.4	12.7	10.6	3.8	232
Black Caribbean								
1st generation	29.1	18.6	42.3	10.0	13.5	43.6	1.3	177
2nd generation	35.2	22.1	38.2	4.6	17.1	24.2	1.9	697
2.5 generation	30.8	12.6	51.9	4.7	11.9	16.7	3.4	364

Source: Same as table 1.
Note: The sample included children from birth to age seventeen. Comparable information on the 3rd+ generation for Southeast Asian and Black Caribbean not available due to data limitations.

Mexicans have completed eight and a half years of education, compared with about twelve years for native-born Mexicans and more than thirteen years for native-born whites.[14] Together with their limited English proficiency and frequently unauthorized legal status, the low education of Mexican immigrant parents severely limits their opportunities for stable, well-paid employment.[15] With the premium for education and skills especially high in today's high-tech economy, it is no surprise that about 34 percent of Mexican children of immigrants are poor, compared with 24 percent of Mexican children of natives.[16] For these reasons, many scholars and policy analysts are concerned that the Mexican-origin population may remain socially marginalized and economically disadvantaged well into the future.

For children, living in poverty increases the risk of negative outcomes, including health and developmental problems, poor academic performance, low completed education, and low earnings in adulthood. Because poverty and family structure are linked, poor children often face not only resource deficits but also other risk factors associated with single parenthood, such as high family stress, inadequate supervision, multiple family transitions, and frequent residential moves. For Mexican-origin children, however, poverty and family structure vary in a less straightforward manner. Although Mexican children of immigrants have a higher poverty rate than Mexican children of natives, they are more likely to live in two-parent families. As shown in the top panel of table 3, 56 percent of Mexican children of immigrants live with two married parents, compared with 45 percent of Mexican children of natives. When cohabitating parents are included, fully 75 percent of Mexican children of immigrants live in a two-parent family, compared with 63 percent

Figure 3. Percentage of Mexican Children in Poverty by Marital Status and Residence



Source: Same as table 1.
Note: The sample included children from birth to age seventeen.

of Mexican children of natives. The favorable family structures of children with foreign-born parents may reduce some of the risk factors typically associated with poverty.

Despite that initial advantage, however, Mexican-origin children increasingly face challenges related to their household and family structure as their families become more settled. In particular, the favorable two-parent family structure becomes much less common among native-born children in both the 2.5 and third generations (see table 4). That pattern suggests that as Mexican families spend more time in the United States (as indexed by generation), the strong parental bonds that protect Mexican-origin children erode. Over time, Mexican families may be more and more subject to the same forces that are increasing single parenthood among American families generally.

Even though Mexican children of natives are more likely to live in single-parent families than Mexican children of immigrants, they have a lower rate of poverty. That finding, however, does not mean that family structure is inconsequential. Poverty rates would be even lower for children of natives if not for their disadvantaged family structure. As illustrated in figure 3, children of natives are less likely to live in poverty regardless of family type. For example, in married-couple families, 28 percent of children of immigrants are poor, compared with 11 percent of children of natives. The explanation for this difference, in large part, is that foreign-born Mexican parents have lower human capital and earnings than do their native-born counterparts. In addition, although employment rates of foreign- and native-born Mexican men are roughly comparable, the employment rate of foreign-born Mexican women is substantially lower (56 percent) than those of their native-born (76 percent) and white counterparts (80 percent).[17] Similarly, in single-parent Mexican families, children of immigrants have higher poverty rates (51 percent) than children of natives (40 percent). Still, children of natives are four times more likely to be poor if they live in a single-parent than in a married-couple family.

Thus the higher prevalence of single-parent families among Mexican children of natives suggests that economic progress is being eroded by shifts in family structure.

Mexican immigrant families also face special challenges associated with migration itself. Mexican immigrants are predominantly labor migrants, sojourners who come to the United States temporarily to work during their early adult years (as early as late adolescence through their mid-thirties). At least initially, they maintain strong ties with their households and families in Mexico, sending remittances and visiting or even eventually returning home. Others remain permanently in the United States even though many are unauthorized. Not surprisingly, these migration patterns shape children's living arrangements. For example, the circular nature of Mexican labor migration appears to contribute to the formation of highly unstable households made up of both extended kin and non-kin. In addressing the question of why Mexican immigrants are more likely than U.S.-born Mexicans to live in extended families, Van Hook and Glick recently contrasted an explanation focused on cultural norms brought from Mexico with an explanation that stresses the use of extended-family co-residence as a survival strategy.[18] They showed that recent immigrants live in household structures very different from those in Mexico, with considerably more lateral extension (for example, living with adult siblings) and co-residence with nonrelatives. As Mexican immigrants live longer in the United States, they are less likely to live in either of those arrangements and less likely to live with extended kin altogether. The study also found that extended-family arrangements are highly unstable, with considerable turnover of household members. Although Van Hook and Glick's research was not based on families with children, it suggests that living in an extended-family may temporarily benefit Mexican children of recent immigrants by helping their parents cope with the many challenges they face when they first arrive in the United States. But such an arrangement is unlikely to be stable or to contribute to children's long-term well-being.

One particularly troubling difficulty posed by migration is that it can separate children from their parents, either because one family member migrates first and later brings over other family members (stage migration) or because a parent is deported or deterred from the dangerous border crossing. Ethnographic accounts detail "transnational family" patterns among labor migrants from Central America and Mexico,[19] whereby one or more family members (often a parent) will migrate for work, leaving other family members behind. Children born in the country of origin may be left there in the care of a single parent or relative even as new U.S.-born siblings are raised in the United States, so children in both countries are living apart from one or both parents and siblings. Little is known about how many children live in these types of families, but the number may be substantial. In the United States, although most Mexican children of immigrants live with two parents, 21 percent live with only one parent. Of these "single" parents, 17 percent are married but live apart from their spouse. Although the whereabouts of these parents is unknown, they may be living in Mexico. In a study of an immigrant-sending community in central Mexico, Joanna Dreby found that 28 percent of children had one or both parents living in the United States.[20] Clearly further study is warranted to learn more about how long children of immigrants remain separated from their immediate family members and how that separation affects their well-being

and future integration into U.S. society. Because of the limits of cross-sectional data for studying family separations and instability, it will be necessary to build binational data sets that follow children and parents over time to advance research in this area.

Migration also separates children from their parents when foreign-born adolescents travel to the United States alone in search of work. Among foreign-born Mexicans aged twelve to seventeen, fully 12 percent live in U.S. households with no resident parent.[21] These youths are highly likely to live with relatives other than parents or grandparents (62 percent), such as siblings, cousins, or aunts and uncles, or in households that do not include family members (27 percent). Because they are rarely enrolled in school and are subject to limited supervision, youth living apart from their parents are at high risk of negative short-term outcomes (such as unmet health care needs or drug and alcohol abuse) and negative long-term outcomes (such as limited education and skill development).[22] Yet few studies provide information on the circumstances of Mexican children who live apart from their parents. Researchers know little about the stability of their living arrangements or about whether living with extended kin is protective for these vulnerable youth.

Yet another risk factor for Mexican children of immigrants is the mixed legal status of their family members. Almost half of Mexican children of immigrants live in families where the children are citizens and the parents are not. (The comparable share for children of Asian immigrants is 13 percent; for children of European immigrants, 14 percent).[23] Beyond lacking U.S. citizenship, many of the parents in Mexican mixed-status families are unauthorized, especially those who have immigrated relatively recently. Using data from 2004, Jeffrey Passel showed that most Mexico-born U.S. residents who entered the country after 1990 were unauthorized, with figures ranging from 70 percent during 1990–94 to 85 percent during 2000–04.[24] Although the citizen children of unauthorized parents are on an equal legal footing with all citizen children, their parents' unauthorized status affects them adversely in many ways. Unauthorized parents typically work in unstable, low-wage jobs that do not carry health benefits. Thus Mexican children of unauthorized parents are more likely to be poor than other Mexican children of immigrants. In addition, as Passel notes in his article in this volume, unauthorized parents often fail to take advantage of public benefit programs for which their children qualify, because they fear deportation. These hardships may be intensified by unstable living arrangements and periods of separation from one or both parents. Researchers as yet know little about the family situations of children with unauthorized parents and should make that topic a high priority for future work.

The lives of children in mixed-status families would become especially difficult if U.S. citizenship laws were to change. One particularly disturbing recent development has been the mounting criticisms of birthright citizenship, which grants citizenship to all persons born in the United States as stated in the Fourteenth Amendment to the U.S. Constitution. For the United States to deny citizenship to the U.S.-born children of unauthorized immigrants, as some have advocated, could jeopardize child well-being and Mexicans' prospects for social integration. Jennifer Van Hook and Michael Fix projected the size of the unauthorized population if all children with an unauthorized mother were denied legal status.[25] Their mid-level estimates suggest that within four decades, the unauthorized population would

be 72 percent higher than the number under current law, and 15 percent of the unauthorized would be third- or higher-generation Americans. Because infants would be the first to lose U.S. citizenship, children would be disproportionately affected. By 2050 the share of all U.S. children who would be unauthorized would more than double, mostly likely exceeding 5 percent. In all likelihood, most of these children would be of Mexican or other Hispanic origin.

Children in Southeast Asian Immigrant and Refugee Families

Refugees come to the United States under very different circumstances than do Mexican labor migrants. Many flee their countries of origin from stressful and sometimes dangerous situations with little or no planning and may be ill prepared for life in the United States. Unlike labor migrants, however, they and their children are legally resident in the United States and receive settlement assistance from the federal government.

Refugees admitted to the United States in recent decades have increasingly come from diverse countries of origin.[26] Yet much of what scholars know about the living arrangements of children in refugee families comes from studies of the children of immigrants from Southeast Asia and Indochina—largely because Southeast Asian refugees have been in residence in the United States longer than most of their contemporary counterparts. The three major Southeast Asian refugee groups in the United States are the Vietnamese (whose arrival between 1970 and 2000 resulted in a tenfold increase in the Asian foreign-born population), Cambodians, and Laotians.[27] Refugees from Laos include former Hmong guerrillas, a group that fought on behalf of the U.S. government during the Vietnam War, as well as their descendants. In addition to their larger numbers, Vietnamese refugees differ from their counterparts from Cambodia and Laos in other important ways. For example, although children were overrepresented in refugee movements from all three countries, Cambodian and Laotian refugee groups brought with them more children than did the earlier Vietnamese groups.[28] Similarly, because Vietnamese refugee families fled to the United States earlier, their families have a greater share of second-generation children.[29]

Many studies of Southeast Asian immigrants base their discussion of living arrangements on the circumstances of the refugees' flight from conflicts and the ensuing implications for both their mode of entry and their situation after arrival. The refugee experience poses a range of challenges for Southeast Asian children of immigrants through its influence on household characteristics. Parental social and economic attributes, for example, differ for children in refugee and nonrefugee families, with other Asian immigrants tending to be more highly skilled and better educated than Southeast Asian refugees.[30] According to Rubén Rumbaut's study of children in San Diego, children in Southeast Asian refugee groups are less likely than other children to have parents who graduated from college. They are also the least likely to live in families that owned their own home.[31] Human capital also varies among the refugee groups, with families from Cambodia and Laos more disadvantaged than those from Vietnam. Rumbaut finds that parental schooling and home ownership rates are much lower among Cambodians and Laotians than among the Vietnamese. Other studies find parental human capital lowest among the Laotian Hmong refugees, many of whom were poor rural farmers before migrating to the United States.[32]

Other characteristics of Southeast Asian refugee parents depend on when they arrived in the United States. Earlier refugee cohorts from Vietnam, for example, had more schooling when they arrived than did more recent arrivals.[33] That disparity has important implications for child well-being among the Vietnamese because recent Southeast Asian refugee cohorts arrive with a greater number of children than earlier cohorts.[34]

The unique context of Southeast Asian refugee immigration also has implications for the family characteristics of the children, some of which pose significant challenges. First, a relatively high share of Southeast Asian children of immigrants lives in nontraditional family structures because of the death of family members, either in war or from hardships of life in refugee camps.[35] Cambodian refugee households suffered the worst effects. As observed by Nga Nguy, many Cambodian immigrants had spouses in their native country who were killed or simply taken away by Khmer Rouge guerrillas before they arrived in the United States.[36] More than a third of all Cambodian refugees are estimated to have lost either a family member or a close friend.[37]

Family deaths naturally diminished the likelihood that children would live in two-parent families. Rumbaut, for example, finds that Cambodian youths are less likely than other immigrant youths to live with two parents. Studies of Hmong and other Laotian youths report similar findings. According to the Youth Development Study in Minnesota, most Hmong youths live in households missing either one or two parents who died in conflict or in refugee camps; about two-thirds live in families without a biological father.[38] A significant number of Laotian immigrants to the United States also arrived as single parents, having lost their partners to conflict.[39]

Consequently Southeast Asian children of immigrants are more likely to live in single-parent families than their Asian counterparts overall (16 percent versus 12 percent for all Asians). They are, however, with the exception of Cambodian-origin children, less likely to live with a single parent than either Mexican or Caribbean black children of immigrants. As table 3 shows, about 16 percent of Southeast Asian children of immigrants live in single-parent families (24 percent for Cambodians), compared with 21 percent of Mexican and 43 percent of Caribbean black children of immigrants. Thus, although the significance of premigration parental mortality for family structure may have declined, the high prevalence of single-parent families among Southeast Asian immigrants suggests that their family structure is also a product of other social determinants.

Southeast Asian refugees are highly likely to have siblings, other relatives, and nonrelatives within their households who help provide child care and with whom they share resources.

Family structure among Southeast Asian youths is determined by the absence not only of Southeast Asian fathers but also of American fathers of children born outside the United States. For example, Jeremy Hein maintains that a significant number of first-generation Vietnamese and Cambodian children who arrived in the United States with

only their mothers and siblings had fathers who were American soldiers.[40] Because many of these fathers also died during the wars in their respective countries, only a few of their children were reunited with their fathers after arriving in the United States.

As another consequence of their war experiences, Cambodian immigrants created complex networks of extended-family relationships that foster family cohesion across fragmented households. Hein finds that these networks involve attaching isolated individuals and fragmented families to other families through friendship, fictive kinship, or marriage. It is not unusual for these households to contain multiple generations, as well as married siblings or friends who are unrelated to other household members but nonetheless considered part of the family. Among Vietnamese refugees, interstate mobility after arrival in the United States also complicates household structures. According to Nazli Kibria, many Vietnamese refugees migrate from one U.S. state to another to live with friends and other kin, thus creating new households that allow them to pool resources to combat poverty.[41] Hmong household relationships too are often highly complex. Estimates from the 2000 census indicate that the Hmong are more likely than the rest of the U.S. population to live in households that include grandchildren, parents, siblings, and other kin members.[42]

Table 3 shows that the likelihood of living with a grandparent varies considerably by country of origin among Southeast Asian children of immigrants, from a high of 23 percent for Cambodians to a low of 7 percent for Laotians. All Southeast Asian children, however, are highly likely to live in households with relatives other than grandparents. Combining grandparents and other relatives, fully 37 percent live in households with relatives other than their parents. Almost half of Cambodian children live in complex family households. Southeast Asian refugees are, therefore, highly likely to have siblings, other relatives, and nonrelatives within their households who help provide child care and with whom they share resources.[43] Nonetheless, the share of other relatives in their households is roughly comparable to that of Caribbean black children of immigrants and only somewhat higher than that of Mexican children of immigrants.

Southeast Asian children also have larger families than do other immigrant groups. Among Southeast Asians, Hmong families are the largest and also the youngest.[44] Southeast Asian families are large for several reasons.[45] The first is their fertility rate, which exceeds that of all other immigrants except Mexicans. The second is their desire to retain the characteristics of traditional Southeast Asian families after arriving in the United States. For example, Hmong immigrant families, like families in their country of origin, are formed early in the life course because of early marriage among females and the importance of childbearing.[46] As many as half of Hmong girls in California are estimated to marry before age seventeen.[47] Zha Blong Xiong and Arunya Tuicomepee report that the Hmong have higher teen birth rates than blacks, Latinos, and other Asians.[48] Not surprisingly, their analysis also shows that families consisting of married couples with children are more prevalent among the Hmong than among the U.S. population overall, again reflecting the importance of early marriage and childbearing among Hmong adolescents.

Studies about the possible effects of Southeast Asian childbearing patterns on socioeconomic outcomes report mixed

findings. For example, the high fertility rate of Southeast Asians has been linked with an increased risk of welfare dependency.[49] And findings show that large family size is associated with low labor force participation among females. Yet, according to many studies, the link between early childbearing and low educational attainment is weaker among Hmong teenage mothers than among their non-Hmong counterparts.[50]

Southeast Asian youths who immigrate to the United States by themselves are especially vulnerable, particularly when they live in households with no parents present. As table 3 shows, 5.2 percent of Southeast Asian children (and 6.1 percent of Vietnamese children) live without parents. Some of these unaccompanied youths arrive in the United States either as orphans or having been sent by parents to establish initial ties to facilitate future immigration through family reunification preferences.[51] Many of these children must make significant life-course transitions, such as their first employment experience, without their parents.[52] Despite such known vulnerabilities, however, only a few studies have systematically examined the living arrangements of unaccompanied refugee youths from Southeast Asia. A 1988 study found that many resettled within new U.S. families after arriving in the United States.[53] Similar patterns have been found in more recent refugee groups.[54]

Research on the implications of these living arrangements for children's outcomes focuses on unaccompanied Southeast Asian refugee youths in American foster families—finding, for example, that they have lower grades than their counterparts in ethnic foster families.[55] Unaccompanied siblings within the same foster family face other difficulties. For example, Mary Ann Bromley found that youths whose oldest sibling was their "household head" before immigrating to the United States have trouble adjusting when their sibling is replaced as household head by their foster father.[56] She also reports that unaccompanied refugee youths in American families are likely to feel isolated and have symptoms of post-traumatic stress disorder, although these feelings generally disappear as their stay in the United States lengthens. When they transition to independent living, older unaccompanied youths in foster care face many practical difficulties, such as taking care of themselves and finding employment to meet their expenses.[57]

Children in Black Caribbean Families

As U.S. immigration flows have become more diverse, the black foreign-born population has grown larger. Now one of the nation's fastest-growing immigrant groups, black immigrants, particularly those from the Caribbean, have drawn attention from scholars and social commentators for their economic success despite their disadvantaged racial origins.[58] Nevertheless, research and policy attention to the living arrangements of their children is generally limited—and at odds with the "success story" often told about black immigrants. Recent studies suggest that the children of black immigrants are more likely than other children to face several types of familial vulnerabilities that have significant implications for their well-being. For example, among all children of immigrants, the children of black immigrants are the least likely to live with two married parents; they are highly likely to live in single-parent families or with grandparents rather than parents.[59] In addition, they live in less favorable familial circumstances as they assimilate. As their generational status increases, they are more likely than children in other immigrant groups to continue to live in socioeconomically vulnerable household contexts, such as in single-mother households.

Most studies on the living arrangements of children of black immigrants focus on the largest such group—Caribbean immigrants. … Recent estimates indicate that more than half of all black children of immigrants have Caribbean-origin parents.

Most studies on the living arrangements of children of black immigrants focus on the largest such group—Caribbean immigrants—in part because they arrived earlier than black immigrants from other regions.[60] Recent estimates indicate that more than half of all black children of immigrants have Caribbean-origin parents.[61] We thus confine our review of the research to the children of black Caribbean immigrants.

Household living arrangements among black Caribbean immigrants are influenced by gender disparities in Caribbean immigration to the United States. Specifically, there are more female than male Caribbean immigrants, and this has influenced the sex composition of adults in immigrant families.[62] Caribbean-origin children of immigrants, especially those from the English-speaking Caribbean, are more likely to live in female-headed families than are children in many other immigrant groups.[63] Some scholars suggest that the high prevalence of single-parent families among Caribbean immigrants also reflects the influence of pre-migration familial norms unique to the Caribbean region. The higher prevalence of female-headed households among Caribbean than non-Caribbean immigrants in South Florida, for example, reflects the higher prevalence of such families in Caribbean countries of origin.[64] At the same time, female-headed households among Caribbean immigrants sometimes result from shifts in who is designated as household head. Such shifts may arise from the post-immigration economic influence of women in families accompanied by husbands or fathers during their initial migration to the United States.[65]

Table 3 compares the family structures of black children of immigrants from the Caribbean and from Africa. Caribbean-origin youth are considerably less likely to live with married parents (33 percent) than their counterparts whose parents migrated from Africa (55 percent). They are more likely than any other group shown in table 3 except black children of native-born Americans to live in a single-parent family (43 percent compared with 55 percent).

The prevalence of single-parent families among Caribbean immigrants varies by group and by state of residence. Sherri Grasmuck and Ramon Grosfoguel maintain, for example, that in New York, Dominican immigrants have more female-headed households than do Jamaicans or Haitians.[66] But in both California and Florida, Rumbaut finds that the children of Jamaican and Haitian immigrants are the most likely to live in father-absent families.[67] Regardless of place of residence, however, Caribbean children in single-parent families fare worse than their counterparts in two-parent families. Among Caribbean immigrants in Southern Florida, for example, children in single-parent families were found to have lower grade point averages, as well as lower math and reading

scores, than those in two-parent families.[68] In addition, Mary Waters' work among Caribbean youths in New York indicates that children in female-headed single-parent families generally have working mothers whose ability to supervise them is constrained by their limited access to networks of extended-family members and friends.[69]

Among Caribbean immigrants, single-parent households are sometimes temporary family arrangements associated with sequential patterns of family migration in which females initially migrate with their children to be followed by their spouses.[70] Indeed, our analysis of the CPS data shows that among all black children of immigrants living in single-parent households, roughly one in five has a married parent living elsewhere. Stage-migration patterns may thus separate members of black immigrant families, much as they do Mexican immigrant families. Even when the "married-but-apart" group is added to the "married" category, however, the resulting share is substantially lower than that among other children of immigrants. Moreover, evidence suggests that a large share of the U.S.-born children of Caribbean immigrants lives in female-headed single-parent families. Waters, for example, notes a high prevalence of female single-parent households among second-generation black Caribbean children of immigrants,[71] suggesting that the high prevalence of single-parent living arrangements among Caribbean families cannot be explained simply by sequential migration patterns and traditional or home country familial norms. The persistence of single-parent families across generations suggests post-immigration influences that are yet to be examined systematically.

Extended-family members who remain in the Caribbean generally play a crucial role in the residential patterns of these children. Parents sometimes send children back to their country of origin to keep them from being socialized negatively by their peers or to influence their developmental trajectories. Once back in the Caribbean, children usually live in nonparent households headed by extended-family members.[72] Likewise, when limited resources prevent the entire family from immigrating, siblings left behind live with extended-family members.[73] These children, who are generally very young, are raised in nonparent households until their early teenage years, when they are reunited with their parents in the United States.[74] Post-migration changes in households also have social implications for the integration of newly arriving Caribbean teenagers into the family. Extended separation between parents and their children may be especially stressful for children whose parents divorce or remarry, or both, in their absence, especially when children have to live with new stepparents.[75] Consequently the reunification of Caribbean children and their immigrant parents in the United States after long separation is often associated with elevated parent-child conflict.[76]

Immigration and Immigrant Integration Policy and Child Well-Being

Immigration policy shapes the laws and practices that affect the national origins, numbers, and characteristics of those who come to live in the United States. It includes admissions, refugee, and border policies. Immigrant integration policy involves the laws and practices concerning the settlement and incorporation of immigrants and their children. Despite the wide diversity of the challenges that face immigrants and their families because of their unique patterns of immigration and integration, it is possible

to identify some ways to alter U.S. immigration and integration policies to help sustain the pre-existing strengths of a broad range of immigrant families.

Immigration Policy

Since 1965 U.S. immigration policy has been guided by principles that promote the reunification of immigrants with their children and other relatives living abroad. In practice, however, policy often violates these principles. Sometimes, it serves to separate rather than support immigrant families. One issue requiring policy makers' attention is that legal immigrants to the United States must often wait several years before their spouses and children may legally join them. Relatives of U.S. citizens and legal permanent residents (LPRs) are permitted to immigrate to the United States under the "family reunification" provisions of the Immigration and Nationality Act. However, long backlogs for some family reunification admission categories, including the spouse and minor children of legal permanent residents, contribute to extended periods of family separation. Backlogs are partially a consequence of inadequate staffing. Doris Meissner and Donald Kerwin argue that the office of Citizenship and Immigration Services (CIS) is understaffed and ill prepared for the inevitable periodic surges in applications.[77] They acknowledge that serious efforts have been made during the past decade to reduce backlogs, but contend that some of the apparent successes have come about by redefining the backlog rather than reducing the waiting time for applicants. According to Meissner and Kerwin, reductions in the backlog (made possible by surges in funding and staffing) tend to be offset by increases in the number of applications as word gets out that wait times have become shorter.

Backlogs are also attributable to the mismatch between admission policy and the demand for visas. Under the family reunification criteria, immediate relatives of U.S. citizens and legal immigrants are eligible for admission to the United States. Current admission criteria grant unlimited numbers of visas to minor children and spouses of U.S. citizens, meaning that they may be admitted as soon as their case has been approved. But the spouses and minor children of legal permanent residents must usually wait several years after their application is approved before they are issued an immigration visa, because the number of visas available to minor children and spouses of LPRs is limited by numerical annual caps that are applied equally to all countries regardless of demand for immigrant visas. The caps, devised to prevent single countries from dominating immigration flows, place unrealistic restrictions on countries with large numbers of potential immigrants to the United States, such as Mexico, China, India, and the Philippines. In 2006 a spouse or a minor child sponsored by an LPR had to wait about six years between applying and being admitted, and the wait has been estimated to be much longer for Mexicans, who apply in such large numbers.[78] Immigrants qualifying for other visa categories, such as unmarried adult children, often have an even longer wait (for example, fifteen years for Mexicans).

During the waiting period between application and admission, prospective immigrants must remain outside the United States. If authorities discover that they have lived in the United States illegally for more than one year, admission is denied and they are not allowed to immigrate for ten more years.[79] Meanwhile, young children living outside the United States spend critical childhood years separated from their immigrant parent(s) and

sometimes even "age out" of the admission category for which they were initially eligible (because they are no longer minor children). Thus, children who turn twenty-two while waiting for admission must find alternative legal pathways—and may endure even longer waiting periods—if they wish to join their parents in the United States. If children are finally reunited with their parents, interpersonal problems may arise as these families negotiate their new lives together and older children born outside the United States must contend with new U.S.-born siblings.

Long waits for legal admission may also encourage illegal immigration. As the Independent Task Force on Immigration and America's Future argues, "The system's multiple shortcomings have led to a loss of integrity in legal immigration processes. These shortcomings contribute to unauthorized migration when families choose illegal immigration rather than waiting unreasonable periods for legal entry."[80] Guillermina Jasso and her colleagues find that about half of LPRs are not new arrivals but had been living (most illegally) in the United States.[81] In 2005 (the last year estimates were made available), the backlog included 3.1 million approved LPR applications. If half of these cases were living illegally in the United States in 2005, that would imply that about 14 percent of the estimated 10.5 million unauthorized residents at that time had been approved for legal admission but remained unauthorized because of the long waiting lists.[82]

Reducing immigration backlogs could improve children's lives. At the very least, adequate staffing could reduce waiting times within existing immigration law. Some observers argue further that minor children and spouses of LPRs should be treated like the minor children and spouses of citizens and be admitted immediately without a wait. Still others have proposed legislation to reduce the backlog by allowing LPRs, like citizens, to bring in their spouses and children, but not their parents.[83] All these measures are likely to shorten the time that legal immigrants are separated from their spouses and children living abroad and could also reduce the size of the unauthorized population.

Another immigration policy issue with important implications for immigrant families is the deportation of unauthorized immigrants. About 5 million children in the United States have at least one unauthorized parent. Nearly one in three children of immigrant parents (and half of all foreign-born children) has at least one unauthorized parent.[84] In the past decade, the U.S. Immigration and Customs Enforcement stepped up workforce raids and deportations of unauthorized workers. The number of unauthorized immigrants arrested at workplaces increased from 500 in 2002 to 3,600 in 2006. Often the unintended victims of these raids and arrests are the children of the immigrants. Indeed, U.S. courts have ruled that having a citizen child is not sufficient cause to prevent deportation of parents who are not authorized to reside and work in the United States. In several case studies on the impact of workforce raids on children, Randy Capps and his colleagues found that the arrest and deportation of unauthorized workers often resulted in family separation and financial hardship for children of immigrants.[85] For every 100 unauthorized workers arrested, about 50 children were in their care. Following a workforce raid, unauthorized immigrant parents were often held overnight while their children were placed in the care of neighbors, babysitters, and relatives. Single parents or parents who were the sole caregiver of children were

often released on the same day. Frequently, however, one of the parents was held (some for several months) while the other was released on bond to care for children but not permitted to work. Despite assistance from family members, community organizations, and churches, these families experienced great financial hardship and emotional stress. Although the number of children directly affected by workforce raids now appears to be low compared with the overall number of children of immigrants, the effects could spread if deportation efforts are increased.

Immigrant Integration Policy

The successful economic and social integration of today's immigrant families is key to the future well-being of the nation's children. Of particular concern is the increase in the share of immigrant children living with single parents across generations. But developing policies that reduce the levels of marital dissolution and nonmarital childbearing for this population is extremely difficult. Researchers and policy makers do not know how to reduce these behaviors in the broader U.S. population, let alone among the children and grandchildren of immigrants. To some degree, declines in marriage rates and increases in single parenthood may be inevitable among immigrant families as they acculturate, because divorce and single parenthood have become increasingly commonplace in U.S. society. Nonetheless, it is clear that both marital dissolution and nonmarital childbearing are strongly associated with economic hardship—both because economic disadvantage leads to fewer marriages and greater marital instability and because single parenthood reduces the number of earners in children's households. The successful economic integration of immigrant families is therefore critical to efforts to reduce the prevalence of single-parent families among second- and third-generation children and to reduce the negative consequences of living in a single-parent household. Measures to reduce poverty among all children of immigrants, regardless of their living arrangements, are of central importance.

Unlike many other countries with large immigrant populations, the United States has no explicit immigrant integration policy or programs. If anything, the U.S. government has weakened its support for immigrant families over the past three decades, as is evident in the steady withdrawal of social welfare benefits for noncitizens since the early 1980s and in the welfare reforms of 1996 that tied eligibility for federal welfare benefits to citizenship.[86] Welfare reform led to substantial reductions in receipt of welfare among noncitizens and was also associated with increases in food insecurity among immigrant families and their children.[87] Nor were the effects of welfare reform limited to noncitizens. Even though U.S.-born children of immigrants remained eligible for welfare benefits, their rates of participation in welfare programs, especially the Supplemental Nutrition Assistance Program (formerly the food stamp program), decreased faster than did those of children of citizens. Some accounts suggest that the decrease in participation was attributable to immigrants' confusion about eligibility, their worry that applying for benefits would jeopardize their ability to naturalize or sponsor relatives for immigration, or their fear of bringing attention to other unauthorized immigrants living in the household.[88] Although some observers believe that immigrants should not receive economic support, accumulating evidence suggests that immigrants are unlikely to be drawn to the United States because of its welfare benefits. Nor are they especially "welfare-prone" or deterred from working because of the availability

of welfare benefits.[89] On the basis of that evidence, we suggest that more attention and resources should be directed toward immigrant settlement. Legal immigrants and their children should be granted greater access to the social safety net regardless of citizenship status. At the very least, immigrant parents need accurate information about social welfare benefits for which they and their children are eligible.

Conclusion

Children with immigrant parents are a rapidly growing part of the U.S. child population, and they are here to stay. Their health and development, educational attainment, and future social and economic integration will play a defining role in the nation's future. Immigrant families have many strengths—in particular, high levels of marriage and commitment to family life—that clearly benefit their children and offset to some extent potential negative impacts of other risk factors. But despite their strengths, these families are vulnerable because of the separations and economic insecurities inherent in the migration process, the stresses of forging a new life in the United States, and the lack of an explicit U.S. immigrant integration policy.[90] In facing these challenges, immigrant families reshape and adapt themselves through extended-family living arrangements, social support networks of kin and non-kin, and family networks that extend beyond national boundaries.

Quite apart from immigration, children's living arrangements in the United States have been changing rapidly in response to a sharp rise over the past several decades in nonmarital births, cohabitation, and marital dissolution. Despite rising rates of female employment, the growth of single parenthood resulting from these changes has led to a striking inequality in children's life chances, with children in two-parent families having access to far more economic resources and parental time than children in families with only one, or, even worse, no parent. Differences in the living arrangements of children of immigrants by generational status suggest that as immigrant families spend more time in the United States, their family patterns progressively mirror those of the general population. The nation should pay special heed to how this aspect of immigrants' Americanization heightens the vulnerability of their children.

Endnotes

1. Karina Fortuny and Ajay Chaudry, "Children of Immigrants: Immigration Trends," Fact Sheet No. 1 (Washington: Urban Institute, 2009).
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Early Care and Education for Children in Immigrant Families

Lynn A. Karoly and Gabriella C. Gonzalez

Summary

A substantial and growing share of the population, immigrant children are more likely than children with native-born parents to face a variety of circumstances, such as low family income, low parental education, and language barriers that place them at risk of developmental delay and poor academic performance once they enter school.

Lynn Karoly and Gabriella Gonzalez examine the current role of and future potential for early care and education (ECE) programs in promoting healthy development for immigrant children. Participation in center-based care and preschool programs has been shown to have substantial short-term benefits and may also lead to long-term gains as children go through school and enter adulthood. Yet, overall, immigrant children have lower rates of participation in nonparental care of any type, including center-based ECE programs, than their native counterparts.

Much of the participation gap can be explained by just a few economic and sociodemographic factors, the authors find. To some extent, the factors that affect disadvantaged immigrant children resemble those of their similarly disadvantaged native counterparts. Affordability, availability, and access to ECE programs are structural barriers for many immigrant families, as they are for disadvantaged families more generally. Language barriers, bureaucratic complexity, and distrust of government programs, especially among undocumented immigrants, are unique challenges that may prevent some immigrant families from taking advantage of ECE programs, even when their children might qualify for subsidies. Cultural preferences for parental care at home can also be a barrier.

Thus the authors suggest that policy makers follow a two-pronged approach for improving ECE participation rates among immigrant children. First, they note, federal and state ECE programs that target disadvantaged children in general are likely to benefit disadvantaged immigrant children as well. Making preschool attendance universal is one way to benefit all immigrant children. Second, participation gaps that stem from the unique obstacles facing immigrants, such as language barriers and informational gaps, can be addressed through the way publicly subsidized and private or nonprofit programs are structured.

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Researchers and policy makers have long recognized the importance of early care and education (ECE) programs in promoting healthy development before children enter school and in shaping their success once they begin school. But do these programs hold the same promise for immigrant children? This article explores the current role of and future potential for early childhood education for the large and growing segment of immigrant children.

According to data from the 2005–06 American Community Survey, of the 15.7 million immigrant children in the United States, nearly 5.7 million are age five or younger.[1] Nationally, immigrant children make up about 24 percent of the under-six age group, and that share reaches as high as 50 percent in California. Although 94 percent of these youngest immigrant children were born in the United States, they are more likely than their native-born counterparts with native-born parents to face a variety of circumstances that place them at risk of developmental delay and poor academic performance once they enter school. Among immigrant children under age eighteen, for instance, 28 percent are in a linguistically isolated household where no one age fourteen or older speaks English "very well," 26 percent have parents without a high school degree, and 22 percent have family income below the poverty line.[2] At the same time immigrant children are a heterogeneous group. Many live in families where English is spoken fluently, parents are well educated, and the family enjoys a high standard of living.

As Robert Crosnoe and Ruth Turley discuss in more depth in their article in this volume, researchers and policy makers have long taken the view that elementary and secondary education supports the economic and cultural assimilation of immigrant children, but schools can also reinforce existing disparities associated with race and ethnicity, country of origin, and English fluency. The potential for high-quality early-learning settings to advance school readiness and academic achievement in absolute terms and to narrow gaps between less advantaged and more advantaged groups of children has spurred greater interest in promoting access to such programs, especially for disadvantaged children.[3] Growing policy support for early care and education more generally stems from advances in brain research demonstrating the importance of the first few years of life in laying a foundation for healthy cognitive, emotional, social, and physical development.[4] Thus, especially for disadvantaged immigrant children, it is important to understand the extent to which children already participate in ECE settings and the quality of those experiences, the potential benefits that might be expected from being in such programs, and the nature of the barriers that may preclude children who could benefit from participation. An understanding of these issues can then shape a policy agenda to remedy any issues identified with access and quality.

Our scope in this article covers child care and early-learning programs in home- and center-based settings that serve children from birth to their entry into kindergarten. Because the research base specific to immigrant children is richer for preschool-age children and center-based programs than it is for infants and toddlers and home-based care, we offer some original data analysis of ECE use and quality to complement previous research. In both our data analysis and literature review, we define immigrant children as those who are foreign-born or native-born with one or both parents being

foreign-born, groups that represent first- and second-generation immigrants, respectively. (Given that the first-generation group is so small among immigrant children under age six, sample sizes limit our ability to examine ECE patterns by immigrant generation.) We refer to children who are native-born with native-born parents as nonimmigrants or natives. This classification of immigrant status for children may differ from definitions in other studies of ECE use and impact. We note such differences when relevant.

Immigrant Children and Participation in ECE Programs

Despite the recent interest in participation in ECE programs, relatively few studies have focused on participation patterns specifically for immigrant children. One of the first analyses based on a nationally representative sample of immigrant children used detailed data on child-care arrangements for children under age six collected in the 1996 panel of the Survey of Income and Program Participation (SIPP).[5] The estimates showed that immigrant children under age six were more likely than their native counterparts to be in parental care only (59 versus 44 percent) and less likely to be in center-based care (14 versus 25 percent). The two groups were more similar in their use of nonrelative care and kin care.

This general pattern has been confirmed in other studies using data from the 2000 Census and the Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K) with a focus exclusively on preschool-age children. For example, estimates from the 2000 Census, which asks about regular school attendance including "nursery school or preschool," indicate that immigrant children participate in early education programs at lower rates than their native counterparts at both age three (30 versus 38 percent) and age four (55 versus 63 percent).[6] Estimates from the ECLS-K for the cohort that entered kindergarten in 1998–99 also show that children of mothers born outside the United States and children of Mexican immigrant families were less likely to be enrolled in center- or school-based preschool programs than other children in the year before they entered kindergarten, with a participation differential as large as 15 percentage points.[7]

Research also documents considerable variation by subgroup of immigrants and by geography in their use of nonparental care or specific types of care arrangements such as preschool programs. The evidence suggests, for example, that immigrant children from Mexico are even less likely to participate in preschool programs than immigrant children from Central America, the Dominican Republic, or Indochina.[8] Preschool participation rates for three- and four-year-olds also vary substantially by state, with the largest participation gaps between immigrant and native children in the states with the largest immigrant populations.[9]

An Updated Perspective on ECE Use by Immigrant Children

While informative, these studies offer a limited understanding of the patterns of ECE use for immigrants and natives, especially ECE use for infants and toddlers compared with preschool-age children. Furthermore, earlier studies relied on data from the 1990s or the 2000 Census, which may offer a dated perspective on ECE use given the recent expansion of subsidized child-care programs, including state-funded preschools.[10] Because of our interest in current ECE use among immigrant children—both first and second generation—from birth to kindergarten entry (typically at age five), we have

Table 1. Early Care and Education Arrangements for Children, by Age Cohort

Percent, except as indicated	0 to 2-year-olds		3-year-olds		4-year-olds	
Measure	**Immigrant**	**Native**	**Immigrant**	**Native**	**Immigrant**	**Native**
ECE arrangements for all children in the 2005 National Household Education Survey						
Any nonparental care	37.6	55.1	61.4	71.2	71.8	83.6
ECE by setting type						
Any center-based ECE	13.2	23.0	44.9	50.7	65.9	75.3
Any relative care	16.8	24.0	19.3	22.8	15.3	24.0
Any nonrelative care	12.9	16.6	9.1	13.7	9.1	9.1
Number (unweighted)	1,154	3,030	328	1,061	292	919
ECE arrangements for all children in the 2007 RAND California Preschool Study						
Any nonparental care	...	...	63.7	78.2	72.9	85.4
ECE by setting type	...	...				
Any center-based ECE	...	...	49.5	51.8	62.1	72.0
Any relative care	...	...	14.3	28.8	15.6	22.8
Any nonrelative care	...	...	10.4	14.6	12.1	15.8
Number (unweighted)	...	...	434	581	429	578

Source: Authors' analysis of 2005 NHES Early Childhood Program Participation and 2007 RAND California Preschool Study.
Notes: Tabulations are weighted. Immigrant children are those either born outside the United States or with at least one parent born outside the United States. In the NHES, the four-year-old age group includes those born between October 1999 and September 2000, so they were either age four or five when the survey was conducted between January and April 2005. The three-year-old cohort includes those born between October 2000 and September 2001, while those in the youngest cohort were born in October 2001 or later. In the California data, kindergarten entry cohorts were defined using the state's kindergarten entry cutoff of December 2.
... = Not available.

generated estimates of ECE use from the Early Childhood Program Participation (ECPP) module of the National Household Education Survey (NHES), which was last administered to a nationally representative sample of families with children under age six in the first four months of 2005.[11] The ECPP module collects detailed information about the use of various types of care arrangements at the time of the survey for children under age six who are not yet enrolled in kindergarten. Nativity information is also collected for the child and his or her parents.[12]

We also draw on data collected in the late winter and spring of 2007 on ECE use and quality for a representative sample of three- and four-year-olds in California as part of the RAND California Preschool Study.[13] Examination of the data from California, home of 27 percent of the nation's immigrant children under age six, is instructive for several reasons. First, the data for 2007 are even more current than those from the NHES. Second, according to the RAND data, 50 percent of all California three- and four-year-olds are first- or second-generation immigrants, so one can see if the patterns of ECE use among immigrants shown in national data also hold for California. Finally, in addition to collecting information on care arrangements and nativity status comparable to that in the NHES, the California study obtained information through direct observation of program quality for children in center-based programs. Thus the California data provide an opportunity to examine the quality of ECE received by immigrant and nonimmigrant children in center-based settings.[14]

Table 1 reports estimates of the use of nonparental care for children stratified by age group and immigrant status from the 2005 NHES (top panel) and the 2007 California study (bottom panel). Age groups are defined by school-entry cohorts (rather than age at the time of the survey) based on the month and year of their birth in the NHES and the birth date in the California data.[15] For example, at the time of either survey (the first part of the calendar year), children in the four-year-old age group would be age-eligible to enter kindergarten in the following fall, so they would typically be labeled four-year-old preschoolers. The three-year-olds, those children who are two years away from kindergarten entry, are likewise typically included in the preschool-age group. Those in the youngest age group (available only for the NHES), typically labeled infants and toddlers, are usually not yet eligible for preschool programs. Both sources of data ask about regular nonparental care arrangements and differentiate between center-based programs and care provided in a home by either a relative or nonrelative.[16]

Compared with their native counterparts, immigrant children at each age are less likely to be in center-based care or either type of nonparental home-based care.

As expected, both panels of table 1 show that use of nonparental care increases with the age of the child for both immigrant and nonimmigrant children. Of more interest is that at each age, the share of immigrant children in any nonparental care is smaller than the share of native children in nonparental care.[17] In the NHES the differential is 17 percentage points for children under three, 10 percentage points for those age three, and 12 percentage points for those age four. While the levels differ, the California data show a similar gap in the use of any nonparental care for the two older cohorts (14 and 12 percentage points, respectively).

Differentiated by care type, the use of center-based programs also increases with age, reaching 66 and 75 percent nationally (and 62 and 72 percent in California) for four-year-old immigrant and nonimmigrant children, respectively. Again, however, compared with their native counterparts, immigrant children at each age are less likely to be in center-based care or either type of nonparental home-based care (with the exception of nonrelative care among four-year-olds in the NHES). Interestingly, the immigrant-native gap in the use of center-based care is smaller for three-year-olds than it is for four-year-olds, especially in California. Nevertheless, the differential use of center-based care, especially in the two preschool-age groups, suggests that immigrant children may have less exposure to formal early-learning programs that can support their preparation for school entry. At the same time, the differential in center-based care for four-year-olds as of 2005 in the NHES is less than the differential measured in the ECLS-K cohort whose children would have attended preschool seven years earlier.[18] This finding suggests that the preschool participation gap may be narrowing over time, perhaps as a result of the expansion of state-funded programs.

The immigrant-native differences in the use of any nonparental care raise the question

Table 2. Early Care and Education Arrangements among Children in Nonparental Care, by Age Cohort

Percent, except as indicated	0 to 2-year-olds		3-year-olds		4-year-olds	
Measure	**Immigrant**	**Native**	**Immigrant**	**Native**	**Immigrant**	**Native**
ECE arrangements for children with any nonparental care in the 2005 National Household Education Survey						
ECE by arrangement with most hours						
Main arrangement: center-based	32.6	38.9	67.5	63.5	83.4	77.7
Main arrangement: relative	38.1	35.1	23.4	23.6	11.6	16.0
Main arrangement: nonrelative	29.3	26.0	9.1	13.0	5.0	6.4
ECE by arrangement hierarchy						
Any center-based ECE	35.0	41.7	73.1	71.3	91.8	90.0
Main arrangement: relative	37.4	33.5	19.3	19.2	6.4	7.3
Main arrangement: nonrelative	27.6	24.8	7.5	9.5	1.9	2.6
Number (unweighted)	455	1,725	217	803	227	783
ECE arrangements for all children with any nonparental care in the 2007 RAND California Preschool Study						
ECE by arrangement with most hours						
Main arrangement: center-based	...	...	69.8	57.5	80.5	74.0
Main arrangement: relative	...	...	16.3	31.5	10.8	13.3
Main arrangement: nonrelative	...	...	13.9	11.0	8.7	12.7
ECE by arrangement hierarchy						
Any center-based ECE	...	...	77.8	66.2	85.0	84.3
Main arrangement: relative	...	...	11.7	25.6	6.7	6.5
Main arrangement: nonrelative	...	...	10.5	8.2	8.3	9.1
Number (unweighted)	...	...	291	432	347	510

Source: Authors' analysis of 2005 NHES Early Childhood Program Participation and 2007 RAND California Preschool Study.
Notes: Tabulations are weighted. See definitions of immigrant status and age cohorts in table 1.
... = Not available.

of whether the use of different care settings, for children in any nonparental care, varies by immigrant status. Table 2 highlights these patterns for both data sources using two approaches to account for multiple care arrangements. First, the table classifies children by the care setting where they spend the most time based on weekly hours (labeled the "main arrangement"). As shown in the top panel of the table, among children in nonparental care, immigrant children in the two preschool-aged groups, both nationally and in California, are more likely than native children to spend the most hours in center-based care. The difference can be quite sharp, as evidenced by care in California, where 70 percent of three-year-old immigrant children and 58 percent of native children in care spend the most hours in center-based care. The reverse pattern holds for infants and toddlers, with immigrant children less likely than their native counterparts to spend the most hours in a center setting.

The second approach assigned children in any center-based program to that category regardless of hours spent there. Thus calculated, as shown in the bottom panel of table 2, rates of participation in any center-based care are very similar for immigrant and nonimmigrant children in nonparental care, especially for three- and four-year-olds. Three-year-olds in California are the exception, with natives having a smaller share than immigrants in any center setting. Among four-year-olds, upward of 10 to 12 percent

Table 3. Early Care and Education Arrangements for Children in 4-Year-Old Cohort by Selected Characteristics: 2005 National Household Education Survey

Percent, except as indicated	Any nonparental care		Any center-based care	
Characteristic	**Immigrant**	**Native**	**Immigrant**	**Native**
By poverty status				
Household income below poverty	68.8	79.7	53.8	67.9
Household income above poverty	73.0	84.4	70.6	76.8
By parental education				
Below high school graduate	66.0	71.1	52.3	56.5
High school graduate or above	73.7	84.4	70.2	76.5
By number of parents in family				
Two parents	26.8	35.1	66.0	74.5
One parent	67.4	89.0	64.9	77.5
By ethnicity				
Hispanic or Latino	69.8	69.9	59.3	56.7
Not Hispanic or Latino	74.1	85.1	73.6	77.3
Number (unweighted)	292	919	292	919

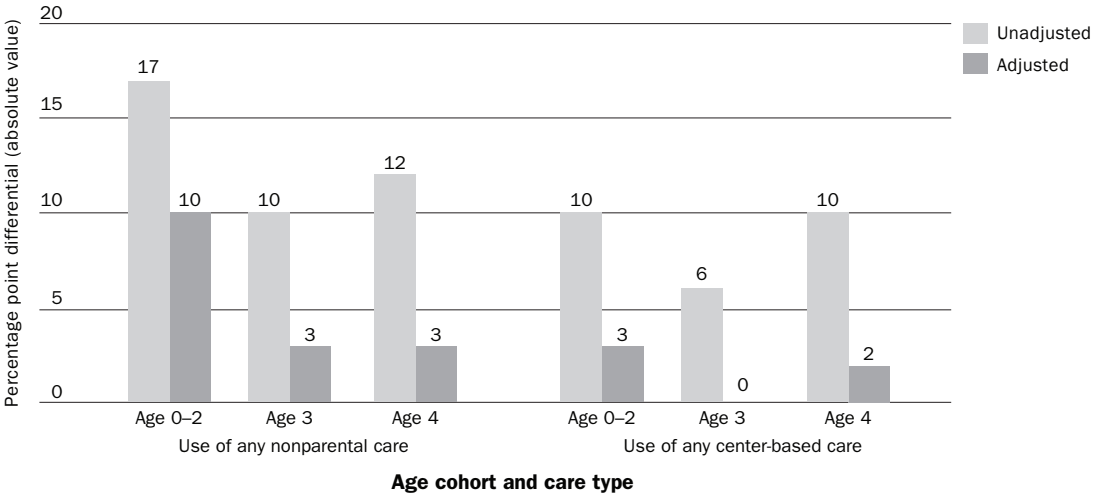
Source: Authors' analysis of 2005 NHES Early Childhood Program Participation.
Notes: Tabulations are weighted. See definition of immigrant status in table 1.

of immigrant and native children nationally are in center-based care, although they spend more time in some other non-center-based arrangement. Because many preschool programs last for only part of a day, children may spend more time in other care arrangements, especially when their parents need full-time care. Ultimately, these patterns indicate that, among all children in nonparental care, immigrant children in the preschool age groups—especially four-year-olds—are equally if not more likely than their native counterparts to be in a center-based setting.

Composition Differences and the Immigrant-Native Gap

Immigrant children would be expected to have lower rates of participation in nonparental care than native children, because they are more likely to have the characteristics associated generally with lower participation in care arrangements. For example, immigrant children are disproportionately from families with low income, with low parental education, with two parents, and of Hispanic ethnicity, all factors associated in earlier studies with lower use of nonparental care.[19] To what extent can these and other demographic or socioeconomic characteristics explain the immigrant-native gap? Table 3 explores this question by reporting immigrant-native differences in the use of any nonparental care and the use of any center care for four-year-olds in the NHES within subgroups defined by poverty status, parental education, the number of parents in the family, and ethnicity.[20] As expected, whether one looks at immigrants or natives, the use of any care and any center-based care is higher for children in families with income above poverty, with parents who have a high school degree or higher, within one-parent families, and who are not Latino. In other words, for example, immigrant children above the poverty line are more likely than immigrant children below the poverty line to use some form of nonparental care. Yet within all but one of these subgroups, immigrant children are less

Figure 1. Size of Unadjusted and Adjusted Immigrant-Native Gap in Care Use by Age Group: 2005 National Household Education Survey



Source: Authors' analysis of 2005 NHES Early Childhood Program Participation.
Note: Adjusted percentage point differential controls for poverty status, parental education, number of parents, and Hispanic ethnicity.

likely than their native counterparts to use any care, including center-based care. For example, the immigrant-native gap in the use of center-based care is 14 percentage points for children in poor families and 6 percentage points for those in nonpoor families. The one exception is for Latino children, where immigrants and native children (that is, third generation) are equally likely to use any nonparental care and Latino immigrants are slightly more likely than Latino natives to use center-based care.

Considering each of these characteristics alone, as in table 3, cannot eliminate the immigrant-native gap. But if composition differences across all four characteristics are simultaneously accounted for in a regression model, much of the immigrant-native gap for the two older age groups can be explained. The results of the regression are illustrated in figure 1, which shows the absolute size of the immigrant-native gap in the use of any care and use of center-based care. For each age group, the first bar shows the unadjusted percentage-point gap (the same as those reported in table 1), while the second bar shows the gap that remains after accounting for poverty status, parental education, number of parents, and Hispanic ethnicity. With the exception of the use of any care among infants and toddlers, the adjusted gap is reduced to 3 percentage points or less after controlling for the four characteristics. In other words, much of the lower use of nonparental care and center-based care on the part of immigrant children, at least for three- and four-year-olds, can be explained by four factors: higher poverty rates, low parental education, and a higher propensity to be in two-parent families and of Hispanic ethnic origin. One implication is that efforts to address low rates of ECE use for low-income families or families with low parental education would also potentially encompass immigrant children who share these characteristics. It also means that there

Table 4. Quality of Care Measures for Preschool-Age Children: 2007 California Preschool Study

	Total		Mean		
Quality measure	**Mean**	**SD**	**Immigrant**	**Native**	**Effect size**
Early Childhood Environment Rating Scale-Revised					
Mean score for space and furnishings	4.4	1.14	4.2	4.5	0.26
Mean score for activities	3.9	1.24	3.8	3.9	0.08
Mean score combined	4.1	1.09	4.0	4.2	0.18
Classroom Assessment Scoring System					
Mean score for emotional support	5.5	0.88	5.4	5.5	0.11
Mean score for classroom organization	4.9	1.06	4.7	5.0	0.28
Mean score for instructional support	2.6	1.05	2.5	2.8	0.29

Source: Authors' analysis of 2007 RAND California Preschool Study data.
Notes: Sample size is 615. Tabulations are weighted. See definition of immigrant status in table 1. Missing data are imputed using N = 10 imputations. Both ECERS-R and CLASS are scored on a 7-point scale, with 7 being the highest quality. The effect size is calculated as the ratio of the difference in the group means divided by the overall standard deviation. SD = standard deviation.

is a residual gap in ECE use for immigrants, albeit a relatively small one for preschoolers, that must be explained by other factors that may be more germane to the immigrant population. We turn to such potential barriers in a later section.

Quality Differences in Center-Based ECE Programs for Immigrant Children

Researchers have made few efforts to link data on care use with measures of quality for the ECE settings children use for representative samples of children. The RAND California Preschool Study provides such an opportunity for preschool-age children because it collected observational measures of program quality in center-based settings for a subset of the sample children in center care. These data show that measures of global quality, namely, the Early Childhood Environment Rating Scale-Revised (ECERS-R) and the Classroom Assessment Scoring System (CLASS), as well as other measures of structural quality such as group sizes and ratios, vary only modestly across groups of children defined by family income, parent education, mother's nativity, linguistic isolation, and other characteristics.[21]

Differences by race and ethnicity were somewhat more pronounced and showed that Latino children experienced somewhat higher quality on some dimensions. However, all groups of children, both less and more advantaged, experience shortfalls with respect to benchmarks that are associated with high-quality care environments, often by large margins. (Examples of benchmarks are achieving an ECERS-R score of 5 or better on a scale of 1 to 7 or having a lead classroom teacher with a bachelor's degree.)

The lack of large differences in quality for children in more disadvantaged groups relative to their more advantaged peers suggests that differences in quality for immigrant versus native children would not be large, a contrast that was not made in previous research using these data. Indeed, as demonstrated in table 4, the two global quality measures, both set on a 7-point scale, show only modest differences between immigrant and nonimmigrant children in center-based programs. On average, the two subscales of the ECERS-R collected show quality for all children falls between the minimally acceptable level (a score of 3) and the good level (a

score of 5). The variation by immigrant status is small, about 0.2 of a standard deviation, although the scores are always somewhat lower for immigrant children than for their native peers.

A similar pattern emerges for the CLASS, which is viewed as capturing process aspects of care quality. As seen in table 4, the scales for emotional support and classroom organization are in the middle-score range, but the score for instructional support is on the low end of the scale, a common result in other studies that have used the CLASS in preschool-age settings.[22] Together these scores indicate that teachers in center-based settings are relatively successful in creating emotionally supportive and well-managed classrooms, but they fall short in promoting higher-order thinking skills, providing high-quality feedback, and developing students' language skills. Like the ECERS-R, however, differences in the CLASS components by immigrant status are modest, although again the scores are consistently lower for immigrant children.

Taken together, the portrait that emerges from this review and updated analysis of ECE use and center-based ECE quality for immigrant children versus their native counterparts suggests several results worth highlighting. First, for infants, toddlers, and preschool-age children, immigrants have lower rates of participation in any nonparental care and center-based care. Evidence suggests that the participation gap may be narrowing over time, but double-digit differences in participation remain even so. Second, among those in care, preschool-age immigrant children are as likely as native children, if not more likely, to be in center-based ECE programs, especially if one looks at the arrangement where children spend the most time. Thus, for immigrant-native participation differences, whether or not care is used at all is more relevant than the type of care arrangement used. Third, much of the participation gap can be explained by just a few economic and sociodemographic factors, such as low parental education or low family income. Thus, lower use of care may result not from being an immigrant child per se but from factors associated with disadvantaged groups. Finally, the data for California indicate that center-based care environments are falling short of benchmarks associated with high-quality care for both immigrant and native preschool-age children alike. These results may not extend to other states, but they imply that, at least in the state with the largest share of immigrant children, ECE quality needs to be raised, especially in areas like instructional support, which has been shown to have a positive relationship with gains on cognitive assessments during the preschool year and on subsequent school achievement success.[23]

The Potential Benefits for Immigrant Children from ECE Programs

The interest in participation in high-quality ECE programs stems from an extensive body of research demonstrating the potential for benefits to children in school readiness and later school success. The strength of this research base is rooted in the use of rigorous approaches to evaluation, including experimental studies, often viewed as the gold standard, together with quasi-experimental methods that closely approximate the experimental approach. Much of the existing literature focuses on programs serving disadvantaged children, and these findings are equally relevant for immigrant children, who, as already noted, disproportionately experience poverty, low parental education,

and other stressors in early childhood. But some direct evidence also indicates that immigrant children and English learners benefit from high-quality programs. A relatively understudied issue is the potential benefits to parents from programs that serve their children.

Benefits from Targeted ECE Programs

Arguably the most active area of research in recent years has centered on the potential short- and longer-term benefits from high-quality early-learning programs serving children one or two years before they enter kindergarten.[24] The body of research includes experimental evaluations of small-scale demonstration programs such as the High-Scope/Perry Preschool Project, as well as of larger-scale publicly funded programs like Head Start. More recently, as states have expanded their preschool programs, a series of studies has used quasi-experimental methods to examine the effects of these larger-scale public programs in a handful of states on prereading and premath skills, as indicators of school readiness. Studies have also used observational data from the ECLS-K and other sources to further quantify the effects of preschool on readiness and later school performance. The Perry Preschool evaluation along with the evaluation of the Chicago Child-Parent Centers (CPC) program, both with longer-term follow-up, provide evidence of longer-term benefits from preschool participation. As noted, most of the preschool programs evaluated to date serve targeted groups of disadvantaged children based on family income or other risk factors. One exception is Oklahoma's state-funded universal preschool program, whose effects on school readiness for the diverse population of students who participate in the program have been studied extensively.

The preponderance of the evidence from this body of research indicates that high-quality preschool programs can produce cognitive benefits at the time of school entry, with magnitudes that can be large relative to other education interventions such as smaller class sizes in the early elementary grades, especially for the highest-quality programs. Children's levels of socioemotional development can also be higher, although the gains tend to be smaller than those for cognitive domains. Some studies even suggest that preschool programs may negatively affect child behavior, but these findings tend to be associated with observational studies that cannot account for program quality. Evidence, albeit limited, from the Perry Preschool and Chicago CPC evaluations shows the potential for high-quality preschool programs to generate educational benefits that extend into the elementary grades, such as less use of special education and reduced rates of grade repetition. The evaluations of these two programs further show meaningful lasting benefits such as higher rates of high school graduation and improved economic and social outcomes in adulthood such as higher earnings, reduced welfare use, and lower rates of crime. At the same time, the national Head Start experimental evaluation shows little lasting advantage of participation as of the last follow-up when treatment and control group members had reached the end of first grade. Lasting Head Start benefits may be lacking because the quality of the average Head Start program falls below that of Perry Preschool or Chicago CPC and because many children in the control group participated in other Head Start or early education programs.

A related research literature considers the effects of targeted early intervention programs serving children from birth to age three, as well as the relationship of the

quality of child-care programs more generally to child developmental outcomes.[25] Like the preschool literature, smaller- and larger-scale experimental studies have evaluated targeted center-based developmental programs for infants and toddlers (sometimes with extended services into the preschool years) such as Abecedarian, the Infant Health and Development Program, and Early Head Start. Observational studies have likewise estimated the effects of participation in nonparental care on children's developmental trajectories in cognitive and noncognitive domains.[26]

This body of research demonstrates that well-designed targeted programs serving infants and toddlers can produce short-term developmental benefits and even longer-term gains for school performance and adult outcomes. However, the stronger benefits are associated with smaller-scale programs whose benefits may not be as large when taken to scale. Indeed, the recent evaluation of the federally funded Early Head Start programs documents initial gains that were considerably more modest than those found for model programs and that were not sustained several years after the program ended.[27] Moreover, the evidence on the relationship between child care and children's development points to the importance of quality in determining whether children benefit from nonparental care.

Benefits Specifically for Immigrant Children and English Learners

For the most part, recent studies of the benefits of participation in ECE programs have not considered whether immigrants or English learners gain more or less than native children. The handful of studies that do look at this question indicate that immigrant children or English learners stand to benefit as much as, if not more than, children from other groups. Like the larger research literature, much of this research has considered the effects on school readiness measured in terms of academic skills in reading and mathematics. But there may be other benefits unique to immigrants. For example, center-based ECE can assist immigrant children in their adaptation to a sociocultural environment that might be different from the one at home, helping them to learn rules and norms of school settings, play cooperatively with diverse peers, and understand how to relate to teachers or other authority figures outside their families.[28] These potential socialization benefits may enable the gains in cognitive domains that have been the focus of the research available to date.

In terms of more academic outcomes, the quasi-experimental evaluation of Oklahoma's universal preschool program, for example, has documented that the gains in school readiness extend to children from diverse backgrounds, with estimated gains on measures of prereading and premath skills that are at least as large for Latino children as they are for white and African American children.[29] A more in-depth examination of the effects of Oklahoma's program on Latino children found the largest benefits for those whose parents spoke Spanish at home or were born in Mexico.[30] Because some children were tested in both English and Spanish, the study was also able to demonstrate that the language gains were generally larger in the former than in the latter.

Further evidence of the benefits of preschool participation for children from immigrant backgrounds comes from two observational studies based on the ECLS-K. One study estimated that children whose mothers were born outside the United States and who

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attended center-based preschool programs in the year before they started kindergarten had higher reading and math scores at kindergarten entry than did their counterparts who did not attend preschool, although the improvements were modest (about 0.2 for both achievement measures), and the gains from preschool were the same for children of immigrant mothers as for children of native-born mothers.[31] Head Start participation was also found to raise English-language proficiency at the time of kindergarten entry, especially for children of foreign-born mothers with less than a high school education. Compared with those not attending preschool, the empirical estimates also offered some suggestive evidence of larger improvements in English proficiency and academic achievement for immigrant children who attended preschool and whose mothers only speak a language other than English. This finding is similar to the results in the Oklahoma evaluation. On the other hand, a second study using a similar methodology and the ECLS-K found more muted gains from preschool participation on math achievement at kindergarten entry for the sample of Mexican-origin immigrant children (the first or second generation), in contrast to the findings from the research on Latinos in Oklahoma's program.[32]

One limitation of the ECLS-K for examining the effects of preschool on children's school readiness is that the assessment of reading skills was given only to children who demonstrated proficiency in English, a screen that was passed by only 74 percent of children of immigrant mothers. Children who were not English proficient but spoke Spanish could take a Spanish-language version of the math assessment, so the children evaluated on math skills make up a somewhat less selected sample. Another concern is that, in the absence of random assignment to preschool participation or no participation (or alternatively the use of quasi-experimental methods that approximate the experimental approach), estimates based on the ECLS-K may be biased if there are unmeasured factors that make children more likely to attend preschool and that also increase school readiness. For example, parents who provide more support at home for their children's early development may be more likely to send their children to preschool. Consequently, some or all of the measured preschool benefit may instead be the result of parental support or other unmeasured factors correlated with preschool participation. A final issue with the ECLS-K is that no information is available on the quality of the preschool programs that children attended, so the measured gains are those associated with the average or typical program rather than those that might be possible with higher-quality programs like Oklahoma's.

Across these studies, one issue that remains unexplored is the existence of longer-term benefits of preschool participation for immigrant children. On the one hand, immigrant

children, because they are relatively more disadvantaged than their native counterparts, might be expected to experience extended benefits from participation in high-quality ECE programs, consistent with the research evidence of sustained improvements from participation in targeted programs. However, as discussed in more detail in the Crosnoe and Turley article in this volume, the immigrant-native gap evident at the time of school entry tends to narrow over time as immigrants with low initial readiness, such as those from Latin America, experience faster growth in their reading and math scores than their native counterparts.[33] Again, given the diversity within the population of immigrant children, it may be those who are most vulnerable who experience both larger initial gains from ECE participation as well as longer-term positive benefits.

Another issue that merits more attention is the role of program quality in influencing the magnitude of the educational gains realized by immigrant children from participation in early-learning programs. One critical program feature for immigrant children is the approach to working with English learners. As more and more English learners participate in formal early-learning programs, researchers have turned their attention to more rigorous evaluations of approaches to serving them. Just as with K–12 education, alternatives include English immersion, bilingual instruction designed to transition students to English-only instruction, and two-way bilingual immersion (also known as dual language) designed to promote acquisition of both the home language and English.

A recent and rare experimental evaluation by W. Steven Barnett and colleagues compared the English immersion and two-way bilingual immersion approaches for a sample of three- and four-year-olds in a high-quality preschool program.[34] Both approaches generated gains for participants in language, emergent literacy, and mathematics consistent with those found for other high-quality programs. Although the two program models showed no significant differences on assessments conducted in English, the dual immersion program produced stronger gains in Spanish vocabulary for native-Spanish speakers. Thus, the research to date does not suggest that one particular approach to early education for English learners is better than another. At the same time, there may be other reasons to support dual immersion programs, given the longer-term cognitive advantages of bilingualism as well as the growing importance of fluency in other languages in an increasingly interconnected global economy.[35]

Benefits for Participating Parents

Much of the research evaluating ECE programs has focused on effects on child development, but parents, especially immigrant parents, may benefit as well from having their children participate in formal programs before they enter school. For example, a child-care center, preschool, or prekindergarten program is an institution with its own set of rules, norms, practices and procedures, and schedule. By virtue of these norms and procedures, such as determined drop-off and pick-up times, parent-teacher meetings, or classroom holiday celebrations, parents engage with each other and with the center's staff. This engagement provides opportunities for parents to widen their circle of acquaintances and potentially improve their social resources. The resources that inhere in social relationships, or social capital, in turn, can work to improve the quality of life for the family.[36]

In a study of child-care centers in New York City, Mario Small found that parents were

comfortable interacting and making connections with strangers they met at their children's day cares.[37] The centers gave parents with enrolled children a sense of trust and legitimacy, making the development of social ties and relationships fairly easy. The centers also provided opportunities for parents to meet and interact with each other in a safe environment. This analysis did not specifically focus on immigrant parents, but immigrant parents may likewise experience gains in their social capital depending on the center's institutional norms and practices.

Specialized services provided through ECE programs, often directed toward more disadvantaged families or those needing special assistance, may provide supports that are particularly relevant for immigrant parents with young children. These services may include English-language classes for parents or assistance in finding a job, both of which, in turn, enable the immigrant parent to become better integrated economically and socially into the broader U.S. society. For example, AVANCE, a program established in 1973 and based in California, New Mexico, and Texas, has a "whole-family" philosophy. AVANCE centers target families with children from birth to age four, providing early childhood education as well as parenting, adult literacy, English-language, and healthy-marriage training to parents. AVANCE's family support programs address low self-esteem and dependency, improving parents' connectivity to the community.[38]

Finally, participation in ECE programs may also support immigrant parents in realizing their educational goals for their children. Parents of immigrant children tend to have high aspirations for their educational attainment.[39] ECE programs that engage parents in their children's development are able to leverage those ambitions to teach parents how to participate in their children's learning and how to navigate the U.S. educational system. A study of Mexican immigrant mothers of young children enrolled in the Dallas AVANCE program found that, by showing the mothers how to participate in their children's learning through concrete activities (such as regular mother-child conversation, daily reading, and playtime activities that teach developmental skills), the mothers were able to overcome their own lack of schooling and motivate their children to pursue academic success.[40]

Barriers to Participation in High-Quality ECE Programs

While a growing body of evidence points to the positive benefits for immigrant children and their families from participating in high-quality ECE programs, we have also documented sizable gaps in participation rates in ECE programs between immigrant children and their native counterparts. Some of these differences can be explained by demographic and socioeconomic factors that are linked in the broader child-care and preschool literature to lower rates of ECE use.[41] These include being in a two-parent family and having low family income, parents with low education, or a nonworking parent.[42] Yet other determinants of care use, such as language barriers and knowledge gaps that relate to time in country, are unique to immigrants.[43] These demographic and socioeconomic characteristics of immigrant families do not operate in isolation. They affect and are affected by a number of factors—structural, informational, bureaucratic, and cultural—as well as by immigrants' perceptions, all of which can impede immigrant families' access to various types of nonparental care during the years before school entry.

The lower rates of enrollment in ECE programs on the part of immigrant children have prompted research into the causes. Much of this research is qualitative, drawing on small samples that may or may not be generalizable. Even so, it is reasonable to conclude from this literature that no single factor can explain why proportionately fewer immigrant children enroll in ECE programs. Rather, a combination of factors can be at play, and those factors may vary for different immigrant subgroups. The relative importance of different barriers may also change as immigrant families make decisions about ECE use for children at different stages of early childhood.

Structural Barriers

A number of structural factors can affect affordability, availability, and access to ECE programs for disadvantaged immigrant children, just as they do for disadvantaged families more generally. The cost of child-care and early-learning programs, particularly center-based care for infants, is a significant factor affecting the choices of low-income and working-class families.[44] Children in low-income families are therefore less likely to use formal ECE programs because of the costs associated with participation.[45] For example, in 2008 the market rate for care of preschool-age children was $180 a week; the rate for infant care was $267 a week, which was nearly equivalent to the weekly pay of a single minimum-wage earner.[46] Affordability of programs is a particularly acute issue for many immigrant families because, on average, immigrant families have lower incomes than nonimmigrant families.[47] As shown earlier using the NHES, children in low-income immigrant families use center-based child care less frequently than children of immigrant families with higher incomes or children in low-income, native families.[48]

Because immigrant children are overrepresented in the poverty population, they are typically eligible for subsidized care and early-learning programs through federal programs like Early Head Start, Head Start, or programs administered at the state level such as state-funded preschool programs or subsidized child care provided through Temporary Assistance to Needy Families (TANF) and

A number of structural factors can affect affordability, availability, and access to ECE programs for disadvantaged immigrant children, just as they do for disadvantaged families more generally.

the Child Care Development Fund (CCDF) block grant. Most immigrant children under age six are U.S. citizens and are therefore eligible for these programs if their families meet other requirements such as low income and, in some cases, a demonstrated need for care because the parents work or meet other criteria. Even if a child is eligible, an undocumented parent may not be able to demonstrate that he or she qualifies for the subsidized program. If parents are working outside of the formal labor market and have no verification of employment, a common situation for many undocumented immigrant workers, they will not be able to access available slots.[49] In addition, the available subsidized programs do not cover all children who are eligible, and immigrant families may be

less likely to obtain access if they are not able to navigate the system.

Beyond cost, there may be few care options in the community that can meet parents' needs for hours of care and other requirements. For example, a recent study for California documented that the shortage of suitable spaces for preschool-age children (that is, school-based slots or licensed private center-based providers in the child's neighborhood) is greatest for minority children, those with low parental education, and those whose parents do not speak English as their primary language.[50] Immigrants live predominantly in segregated neighborhoods with fewer services compared with nonimmigrants.[51] In addition, immigrants with low education tend to work jobs that have nontraditional hours or to work multiple jobs at various hours. The limited supply of programs in communities where immigrants are concentrated often cannot meet their needs for bilingual or culturally competent staff, flexible hours, or subsidized spaces.[52]

Getting a child to and from an ECE provider can also be a barrier. Programs that are not within walking distance of the family or are not located along public transit lines can be particularly difficult to reach for immigrants who do not drive. This is an issue particularly for lower-income immigrants who cannot afford a car, undocumented immigrants who are not able to obtain a U.S. driver's license, and immigrant mothers who never learned to drive in their countries of origin because of cultural mores against women driving. Even those programs that are accessible by public transportation may be difficult to reach if the immigrant family is unable to navigate transportation schedules because of language barriers.[53]

Informational and Bureaucratic Barriers

The structure of ECE markets and the complex array of subsidized alternatives that exist in many states can make it challenging for immigrant families to understand all their options and pursue their preferred choice. Studies of immigrant families note that many are simply unaware of the existence or availability of the ECE programs that their children could attend. Furthermore, the research has shown that the predominant method of sharing information about child-care and early-learning programs within immigrant communities is word of mouth, not formal information provision. City agencies and child-care providers may not be effectively using direct, language-appropriate outreach or media to educate immigrant families about the options available to them.[54] Yet, even if such outreach were available, immigrant families, because they rely predominantly on their co-ethnic immigrant peers to inform them of ECE options, may lack the necessary social resources and capital to understand and navigate the broad child-care market at their disposal.[55]

Enrollment processes in both public and private ECE programs involve complex paperwork and often long waiting lists. Immigrant parents may need to rely on community agencies to facilitate the process or to translate written or oral communications. Forms for subsidized programs can be even more complicated and time consuming because parents have to demonstrate their eligibility for the subsidy, documenting income level and, for some subsidies, employment status.[56] This process can be daunting, particularly for immigrants who do not know English well or who do not have many years of formal schooling in their home country. In a study in New York City, for example, immigrant parents who were interviewed remarked that they would

prefer to pay for unsubsidized center-based care or informal care by a trusted kin member or acquaintance because there would be fewer hassles and immediate enrollment.[57]

Another potential barrier to enrollment in center-based ECE programs is the need for a medical examination of the child or, at minimum, a certificate that the child's vaccinations are up-to-date. This additional step could dissuade some immigrants from enrolling their children in center-based programs. On average, immigrants have difficulty accessing the health care system—either because of a lack of knowledge about how to navigate the system or because of a lack of health insurance.[58] Furthermore, immigrant parents who work irregular or nontraditional hours have difficulty making an appointment for their children with medical professionals who are available only during traditional hours.

Cultural Barriers

A reason often cited for lower enrollment rates of immigrants is a familistic culture that characterizes immigrants from many parts of the world and that is particularly salient for Latino immigrant families. This culture leads parents to prefer that their children be cared for at home, rather than by nonrelatives in a formal educational setting.[59] And, because immigrant children are more likely to live in two-parent families, there is a preference for parental care because the parent at home can therefore promote the children's ethnic and cultural identities.[60] Although the cultural explanation may have some merit, recent research has demonstrated that structural factors are a stronger influence than familistic cultural factors on immigrant children's use of center-based care.[61] Immigrant parents' choice to use care by family members is largely a reflection of the care options available to them rather than a preference for informal or kin-based care.[62]

Another potential cultural barrier is the comfort level parents have interacting with child-care providers at a group care setting. This comfort level, in turn, can affect parental involvement in their children's child-care experience. Research has shown that parental involvement in their elementary and secondary school students' education is positively linked to students' academic and behavioral success.[63] Yet, parents modify their involvement at their children's school depending on the opportunities made available to them by the school or school staff.[64] If providers are not culturally sensitive or responsive, do not know the language of an immigrant family that has difficulty speaking English, or are unsupportive of immigrant families, the parents may not feel welcome and may not be responsive to requests for parent-teacher conferences or involvement in other activities. Research notes that being culturally responsive is critical in supporting parent participation, in allowing parents to communicate with the teachers to understand what is happening and to support their child's learning at home, and in developing trust in the program.[65] Research on kindergarten students finds that parental involvement in early education is linked to academic and behavioral success in elementary school, yet minority immigrant parents report more barriers to participation in their children's schooling and subsequently are less likely to be involved in school than their minority native-born counterparts, even when taking into consideration family demographic, racial and ethnic, and socioeconomic characteristics.[66] Immigrant parents may also prefer that their children enroll in programs that are familiar or supportive of the native language or culture.[67]

Barriers Created by (Mis)perceptions

A remaining set of potential barriers that can affect choices about care use for immigrant children can be labeled "perceptions," or maybe more accurately "misperceptions."As noted earlier, many immigrant children are eligible for federal or state-funded subsidized ECE programs. But the immigrant experience can result in distrust of the government and public programs, especially among those who are undocumented. In a study of Chicago immigrant parents, for example, fear of contacting public agencies was commonly cited as a reason for not enrolling their children in center-based or government-subsidized care.[68] Many immigrant parents also believe that restrictions placed on public benefits for certain types of immigrants such as those who are undocumented or in specific states mean that they are ineligible for any programs funded with federal dollars.[69]

A group especially likely to have a suspicious view of government programs is unauthorized immigrants who fear being deported or jeopardizing their future prospects for citizenship—even if their children are U.S. citizens and even if their fears are unfounded.[70] Even immigrant parents in the country legally often fear contact with public agencies. One reason is that the U.S. Citizenship and Immigration Services can deem an immigrant who is likely to become "primarily dependent on the government for subsistence" as a public charge. Such a finding can lead to severe hardships in adjusting one's immigration status (for an undocumented immigrant to become a permanent resident, for example, or for a permanent resident to become a U.S. citizen) or even lead to deportation in extreme cases.[71] Research has documented that fear of a "public charge" determination lowers participation of immigrants in public benefits programs. However, enrollment in most public benefits programs, including Head Start, state preschool programs, and subsidized child care, would not qualify an immigrant as a public charge.[72]

Some immigrant parents are also wary of filling out documentation that requires the disclosure of sensitive information, such as a Social Security number (SSN) or immigration status. In many cases, immigrant parents believe that they need to provide an SSN to demonstrate need for subsidized child care or that they need to divulge their immigration status. However, according to the Federal Privacy Act, applicants for child-care subsidies are not required to give an SSN.[73]

A study of immigrants in New York City found that some immigrant families do not want to use any form of subsidized care because of the stigma associated with its use. Believing they must be self-sufficient, families are afraid that accessing subsidized care will label them as burdens on the government as well as jeopardize their immigration status and their status within their co-ethnic immigrant community.[74]

Immigrant parents with few years of schooling and from certain countries of origin tend to be unaware of how important early education programs are for their children's subsequent school achievement.[75] They may not understand that center-based care, particularly in the preschool years, is the typical "mode of initiation into the education process for children with highly educated parents."[76] Previous research has noted a positive link between the rates of early child-care enrollment in the country of origin and that immigrant group's propensity to enroll their children in preschool.[77]

Policy Implications and Options

As researchers and policy makers focus on the use, quality, and impact of child-care and early-learning experiences before school entry, they must not ignore the situation of immigrant children. A substantial and growing share of the population, immigrant children are a diverse group that spans the full range of family socioeconomic status experienced by their native counterparts. Yet immigrant children disproportionately face stressors in early childhood such as low family income, low parental education, and lack of exposure to the English language that may affect their ability to enter school ready to learn.

To some extent, the risks that disadvantaged immigrant children face resemble those of their similarly disadvantaged native counterparts, but other factors are unique to immigrant children. Thus patterns of ECE use, quality, and impact for immigrant children are consistent with those of their native counterparts with similar demographic and socioeconomic characteristics. For example, the lower rates of use of nonparental care among immigrant infants, toddlers, and preschoolers can be at least partially explained by their higher prevalence of poverty and low parental education, among other factors. At the same time, immigrant children appear to benefit as much or potentially more than their native peers from high-quality ECE programs, perhaps because of the greater disadvantages they face on average. Thus, to improve ECE access and quality, policy makers can consider options that pertain to disadvantaged children more generally as well as those that address the issues unique to immigrant children. In the remainder of this section, we consider options using this two-pronged approach.

Policy Options for Increasing Use and Quality of ECE Programs for Disadvantaged Children

Given researchers' attention to shortfalls in ECE use and quality among disadvantaged children, policy makers are already considering, and in many cases implementing, reforms at the federal, state, and local levels.[78] Immigrant children who fall into the groups targeted by these efforts stand to benefit as well. Indeed, there may already be some narrowing of the immigrant-native gap in ECE participation that might be attributable to efforts to expand participation of underrepresented groups in new or existing programs like Early Head Start, Head Start, and state prekindergarten programs.

At the federal and state levels, reform strategies planned or under way include increasing funding for subsidized ECE programs so that greater numbers of eligible children can participate; integrating federal and state funding streams to create consolidated subsidized systems that are easier for parents to navigate; raising program quality through quality rating and improvement systems that also link provider reimbursement rates to program quality; improving the quality of ECE programs and classroom staff through reforms to workforce development systems; aligning early-learning education standards with those in the elementary grades and promoting more effective transitions from preschool to kindergarten; and linking and enhancing data systems to support evaluation of the reform efforts. Of course, existing reforms can always be improved, and various prescriptions for improvement exist.[79] These are all efforts that should benefit disadvantaged immigrant children, although ongoing evaluation is required to determine if the objectives of these policy reforms are realized.

In their efforts to expand access to ECE programs, some states have moved toward publicly funded universal provision, particularly for preschool programs serving four-year-olds. Immigrant children may benefit in multiple ways from this approach. Not only would all children be eligible so that affordability is no longer a concern, but barriers related to eligibility determination and the stigma of targeted programs would also be eliminated. Since universal programs are usually voluntary, immigrant children may still participate at lower rates if their parents have cultural reasons for preferring other types of care. However, the data examined earlier in this paper and other cited studies suggest that the cultural differences between immigrant and nonimmigrant families regarding use of care are less important than demographic and socioeconomic factors.

Immigrant children disproportionately face stressors in early childhood such as low family income, low parental education, and lack of exposure to the English language that may affect their ability to enter school ready to learn.

While many states aspire to universal provision, not all have the resources to do so. For the foreseeable future, most states will continue to provide both subsidized child care and preschool programs on a targeted basis. Even with targeted programs, however, alternative approaches to targeting may have differential consequences for immigrant children.[80] For example, in most states, subsidized ECE programs are available to children in families who meet specific eligibility criteria regarding income and other characteristics like employment status. Programs that rely on person-based targeting include Early Head Start, Head Start, subsidized child care through TANF and CCDF, and state-funded preschool programs. Such person-based targeted approaches are associated with a number of the barriers to immigrant participation enumerated earlier, such as difficulties with the application process, fear of exposure on the part of undocumented parents, and the stigma of participating in a targeted program.

Another approach, one that is in effect in New Jersey's Abbott Districts preschool program, is to use geographic targeting. Under this approach, all children in targeted communities are eligible for the program, regardless of other family circumstances. The targeting efficiency of this approach may be particularly effective for immigrant children who are often clustered in neighborhoods with a high concentration of immigrant families.[81] With geographic targeting, families need only document their residency (as they would for elementary school enrollment), and stigma is reduced because all children in the community are eligible. In the end, whether publicly funded ECE programs are universally available or limited to targeted populations, further research is needed to determine which subgroups of immigrant children could benefit the most from participation in high-quality programs and whether those subgroups are underrepresented in current programs.

Addressing the Unique Needs of Immigrant Children

Our assessment of the barriers to higher participation of immigrant children in high-quality ECE programs indicates that a number of obstacles represent unique issues faced by immigrants such as legal status, language barriers, cultural sensitivities, informational gaps, and perceptions about government services or the importance of early-learning programs. These issues can potentially be addressed through the way publicly subsidized programs are structured as well as by how providers themselves configure their programs. In many cases, the strategies we suggest below are being tried in states and communities across the country, and the knowledge base about what does and does not work is growing. A potential role for state or federal agencies in this process, or even for the research community, is the building of a centralized repository of information about those strategies that have proven effective and those that need further refinement or should be avoided.

At the institutional level, the agencies that implement or support publicly subsidized programs—federal and state departments, local education agencies, resource and referral agencies—can take steps to reduce barriers that limit the use of ECE programs by immigrant families. For example, language-accessible communication strategies can be targeted to immigrant communities to increase awareness of the programs and services available to them, the benefits of participation, and the lack of harmful consequences (such as becoming a public charge).[82] Given the tendency for immigrants to rely on informal social networks to find out about programs and to navigate the application process, policies could encourage the development of formal peer-to-peer networks for immigrant parents or could engage parents that use subsidized ECE programs to share information about the process and their experiences. Such strategies may even benefit from the use of new online tools for social networking that are gaining in popularity. This approach could help to ease the confusion about available options, provide support for any required application process, and work toward diminishing the stigma or fear of negative consequences associated with using subsidized care.

Other strategies could go beyond increasing information flows and addressing misperceptions to directly change bureaucratic processes. For example, government agencies could streamline their administrative requests and paperwork necessary for low-income immigrants to receive child-care benefits. Applications can be translated into more languages than the most common immigrant languages (Spanish, Mandarin, and Vietnamese). Furthermore, to ensure that U.S. citizen children receive the child-care subsidies to which they are entitled, applications could refrain from requesting a parent's SSN and instead ask for the number of the applicant child.

A number of studies have shown that parental involvement in children's elementary and secondary education is linked to academic or behavioral success of students. Thus efforts made to improve immigrant parents' involvement with ECE programs could prove fruitful in promoting children's success and transition to elementary school. Alongside outreach efforts to encourage parents to use child-care options, efforts need to be made to communicate to immigrant parents the importance of being engaged with their children's early education progress by attending

parent-teacher conferences, engaging in the process of transitioning to kindergarten, and communicating with teachers and staff. Unfortunately, rather than attributing lower levels of school participation to language or cultural barriers, ECE staff may assume that immigrant parents are not engaged in their child's development or social progress. This perception may have detrimental effects on the child's learning and development. Likewise, ECE programs can encourage more involvement by ensuring that staff are linguistically capable of communicating with parents whose second language is English.

The capacity of the existing ECE workforce to meet the specialized needs of immigrant communities is another area to target. Workforce development systems, whether in formal degree programs or ongoing professional development activities, can be enhanced to increase the cultural competency of program administrators and classroom staff so that they are knowledgeable about and can address the unique needs of immigrant families and their young children.[83] Programs also need to provide training in approaches to working effectively with English learners, whether on a whole classroom basis or in one-on-one interactions. Workforce development efforts also need to target both licensed and license-exempt home-based care providers to increase training on these same issues of cultural competency and English learners. Professional networks for at-home providers offer one strategy for reaching these more isolated providers and improving the quality of care.

Providers themselves also have a role to play in how they organize their programs and reach out to immigrant families. As the population has become more diverse in general, ECE providers and the institutions that support them (such as education and training institutions and accreditation agencies) have stressed the need for programs to be more culturally competent. For example, the National Association for the Education of Young Children, the premier organization that accredits child-care and early-learning programs, has an initiative to define culturally competent practices.[84] Although an understanding of best practices has yet to fully emerge, programs can be responsive in many ways, from hiring teachers and staff who speak the languages of the parents or who are from the same country, to creating formal roles for parents and others to act as cultural liaisons, to honoring and respecting cultural and religious practices that may differ from those of the mainstream American society.[85]

Another critical element in supporting immigrant children is the implementation of curricula and other practices that support English learners. These may be formal strategies, such as the dual language immersion approach discussed earlier, as well as strategies that support the development of the English learners in a classroom or group. Here further research is needed to support program administrators and classroom staff in their efforts to identify best practices and to engage in a process of continuous improvement. Other program elements that may have particular benefit for immigrant children are approaches to supporting the transition from preschool to kindergarten.

Ultimately, it is important to recognize that high-quality child-care and early-learning programs alone will not fully close the gaps in school readiness and achievement that exist for immigrants or immigrant subgroups. While not specific to immigrant children, several studies have estimated the potential

of increasing access to and the quality of ECE programs as a strategy for narrowing racial-ethnic gaps in readiness and academic achievement.[86] These studies show that a modest to substantial share of existing gaps can be closed, depending on the assumptions about the effectiveness of high-quality ECE programs. These findings are likely to extend to immigrant children as well, given that readiness and achievement gaps and effectiveness of ECE programs for immigrants versus natives are comparable in magnitude to those seen across racial and ethnic groups. Yet, even the most effective programs will not overcome all of the disadvantages facing immigrant children as they prepare for school and beyond. Thus, the strategies covered in this article must be integrated with those in the other articles in this volume to provide a continuum of supports for immigrant children and youth as they transition to adulthood.

Endnotes

1. The figures in this paragraph are from the Urban Institute's Children of Immigrants Data Tool (http://datatool.urban.org/charts/datatool/pages.cfm). For recent demographics, see also Karina Fortuny and others, *Children of Immigrants: National and State Characteristics*, Brief 9 (Washington: Urban Institute, August 2009).

2. The corresponding shares for native-born children with native-born parents are 1, 8, and 16 percent, respectively.

3. Katherine A. Magnuson and Jane Waldfogel, "Early Childhood Care and Education: Effects on Ethnic and Racial Gaps in School Readiness," *Future of Children* 15, no. 1 (2005): 169–96.

4. Jack P. Shonkoff and Deborah A. Phillips, eds., *From Neurons to Neighborhoods: The Science of Early Child Development* (Washington: National Academy Press, 2000).

5. Peter Brandon, "The Child Care Arrangements of Preschool-Age Children in Immigrant Families in the United States," *International Migration* 42, no. 1 (2004): 65–87.

6. Donald J. Hernandez, Nancy A. Denton, and Suzanne E. Macartney, "Early Childhood Education Programs: Accounting for Low Enrollment in Newcomer and Native Families," in *The Next Generation: Immigrants in Europe and North America,* edited by Richard D. Alba and Mary C. Waters (New York University Press, forthcoming); Donald J. Hernandez, Nancy A. Denton, and Suzanne E. Macartney, *Children in Immigrant Families—The U.S. and 50 States: National Origins, Language, and Early Education*, Publication 2007-11 (State University of New York-Albany, Child Trends and the Center for Social and Demographic Analysis, April 2007).

7. Katherine Magnuson, Claudia Lahaie, and Jane Waldfogel, "Preschool and School Readiness of Children of Immigrants," *Social Science Quarterly* 87, no. 5 (2006): 1241–62; Robert Crosnoe, "Early Child Care and the School Readiness of Children from Mexican Immigrant Families," *International Migration Review* 41, no. 1 (2007): 152–81.

8. Hernandez, Denton, and Macartney, "Early Childhood Education Programs" (see note 6); Crosnoe, "Early Child Care and the School Readiness of Children from Mexican Immigrant Families" (see note 7).

9. Hernandez, Denton, and Macartney, *Children in Immigrant Families* (see note 6).

10. W. Steven Barnett and others, *The State of Preschool 2008: State Preschool Yearbook* (New Brunswick, N.J.: National Institute for Early Education Research, 2008).

11. National Center for Education Statistics, Institute of Education Sciences, "National Household Education Surveys Program" (http://nces.ed.gov/nhes). The 1996 NHES has previously been used to examine care arrangements for immigrant versus nonimmigrant children. See Christine Winquist Nord and James A. Griffin, "Educational Profile of 3- to 8-Year-Old Children of Immigrants," in *Children of Immigrants: Health, Adjustment and Public Assistance*, edited by Donald J. Hernandez (Washington: National Academy Press, 1998).

12. In addition to the Census, SIPP, and ECLS-K, another possible source of nationally representative data on ECE use is the Early Childhood Longitudinal Study—Birth Cohort (ECLS-B). One drawback of the ECLS-B is that the sample consists of a cohort of children born in 2001 in the United States, so children

born abroad are excluded. In the case of the ECLS-K, the survey began with a kindergarten cohort, so only limited retrospective information is available about early care and education experiences before kindergarten entry.

13. Lynn A. Karoly and others, *Prepared to Learn: The Nature and Quality of Early Care and Education for Preschool-Age Children in California* (Santa Monica, Calif.: RAND Corporation, 2008).

14. Because of both data and space constraints, the empirical analysis is limited to a general exploration of patterns for immigrant children. It does not afford a more in-depth analysis of the variation in outcomes for children defined by race and ethnicity, country of origin, or English fluency.

15. While the birth-date cutoffs for kindergarten entry vary across states (and sometimes within states), thirty-five states as of 2005 had a cutoff between August 31 and October 16, so a mixture of four- and five-year-olds will enter kindergarten each fall (Education Commission of the States, "State Statutes Regarding Kindergarten" (Denver, April 2005) (www.ecs.org/clearinghouse/58/28/5828.pdf). In the NHES, because we did not have access to the restricted file with state identifiers, we defined kindergarten entry cohorts as those who will turn five by October 1. For example, for the 2005 NHES, the four-year-olds are those born between October 1, 1999 and September 30, 2000, the group that would be eligible in most states to enter kindergarten in September 2005. Thus, at the time of the NHES interview in January to April 2005, the oldest children in the four-year-old cohort will have already turned five, while the youngest will still be age four. This same approach applies to the California data although in that case, kindergarten entry cohorts are defined for the California cutoff, which is December 2, one of the later state cutoffs.

16. The survey instrument for the RAND California study was modeled in part on the NHES, including the modules that collect information on regular nonparental care arrangements.

17. Because of small sample sizes in the single-year age cohorts in the NHES and California data, the differences in ECE use by immigrant status reported in table 1 are generally statistically significant only for the youngest age group, which covers three single-year age cohorts and therefore has three times the sample size.

18. For example, Magnuson, Lahaie, and Waldfogel, "Preschool and School Readiness of Children of Immigrants" (see note 7), estimated preschool plus Head Start participation in the year before kindergarten as 73 percent for children of native-born mothers versus 58 percent for children of immigrant mothers, a 15-percentage-point differential in contrast to the 10-percentage-point differential for center-based care for four-year-olds shown in table 1. The figures from Magnuson and colleagues are not strictly comparable to those in table 1 because of the different definition of immigrant status.

19. Brandon, "The Child Care Arrangements of Preschool-Age Children in Immigrant Families in the United States" (see note 5).

20. Given the differences in ECE use by age cohorts, we focus on a single cohort in table 3. The general patterns observed for four-year-olds are replicated when we focus instead on the two younger age groups.

21. Karoly and others, *Prepared to Learn* (see note 13).

22. Ibid.

23. Bridget K. Hamre and Robert C. Pianta, "Can Instructional and Emotional Support in the First-Grade Classroom Make a Difference for Children at Risk of School Failure?" *Child Development* 76, no. 5 (2005):

949–67; Carollee Howes and others, "Ready to Learn? Children's Per-Academic Achievement in Pre-Kindergarten Programs," *Early Childhood Research Quarterly* 23, no. 1 (2008): 27–50.

24. For recent reviews, see Barbara T. Bowman, M. Suzanne Donovan, and M. Susan Burns, eds., *Eager to Learn: Educating Our Preschoolers* (Washington: National Academy Press, 2001); Bruce Fuller, Margaret Bridges, and Seeta Pai, *Standardized Childhood: The Political and Cultural Struggle over Early Education* (Stanford University Press, 2007); William T. Gormley Jr., "Early Childhood Care and Education: Lessons and Puzzles," *Journal of Policy Analysis and Management* 26, no. 3 (2007): 633–71; Lynn A. Karoly, *Preschool Adequacy and Efficiency in California: Issues, Policy Options, and Recommendations* (Santa Monica, Calif.: RAND Corporation, 2009). Recent formal meta-analyses of the effects of preschool programs are provided by Laurie M. Anderson and others, "The Effectiveness of Early Childhood Development Programs: A Systematic Review," *American Journal of Preventive Medicine* 24, no. 3 (2003): 32–46; Geoffrey Nelson, Anne Westhues, and Jennifer MacLeod, "A Meta-Analysis of Longitudinal Research on Preschool Prevention Programs for Children," *Prevention and Treatment* 6 (2003): 1–34; and Gregory Camilli and others, "Meta-Analysis of the Effects of Early Education Interventions on Cognitive and Social Development," *Teachers College Record* 112, no. 3 (2010). The Head Start follow-up study is found in U.S. Department of Health and Human Services, Administration for Children and Families, *Head Start Impact Study: Final Report* (2010).

25. For recent reviews, see Shonkoff and Phillips, eds., *From Neurons to Neighborhoods* (see note 4); Lynn A. Karoly, M. Rebecca Kilburn, and Jill S. Cannon, *Early Childhood Interventions: Proven Results, Future Promise* (Santa Monica, Calif.: RAND Corporation, 2005); Gormley, "Early Childhood Care and Education" (see note 24).

26. National Institute of Child Health and Human Development (NICHD) Early Child Care Research Network (ECCRN), "The Relation of Child Care to Cognitive and Language Development," *Child Development* 74, no. 4 (2000): 960–80; NICHD ECCRN and Greg J. Duncan, "Modeling the Impacts of Child Care Quality on Children's Preschool Cognitive Development," *Child Development* 74, no. 5 (2003): 1454–75; NICHD ECCRN, *Child Care and Child Development: Results from the NICHD Study of Early Child Care and Youth Development* (New York: Guilford Press, 2005).

27. Administration for Children and Families, "Preliminary Findings from the Early Head Start Prekindergarten Follow-Up" (U.S. Department of Health and Human Services, 2006).

28. Rubén Rumbaut, "Ties That Bind: Immigration and Immigrant Families in the United States," in *Immigration and the Family: Research and Policy on U.S. Immigrants*, edited by Alan Booth and others (New Jersey: Lawrence Erlbaum Associates, Inc., 1997), pp. 3–46.

29. The effect sizes for Hispanic children on the Woodcock-Johnson Applied Problems, Letter-Word Identification, and Spelling subtests were 0.99, 1.50, and 0.98, respectively, all statistically significant. See William T. Gormley and others, "The Effects of Universal Pre-K on Cognitive Development," *Developmental Psychology* 41, no. 6 (2005): 872–84.

30. William T. Gormley Jr., "The Effects of Oklahoma's Pre-K Program on Hispanic Children," *Social Sciences Quarterly* 89, no. 4 (2008): 916–36.

31. Magnuson, Lahaie, and Waldfogel, "Preschool and School Readiness of Children of Immigrants" (see note 7).

32. Crosnoe, "Early Child Care and the School Readiness of Children from Mexican Immigrant Families" (see note 7).

33. Wen Jui Han, "The Academic Trajectories of Children of Immigrants and Their School Environments," *Developmental Psychology* 44, no. 6 (2008): 1572–90; Sean Reardon and Claudia Galindo, "The Hispanic-White Gap in Math and Reading in the Elementary Grades," *American Educational Research Journal* 46, no. 3 (2009): 853–91.

34. W. Steven Barnett and others, "Two-Way and Monolingual English Immersion in Preschool Education: An Experimental Comparison," *Early Childhood Research Quarterly* 22, no. 3 (2007): 277–93.

35. Ibid.

36. Social capital can include the obligations and trust that people who are connected may feel toward each other, the sense of solidarity they may call upon, the information they are willing to share, and the services they are willing to perform. For more information about the theoretical underpinnings of social capital, see Pierre Bourdieu, *Outline of a Theory of Practice* (Cambridge University Press, 1977); James Coleman, *Foundations of Social Theory* (Cambridge, Mass.: Belknap Press, 1990); Alejandro Portes, "Social Capital: Its Origins and Applications in Modern Sociology," *Annual Review of Sociology* 24 (1998): 1–24; and Nan Lin, *Social Capital: A Theory of Structure and Action* (Cambridge University Press, 2001).

37. Mario Small, *Unanticipated Gains: Origins of Network Inequality in Everyday Life* (Oxford University Press, 2009).

38. AVANCE, "About Us" (http://national.avanceinc.org).

39. Grace Kao and Marta Tienda, "Optimism and Achievement: The Educational Performance of Immigrant Youth," *Social Science Quarterly* 76, no. 1 (1995): 1–19.

40. Ana Schaller, Lisa Rocha, and David Barshinger, "Maternal Attitudes and Parent Education: How Immigrant Mothers Support Their Children's Education despite Their Low Levels of Education," *Early Childhood Education Journal* 34, no. 5 (2007): 351–56.

41. See, for example, Cheryl Hayes, John Palmer, and Martha Zaslow, *Who Cares for America's Children? Child Care Policy for the 1990s* (Washington: National Academy Press, 1990); David Blau, *The Child Care Problem: An Economic Analysis* (New York: Russell Sage Foundation, 2001); NICHD ECCRN, "Familial Factors Associated with the Characteristics of Nonmaternal Care for Infants," *Journal of Marriage and the Family* 59 (1997): 389–408.

42. Brandon, "The Child Care Arrangements of Preschool-Age Children in Immigrant Families in the United States" (see note 5).

43. Hernandez, Denton, and Macartney, "Early Childhood Education Programs" (see note 6).

44. Ruby Takanishi, "Leveling the Playing Field: Supporting Immigrant Children from Birth to Eight," *Future of Children* 14, no. 2 (2004): 61–81.

45. Hernandez, Denton, and Macartney, "Early Childhood Education Programs" (see note 6); Gormley and others, "The Effects of Universal Pre-K on Cognitive Development" (see note 29); Donald Hernandez, "Demographic Change and the Life Circumstances of Immigrants," *Future of Children* 14, no. 2 (2004): 16–47.

46. Department of Labor, "Minimum Wage Laws in the States" (www.dol.gov/whd/minwage/america.htm).

47. Hannah Matthews and Danielle Ewen, *Reaching All Children? Understanding Early Care and Education Participation among Immigrant Families* (Washington: CLASP, 2006).

48. See also Brandon, "The Child Care Arrangements of Preschool-Age Children in Immigrant Families in the United States" (see note 5).

49. Matthews and Ewen, *Reaching All Children?* (see note 47).

50. Molly Munger and others, *California's Preschool Space Challenge: What Preschool Advocates, Parents, and Policy-Makers Need to Know* (Los Angeles: Advancement Project, 2007).

51. George Borjas, *Heaven's Door: Immigration Policy and the American Economy* (Princeton University Press, 1999).

52. Gina Adams and Marla McDaniel, *Fulfilling the Promise of Preschool for All: Insights into Issues Affecting Access for Selected Immigrant Groups in Chicago* (Washington: Urban Institute, 2009).

53. Rasmia Kirmani and Vanessa Leung, "Breaking Down Barriers: Immigrant Families and Early Childhood Education in New York City," Policy Brief (New York: Coalition for Asian American Children and Families, 2008).

54. Ibid.; Adams and McDaniel, *Fulfilling the Promise of Preschool for All* (see note 52).

55. Brandon, "The Child Care Arrangements of Preschool-Age Children in Immigrant Families in the United States" (see note 5).

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58. Kathryn P. Derose and others, "Immigrants and Health Care Access, Quality, and Cost," *Medical Care Research and Review* 66, no. 4 (2009): 355–408.

59. Xiaoyan Liang, Bruce Fuller, and Judith D. Singer, "Ethnic Differences in Child Care Selection: The Influences of Family Structure, Parental Practices, and Home Language," *Early Childhood Research Quarterly* 15, no. 3 (2000): 357–84; Lynet Uttal, "Using Kin for Child Care: Embedment in the Socio-economic Networks of Extended Families," *Journal of Marriage and the Family* 61, no. 4 (1999): 845–57.

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61. See, for example, Hernandez, Denton, and Macartney, "Early Childhood Education Programs" (see note 6); Brandon, "The Child Care Arrangements of Preschool-Age Children in Immigrant Families in the United States" (see note 5).

62. Miriam Calderon, *Buenos Principios: Latino Children in the Earliest Years of Life* (Washington: National Council of La Raza, 2007); National Task Force on Early Childhood Education for Hispanics, *Para Nuestros Ninos: Expanding and Improving Early Education for Hispanics* (Arizona University, 2007).

63. For a review of the field, see Kristen Turney and Grace Kao, "Barriers to School Involvement: Are Immigrant Parents Disadvantaged?" *Journal of Educational Research* 102, no. 4 (2009): 257–71.

64. Abe Feuerstein, "School Characteristics and Parent Involvement: Influences on Participation in Children's Schools," *Journal of Educational Research* 94 (2000): 29–40.

65. Hannah Matthews and Deanna Jang, *The Challenges of Change: Learning from the Child Care and Early Education Experiences of Immigrant Families* (Washington: CLASP, 2007).

66. Turney and Kao, "Barriers to School Involvement" (see note 63). In this study, barriers were defined as inconvenient meeting times, problems with safety going to school, no child care at meetings, not feeling welcomed by the school, problems with transportation, problems because of speaking a language other than English, and family members not getting time off from work.

67. Shonkoff and Phillips, eds., *From Neurons to Neighborhoods* (see note 4); Hernandez, Denton, and Macartney, "Early Childhood Education Programs" (see note 6).

68. Adams and McDaniel, *Fulfilling the Promise of Preschool for All* (see note 52).

69. Ibid.

70. Kinsey A. Dinan, *Federal Policies Restrict Immigrant Children's Access to Key Public Benefits* (New York: National Center for Children in Poverty, 2005), notes that there is little evidence to suggest that undocumented immigrants are deported because they access benefits for their children. For examples of Haitian and Mexican immigrants' lack of participation in public benefits programs and avoidance of the state, even when their children are U.S. citizens and eligible, see Philip Kretsedemas and Ana Aparicio, eds., *Immigrants, Welfare Reform, and the Poverty of Policy* (New York: Greenwood Press, 2004).

71. Calderon, *Buenos Principios* (see note 62).

72. For more information on public charge, see Shawn Fremstad, *The INS Public Charge Guidance: What Does It Mean for Immigrants Who Need Public Assistance?* (Washington: Center on Budget and Policy Priorities, 2000): 12.

73. See U.S. Department of Health and Human Services, Administration for Children and Families, "Clarifying Policy Regarding Limits on the Use of Social Security Numbers under the CCDF and the Privacy Act of 1974" (www.acf.hhs.gov/programs/ccb/law/guidance/current/pi0004/pi0004.htm).

74. Kirmani and Leung, "Breaking Down Barriers" (see note 53).

75. Adams and McDaniel, *Fulfilling the Promise of Preschool for All* (see note 52); Hernandez, Denton, and Macartney, "Early Childhood Education Programs" (see note 6).

76. Hernandez, Denton, and Macartney, "Early Childhood Education Programs" (see note 6).

77. Adams and McDaniel, *Fulfilling the Promise of Preschool for All* (see note 52).

78. Karoly, *Preschool Adequacy and Efficiency in California* (see note 24).

79. As one example, Karoly, *Preschool Adequacy and Efficiency in California* (see note 24), makes recommendations for California regarding strategies for increasing the use and quality of publicly subsidized ECE programs in the state that serve children one or two years before kindergarten entry.

80. See Karoly, *Preschool Adequacy and Efficiency in California* (see note 24), for a discussion of the merits of the alternative approaches to targeting and estimates of the implications for which groups of children are served.

81. Gabriella Gonzalez, *Educational Attainment in Immigrant Families: Community Context and Family Background* (New York: LFB Scholarly Publishers, 2005).

82. Kirmani and Leung, "Breaking Down Barriers" (see note 53).

83. Adams and McDaniel, *Fulfilling the Promise of Preschool for All* (see note 52).

84. National Association for the Education of Young Children, "New Tool from NAEYC on QRIS and Cultural Competence" (Washington 2009) (www.naeyc.org/federal/07_22_09).

85. Matthews and Jang, *The Challenges of Change* (see note 65).

86. Karoly, *Preschool Adequacy and Efficiency in California* (see note 24); Magnuson and Waldfogel, "Early Childhood Care and Education" (see note 3).

Effective Instruction for English Learners

Margarita Calderón, Robert Slavin, and Marta Sánchez

Summary

The fastest-growing student population in U.S. schools today is children of immigrants, half of whom do not speak English fluently and are thus labeled English learners. Although the federal government requires school districts to provide services to English learners, it offers states no policies to follow in identifying, assessing, placing, or instructing them. Margarita Calderón, Robert Slavin, and Marta Sánchez identify the elements of effective instruction and review a variety of successful program models.

During 2007–08, more than 5.3 million English learners made up 10.6 percent of the nation's K–12 public school enrollment. Wide and persistent achievement disparities between these English learners and English-proficient students show clearly, say the authors, that schools must address the language, literacy, and academic needs of English learners more effectively.

Researchers have fiercely debated the merits of bilingual and English-only reading instruction. In elementary schools, English learners commonly receive thirty minutes of English as a Second Language (ESL) instruction but attend general education classes for the rest of the day, usually with teachers who are unprepared to teach them. Though English learners have strikingly diverse levels of skills, in high school they are typically lumped together, with one teacher to address their widely varying needs. These in-school factors contribute to the achievement disparities.

Based on the studies presented here, Calderón, Slavin, and Sánchez assert that the quality of instruction is what matters most in educating English learners. They highlight comprehensive reform models, as well as individual components of these models: school structures and leadership; language and literacy instruction; integration of language, literacy, and content instruction in secondary schools; cooperative learning; professional development; parent and family support teams; tutoring; and monitoring implementation and outcomes.

As larger numbers of English learners reach America's schools, K–12 general education teachers are discovering the need to learn how to teach these students. Schools must improve the skills of all educators through comprehensive professional development—an ambitious but necessary undertaking that requires appropriate funding.

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During the 1960s, public schools in the United States served a student population that was about 80 percent white. Today, non-Hispanic whites make up 57 percent of the student population[1] and are a minority in most large urban districts. The fastest-growing student population in U.S. schools is children of immigrants, half of whom do not speak English well enough to be considered fluent English speakers. In 1974, the U.S. Supreme Court, in *Lau v. Nichols*, 414 U.S. 563 (1974), held that school districts must take affirmative steps to help students overcome language barriers so that they can participate meaningfully in each school district's programs. The U.S. government requires every school district that has more than 5 percent national-origin minority children with no or limited English proficiency to "take affirmative steps to rectify the language deficiency in order to open its instructional program to these students."[2] To that end, school districts across the country determine whether children are Limited English Proficient (LEP),[3] a federal designation for children whose English proficiency is too limited to allow them to benefit fully from instruction in English.[4] Such students are also called English language learners and English learners.[5] But although the federal government requires districts to provide services to English learners, it offers states no policies to follow in identifying, assessing, placing, or instructing them. States, therefore, vary widely in the policies and practices by which they identify and assess English learners for placing within and exiting from instructional programs.

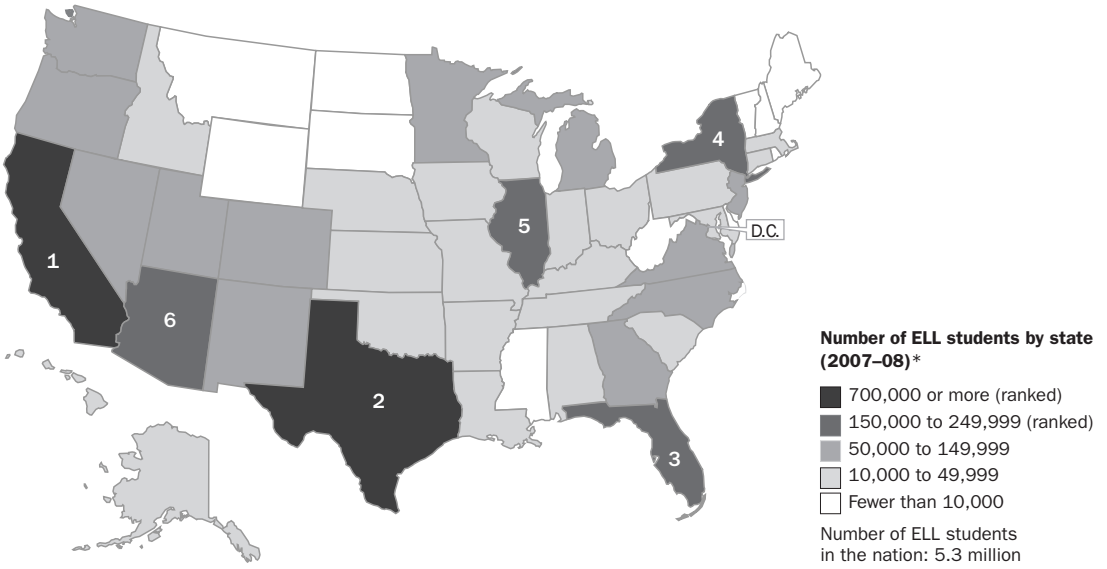
For the past sixty years, educators' discussions of English language learning have focused on whether instructors should use English or students' native languages to enable nonnative English speakers to become proficient in English and in core content. We focus instead on identifying the elements of effective instruction, regardless of the language in which instruction is carried out. We set our discussion in the larger framework of whole-school reform as the basis of all students' academic success and examine eight characteristics of instruction for English learners that have generated successful outcomes for students in elementary, middle, and high schools.

A Fast-Growing Population

Mid-decade data reveal rapid growth in the U.S. English learner population.[6] During the 2007–08 school year, English learners represented 10.6 percent of the K–12 public school enrollment, or more than 5.3 million students.[7] In fact, English learners are the fastest-growing segment of the student population, with their growth highest in grades seven through twelve.[8] Figures 1 and 2 show the dramatic increases in English learner populations, particularly in states that are not accustomed to serving their instructional needs. These students have lower academic performance and lower graduation rates than native white students and have affected the nation's overall educational attainment.[9]

About 79 percent of English learners in the United States speak Spanish as their native language; much lower shares speak Chinese, Vietnamese, Hmong, and Korean. About 80 percent of second-generation immigrant children, who by definition are native-born U.S. citizens, are what schools call long-term English learners. These students,who have been in U.S. schools since kindergarten, are still classified as limited English proficient when they reach middle or high school—suggesting strongly that preschool

Figure 1. Number of English Language Learners (ELL) by State, 2007–08



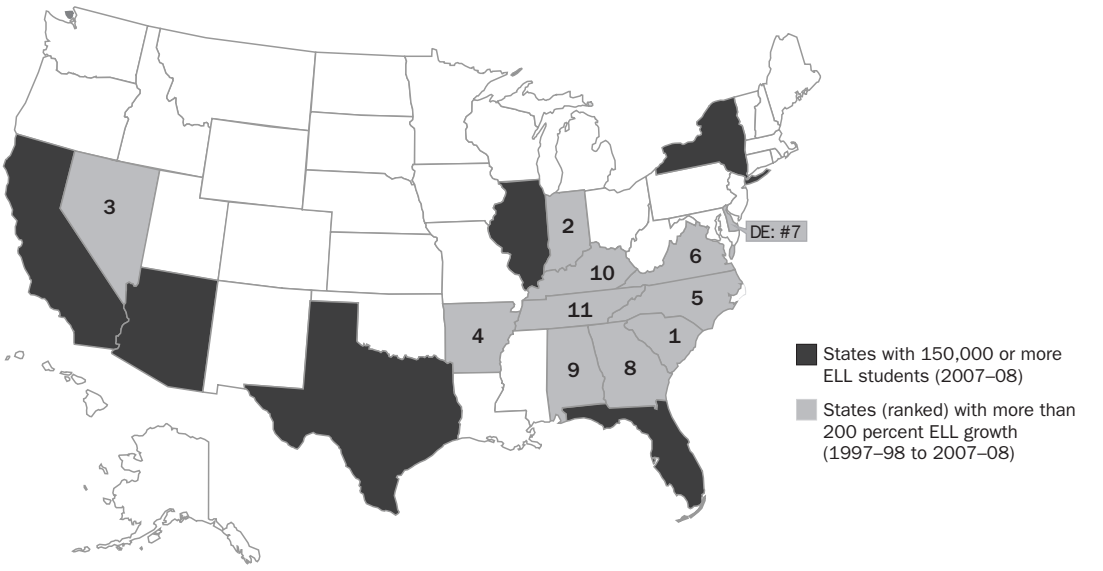
Source: National Clearinghouse for English Language Acquisition, State Title III Information System. © 2010 Migration Policy Institute.
Note: Numbers on the map show the top-ranked states by numbers of ELL students. There were no states with ELL populations between 250,000 and 700,000.
*Includes ELLs from Puerto Rico and other outlying territories.

and elementary programs are not adequately addressing the needs of English learners.[10]

Alongside the long-term English learners, whose language and literacy gaps must be addressed if they are to graduate from high school, exist other categories of English learners with very different needs. One group is in special education. A second group was inappropriately reclassified as general education students after passing their district's language test. As the National Literacy Panel has found, assessments used to gauge language-minority students' language proficiency and to make placement and reclassification decisions are inadequate in most respects.[11] And students who are not proficient in four essential domains—listening, speaking, reading, and writing—but are no longer classified as LEP continue to struggle with reading and academic coursework. Migrant English learners, another group of English learners, are mainly U.S.-born but lack proficiency in English because their education is interrupted as their parents follow the crops from state to state. Transnational English learners return to their native countries for a year or a portion of the year and attend school in those countries. Some students classified as English learners move repeatedly within the same city, often returning to the same school during the school year, as their parents struggle to meet rent payments.

The remaining 20–30 percent of English learners are recent immigrants, but they too are a heterogeneous population. Some are highly schooled and know more geometry, geography, and science than mainstream twelfth graders and primarily need to learn the academic English language vocabulary, not core concepts. Other newcomers, called

Figure 2. States with Large and Rapidly Growing Populations of English Language Learners (ELL)



Note: Numbers on the map show the top-ranked states in ELL growth. There were no states with the size of ELL population between 250,000 and 700,000.
Source: National Clearinghouse for English Language Acquisition, State Title III Information System. © 2010 Migration Policy Institute.

students with interrupted formal education because their schooling was interrupted for two years or more before coming to the United States, have both literacy and subject matter gaps. Refugee children who have never attended school are yet another group of English learners whose academic needs go well beyond language learning, particularly if they enter U.S. schools in the upper grades.[12]

In spite of their striking diversity, English learners in secondary schools have typically been lumped into the same English as a Second Language (ESL) classroom, with one teacher addressing the needs of students with dramatically varied English proficiency, reading, and writing skills. In elementary schools, a common practice is to pull out English learners across grades K–5 for thirty minutes of ESL instruction. For the remainder of the day these English learners attend regular classes in a sink-or-swim instructional situation, usually with teachers who are unprepared to teach them.[13]

Researchers consistently find wide and persistent achievement disparities between English learners and English-proficient students—gaps that we believe signal a need for increased teacher and staff preparation, whole-school commitment to the English learner population, and home-school linkages and collaborations,[14] so that schools can more effectively address these students' language, literacy, and core content needs. Such institutional preparedness is critical to addressing the achievement gaps seen across various age groups and academic content areas—gaps that start early and persist even among second- and third-generation children of some immigrant groups.[15] By disaggregating data and following English learner student achievement by cohorts, researchers can pinpoint more precisely the gaps in academic

outcomes between English learners and other student groups.[16] Closing the achievement gaps means, in part, closing similar gaps in teacher preparation programs and ongoing professional development. Today most English learners spend their time in regular classrooms with teachers who feel that they are ill-prepared to meet their needs.

There is considerable controversy among policy makers, researchers, and educators about how best to ensure the language, reading, and academic success of English learners. Among the many aspects of instruction important to guarantee that success, for years one has dominated all others: What is the appropriate role of the native language in instructing English language learners?[17] Since the 1960s, most U.S. schools with large populations of Spanish-speaking English learners have implemented various types of programs to instruct English learners in Spanish and in English. Some schools teach in Chinese and English or other native languages and English. Schools that serve students from many language backgrounds have implemented ESL programs, which teach only in English.

Recent federal policies have had the effect of restricting the time that can be spent teaching children in their native language. Federal accountability policies and diminishing funds make it impractical for local education agencies and schools to support native language instruction. Although federal policy has neither endorsed nor opposed instruction in the primary language, in recent years policy changes have discouraged bilingual education. Among researchers, the debate between advocates of bilingual and English-only reading instruction has been fierce, and ideology has often trumped evidence on both sides of the debate.[18]

Based on the findings from recent studies, as described in this article, what matters most in educating English learners is the quality of instruction. In our discussion of effective instruction, we highlight comprehensive reform models, as well as individual components of these models. Certain salient features or elements of quality instruction for English learners have been found to be effective from preschool to twelfth grades in either dual-language programs or carefully structured English programs. We discuss the following eight elements: school structures and leadership; language and literacy instruction; integration of language, literacy, and content instruction in secondary schools; cooperative learning; professional development; parent and family support teams; tutoring; and monitoring implementation and outcomes.

Methods

In reviewing research on programs and practices to improve reading and language outcomes for English learners, we emphasize those that have been found to be effective. The research that we review meets several criteria.[19] First, it primarily involves English learners. Second, it compares outcomes for students taught using a given program or practice (the treatment group) with outcomes for students taught using alternative approaches (the control group). Assignment to the treatment group can be randomized or matched, but treatment and control students must be within a half standard deviation of each other on pretests given before treatments began. Third, measures of outcomes are in English if the goal of the program is English language or reading, in other languages if these are the goal. Finally, we use mainly long-term studies where they are available and exclude evaluations that take place over a period of less than twelve weeks. Programs and practices emphasized are

drawn primarily from reviews of research by Robert Slavin and Margarita Calderón, Alan Cheung and Robert Slavin, Diane August and Timothy Shanahan, Diane August and others, and from more recent research.[20]

Comprehensive School Reform: Success for All

One approach to improving outcomes for English learners and other language minority students is to reform the entire school, providing innovative approaches to curriculum, instruction, assessment, provisions for struggling students, professional development, and other elements.[21] Numerous comprehensive school reform models for students in general were developed and evaluated during the 1980s and 1990s, and some have shown strong evidence of effectiveness overall.[22] One of the most widely studied comprehensive school reform approaches, Success for All (SFA), has been adapted for English learners, and these adaptations too have been evaluated.[23] In an analysis of school restructuring that meets the needs of all students, the National Research Council concluded that SFA has been the subject of the most research on effectiveness.[24]

Now used in about 1,000 schools in forty-seven states, SFA provides schools with well-structured curriculum materials emphasizing systematic phonics in grades K–1, cooperative learning, and direct instruction in comprehension and vocabulary skills in all grades. It also provides extensive professional development and coaching for teachers, frequent assessment and regrouping, and one-to-one or small-group tutoring for children who are struggling to learn to read. Family support programs attend to issues such as parent involvement, attendance, and behavior. A full-time facilitator helps all teachers implement the model.

For English learners, SFA has two variations. One is a Spanish bilingual program, Éxito Para Todos, which teaches reading in Spanish in grades K–2 and then transitions students to English instruction beginning in second or third grade. The other is a Structured English Immersion (SEI) adaptation, which teaches all children in English with appropriate supports, such as vocabulary-development strategies linked to the words introduced in children's reading texts. Since 2004, SFA has provided video content shown on DVDs or interactive whiteboards to model key vocabulary content for English learners.[25]

A National Institutes of Health longitudinal study found positive effects of SFA for English learners and other language-minority children.[26] A California study by Meg Livingston Asensio and John Flaherty[27] found substantial positive effects both for English learners initially taught in Spanish and for those taught only in English, compared with control groups. A study in Houston of the bilingual adaptation of SFA found positive effects on English and Spanish reading measures.[28] A Philadelphia study found positive effects of an SEI adaptation of SFA with Cambodian-speaking students.[29]

An Arizona study by Steven Ross, Lana Smith, and John Nunnery[30] found that English learners who were taught with the SEI adaptation of SFA gained more than control students on English measures, and a Texas statewide evaluation found positive effects for Hispanic students in 111 SFA schools across the state, compared with other Texas schools serving Hispanic children. An evaluation of SFA with the video content just noted found strong positive effects on English reading.[31] A national three-year longitudinal randomized evaluation of SFA found positive reading

Schools that serve English learners and other language-minority children, especially in regions where most families are struggling economically, provide children their best and perhaps only chance to achieve economic security.

effects for all students, but gains were greatest among a group of Hispanic students.[32]

The strong and consistent positive effects of SFA for English learners and other language-minority students show that comprehensive school reforms made up of many elements of effective practice can make substantial differences in children's outcomes. We discuss other studies that have provided evidence on the application of individual elements of SFA in following sections. A report by the Council on Advancing Adolescent Literacy, for example, offered a comprehensive agenda similar to SFA for re-engineering America's middle and high schools to support all learners.[33]

Elements of Effective Practice for English Learners

Along with strong evidence for the effectiveness of comprehensive school reforms for English learners, solid evidence of effectiveness also exists for many individual elements of the comprehensive approaches.

School Structures and Leadership

Schools that serve English learners and other language-minority children, especially in regions where most families are struggling economically, provide children their best and perhaps only chance to achieve economic security. Such schools cannot leave anything to chance. They must be organized to capitalize on all of their assets, including students' and parents' aspirations, staff professionalism and care, and other intangibles as well as financial and physical assets. Effective programs contain four structural elements.

The first element is constant collection and use of ongoing formative data on learning, teaching, attendance, behavior, and other important intermediate outcomes. School staffs must always be aware of which students are succeeding and failing and why. They must also have well-conceived plans to prevent or resolve problems and must monitor progress over time to learn whether attempted solutions are having their intended effects.[34]

The second element is a strong focus on professional development for all staff members, including administrators. Staff development must be intensive and ongoing, with many opportunities for both peer and expert coaching and information exchange among implementers of a given component as listed here, either in professional discussions in a school or with professionals from other schools.

The third element is standards of behavior and effective strategies for classroom and school management. It may involve specific programs, such as Consistency Management-Cooperative Discipline,[35] or training in methods for organizing, motivating, and guiding students in class and in the school as a whole.[36]

The final element is leadership focused on building a "high-reliability organization" that shares information widely, monitors the

quality of teaching and learning carefully, and holds all staff responsible for progress toward shared goals.[37]

Language and Literacy Development

A key indicator of verbal ability (which has long been the basis of grade-level tests, college entrance exams, and selection tests for graduate school) is vocabulary knowledge.[38] Recent years have seen a renewed interest in teaching vocabulary among educators at all levels, largely because of worrisome literacy among sixth to twelfth graders, English learners in particular.

As many studies attest, vocabulary is the first important step toward and, indeed, the foundation of, school success for English learners and other students. *Teaching and Learning Vocabulary: Bringing Research to Practice,* a compendium put together by experts from diverse fields, forms the basis of the vocabulary instruction that has helped many English learners and struggling students accelerate their English learning and academic success.[39]

Researchers have found that young children in poverty hear, on average, about 615 words an hour; middle-class children, about 1,251; and children of professionals, about 2,153.[40] The average six-year-old has a vocabulary of approximately 8,000 words.[41] A child's vocabulary in kindergarten and first grade is a significant predictor of his reading comprehension in the middle and secondary grades;[42] it also predicts future reading difficulties.[43]

Vocabulary instruction contributes to overall effective instruction by developing students' phonological awareness[44] and reading comprehension.[45] For English learners, vocabulary instruction must not only be long term and comprehensive,[46] but also be taught explicitly in all subject areas before, during, and after reading.[47] Students benefit the most when teachers provide rich and varied language experiences; teach individual words, noun phrases, and idioms; teach word-learning strategies, such as looking for prefixes and root words; and foster word consciousness that makes clear the importance of learning as many words as possible throughout the day.[48]

Explicit vocabulary instruction entails frequent exposure to a word in multiple forms; ensuring understanding of meaning(s); providing examples of its use in phrases, idioms, and usual contexts; ensuring proper pronunciation, spelling, and word parts; and, when possible, teaching its cognates, or a false cognate, in the child's primary language.

In programs where English is the primary language of instruction for literacy development, it is critical for teachers to show respect for the student's primary language and home culture.

Reading instruction is quite complex, and all the more so because students use multiple cognitive processes in reading. Over the years, the focus of reading instruction has varied, shifting from decoding, to fluency, and, recently, to comprehension and word meaning. But reading entails more than decoding or fluency or comprehension. It makes use of multiple skills: oral language proficiency,

phonological processing, working memory, word-level skills (decoding, spelling), and text-level skills, such as scanning, skimming, summarizing, and making inferences.[49]

The National Literacy Panel for Language-Minority Children and Youth found clear benefits from instruction that covers the key components of reading identified by the National Reading Panel (phonemic awareness, phonics, fluency, vocabulary, and text comprehension).[50] Other research emphasizes the need for instructional practices to integrate oral language proficiency, reading, and writing. For English learners, for whom oral language proficiency plays an important role in acquiring reading skills, active participation by children during teacher "read-alouds" contributes to vocabulary growth.[51] For example, open-ended questions and multiple exposure to words during shared reading help children know how to use those words.[52] Because oral language, reading, and writing draw on common knowledge and cognitive processes, improving students' writing skills should result in improved reading skills.[53] To help English learners catch up when they fall short in core knowledge, all disciplines must practice vocabulary knowledge, reading, and writing instruction.[54]

To become good readers—to be able to recognize words and comprehend a text simultaneously—English learners require practice at both decoding and fluency.[55] Teachers must thus give equal attention to decoding, or word recognition, and comprehension. Once English learners can recognize words automatically (automaticity), the focus can shift to overall meaning. For mainstream students, word recognition simply means being able to read a word aloud. For English learners, it also means being able to recognize the word's meaning. Comprehension calls for knowing 85 to 90 percent of the words in a sentence, a question, a paragraph, or any text.[56] For English learners, therefore, instruction time and attention must be divided among word meaning, decoding, grammatical structures, background knowledge, and comprehension skills. Because English learners begin school, or arrive in the later grades, with a wide variety of educational and literacy backgrounds, schools must assess all language and literacy domains and identify areas where a student might need an additional intervention such as tutoring. Despite these unique demands in instructing second-language writers, however, research on how to teach writing to English learners is scarce. Because no single approach to writing instruction will meet the needs of all students, much more research is needed on interventions that work.[57]

Studies also shed light on the strategic use of the primary language during instruction. For example, in programs where English is the primary language of instruction for literacy development, it is critical for teachers to show respect for the student's primary language and home culture. Just as language and identity are interwoven, so are culture and identity. Strategies that send the message that this student's primary language and culture are valuable might include encouraging the student to use his native language with language peers during activities to build comprehension but to use the new words in English once the task is understood; pairing a new student with a same-language buddy who is familiar with the classroom and school; and using a variety of cooperative learning strategies to create a safe context to practice the new language with peers.

Integrating Language, Literacy, and Content for Adolescent Readers

Recent research has identified instructional strategies that seem to be effective with struggling adolescent readers.[58] National panels and committees concur that these instructional approaches enhance language, reading, and writing skills.[59] They recommend that math, science, and social studies teachers provide explicit vocabulary instruction for each content area; provide direct and explicit comprehension strategy instruction; use text-based cooperative learning to allow for extended discussion of text meaning and interpretations and for application of new vocabulary; ensure that each subject area involves intensive writing and use of new vocabulary; use technology to support instruction and learning; and conduct ongoing formative assessment of the students.

English learners in middle and high school present schools with a particular problem. Not only are these students expected to master complex course content, often with minimal background knowledge or preparation, but also they have fewer years to master the English language. Because the number of English learners is large and growing, all teachers must understand the factors that affect their language, reading, and content development and be prepared to address them. As of 2000, however, although 41 percent of teachers had taught English learners, only 13 percent had received any specialized training.[60]

According to the Carnegie Council on Advancing Adolescent Literacy, literacy instruction should focus on attacking multisyllabic and technical terms; assessing and providing repeated reading practice if necessary; expanding the emphasis on academic and technical vocabulary, polysemy (multiple-meaning words), etymology, and morphological analysis. Content-area reading should involve explicit instruction in discourse structures, word use, and grammar needed for math, science, social studies, and language arts.

Beyond classroom instruction, the Carnegie panel recommends conducting literacy assessments to assign struggling students to appropriate interventions and to monitor progress. Assessments would cover the primary language as well as English to identify appropriate instruction for recent arrivals. Based on the assessments, the school administration and teams of teachers would meet to respond to variability among English learners.

The panel sets forth an integrated curriculum for English language learners that includes a detailed developmental sequence for learning the English language within all subject areas, as well as traditional social English. In many states, however, the standards that guide the school or district curriculum for English learners differ little from those designed for native English speakers, and give little careful attention to second-language development. English learners need their own ladders of progressions. Unless concrete supports, direction, and examples are attached to the newly approved Common Core State Standards, these standards and the new generation of assessments and new materials to be published alongside them will likely double or triple the long-term English learner population.[61]

A more complex instructional challenge for middle and high schools is the curriculum and structural adjustments necessary to help adolescent newcomers with interrupted formal education or barely any education. New York City schools have

implemented one program, Reading Instructional Goals for Older Readers (RIGOR), that offers promise here by providing newcomers more time for learning through before- and after-school sessions, Saturday academies, and summer school sessions.[62] The program consists of intensive English-language instruction through science and social studies instruction. For students with low literacy skills in their own language, RIGOR is offered in both Spanish and English during the day. The extended day schedules, with native language support, help accelerate language, literacy, and knowledge of science and social studies simultaneously. Refugees and students with interrupted formal education accelerated their learning more efficiently in the extended day programs than they did in unstructured English as a Second Language classes, remedial courses, or basal readers. Therefore, the central district office now offers grants to allow schools to implement these programs. For district offices to provide additional resources to schools demonstrates how much they value addressing the most needy of secondary school English learners.

Parent support for children's success in school is always important, but it is especially so for the children of immigrants.

Unlike students with interrupted formal education, highly schooled newcomers have substantial background knowledge and mainly need intensive accelerated English programs. They need a different curriculum design to help them move quickly into general education classes.

Cooperative Learning

In cooperative learning, teachers plan for students to work in small groups to help one another learn. Cooperative learning offers a wide variety of approaches, but the most effective are those in which students work in mixed-ability groups of four, have regular opportunities to teach each other after the teacher has introduced a lesson, and are recognized based on the learning of all members of the group.[63]

Cooperative learning has been found effective for elementary and secondary students across a broad range of subjects, and it is especially so for English learners who are learning to operate in English. The cooperative activities give them regular opportunities to discuss the content and to use the language of the school in a safe context. Many English learners are shy or reluctant to speak up in class for fear of being laughed at, but in a small cooperative group they can speak and learn from their friends and classmates.

Research has clearly shown the effectiveness of structured cooperative methods for English learners. Margarita Calderón, Rachel Hertz-Lazarowitz, and Robert Slavin[64] evaluated a program in El Paso, Texas, called Bilingual Cooperative Integrated Reading and Composition, or BCIRC, among English learners who were transitioning from Spanish to English instruction in grades two through four. Compared with a control group of similar English learners, those in BCIRC had significantly higher scores on both English and Spanish reading measures. A second El Paso study, by Calderón and others,[65] evaluated a similar bilingual program among third

graders that emphasized cooperative learning and systematic phonics. Once again, students in the cooperative learning classes scored higher than controls on English as well as Spanish reading measures.

Other studies of programs using cooperative learning that have documented positive effects include Spanish-to-English transition approaches evaluated by Maria Carlo, Diane August, and Catherine Snow and by Bill Saunders and Claude Goldenberg.[66] A first-grade pair learning method called PALS (Peer Assisted Learning Strategies) helps Hispanic students to improve their reading performance.[67] A great deal of research has shown that SFA and Expediting Comprehension for English Language Learners (ExC-ELL), both of which have a strong focus on cooperative learning, improve student achievement.[68]

Professional Development

According to reviews of professional development studies, teachers who work with English learners found professional development most helpful when it provided opportunities for hands-on practice with teaching techniques readily applicable in their classrooms, in-class demonstrations with their own or a colleague's students, and personalized coaching.[69]

Rafael Lara-Alecio and his colleagues[70] found that ongoing biweekly professional development improved kindergarten teachers' work with English learners. The teachers became more effective in the classroom after receiving training in eight specific strategies: enhanced instruction via planning, student engagement, vocabulary building and fluency, oral language development, literacy development, reading comprehension, parental support and involvement, and reflective practice through portfolio development. Fuhui Tong and her colleagues[71] attributed the acceleration of English learners' oral language development to well-planned professional development (at least six hours a month for teachers, and three hours a month for paraprofessionals).

The SFA professional development model begins with two days of workshops that group teachers by grade levels so that trainers can address instructional approaches specific to their grade levels. Trainers then provide each teacher three or more follow-up coaching days. Coaches and administrators participate along with teachers and also receive their own sessions on how to make sure that the implementation of all this training is of high quality.

The ExC-ELL professional development begins with five days of workshops on how to teach vocabulary, reading, writing, and subject matter, followed by extensive coaching by the ExC-ELL trainers. The school's principals and the literacy coaches who work with the teachers shadow the trainers initially to practice conducting classroom observations and giving technical feedback to help teachers reflect and set goals. The observations by trainers, coaches, principals, other teachers, and central district administrators also help to validate data on teacher and student performance. Observers collect the data with the ExC-ELL observation protocol using a digital pen and paper that can be docked on a computer to generate reports on the students' use of vocabulary, reading, and writing skills; the effectiveness of cooperative learning; and classroom management. The protocol can generate reports for individual classrooms, for subject area clusters or learning communities, after each observation, or as benchmark assessments or end-of-year reports.

Researchers, school administrators, and policy makers have neglected for too long the relationship between professional development and student learning. Designing, measuring, and providing effective professional development is often a complex undertaking for schools and school districts. Yet, without knowing how and how well professional development is implemented in each classroom, they cannot determine its impact on student learning.[72] Schools need to establish clear causal links between their particular teachers' needs, their teacher professional development offerings, and their student outcomes. Measures of student outcomes on standardized achievement scores alone will not give a clear picture of the complex ways in which professional development is linked with teacher effectiveness and student learning. Direct observation of teacher knowledge and skills, as well as the delivery of those skills in the classroom, makes those links clearer. Several recent studies have examined how observational protocols that measure various domains of teaching have affected student outcomes.[73] These observational protocols offer a vehicle for exploring the transfer of skills and knowledge from teacher preparation offerings into their active teaching repertoire, as well as how their teaching affects students, in order to evaluate teachers' effectiveness.[74]

Parent and Family Support

Parent support for children's success in school is always important,[75] but it is especially so for the children of immigrants. English learners are likely to have to balance cultural, linguistic, and social differences between home and school, so open communication and positive relationships across the home-school divide are crucial.[76] Schools serving many English learners need to focus on aspects of children's development beyond those directly affected by classroom teaching. SFA schools, for example, establish "Solutions Teams" to organize resources and energies to deal with these issues.[77]

Parents need to feel that they play a meaningful role in school decisions that affect them and their children. Schools may, for example, establish a Building Advisory Team to review schoolwide discipline policies, suggest opportunities for parent and community involvement, review homework guidelines, and suggest ways to improve school climate. The team should ensure openness to participation by parents who do not speak English.

Schools should also create many opportunities for parents and other community members to volunteer in the school. Volunteer opportunities may include tutoring, homework help, or other academic assistance, as well as helping with sports, cultural programs, food service, and fundraising. Parents should feel that they are welcome at school and that their issues are important. Many SFA schools offer parents a "Second Cup of Coffee" to give them a chance to sit with a parent aide or other staff member to discuss ways to help their children at home, as well as parenting issues such as behavior management and finances. These programs should be offered in the parents' home language if at all possible. Other communications may be informal. School staffs may be encouraged to look for opportunities to speak with parents as they drop their children off in the morning, for example, or to share good news about individual children. Good news phone calls, texts, or e-mail can make a big difference in how parents feel about the school.

Children need to be in school on time every day. Effective programs for attendance collect information early in the day and act on it immediately, so that lateness and missing

days of school never come to be seen as normal. Providing awards for children who improve their attendance can also help build supportive relationships between home and school. Despite every effort at preventing absences and tardiness, problems will arise with individual children. School staffs should formulate generic intervention plans for predictable types of problems, such as truancy, and then modify them for individual circumstances if necessary.

In essence, SFA schools try to negotiate opportunities to provide health, mental health, and social services at the school or in close coordination with the school. For example, school staff should know how to help families with issues such as health problems, counseling, immigration problems, food, shelter, and adult literacy. Ideally these services can be provided at the school site, but if not, school staffs should still help make sure that families have easy access to services that affect children.

Tutoring and Other Interventions for Struggling Readers

When children are struggling in reading, the most effective intervention is one-to-one tutoring by well-trained, certified teachers,[78] and the most effective tutors use structured phonetic programs.[79] Evaluations of the most widely used phonetic program, Reading Recovery, show that it is successful with English learners,[80] but other phonetic programs have had more positive effects on the reading of struggling students. Reading Rescue, for example, was found successful with Spanish-dominant urban first graders. Two other such programs are Early Steps and Targeted Reading Instruction.[81]

Well-trained, well-supervised paraprofessionals using structured, phonetic models can also be effective tutors, as shown by programs called Sound Partners and Howard Street Tutoring.[82] Well-structured volunteer programs, such as Book Buddies,[83] can be effective as well. Several effective tutoring programs—such as Corrective Reading; Read, Write, and Type; and SHIP—use structured, phonetic methods with small groups of two to six students.[84]

Researchers have also provided strong evidence that effective whole-class programs can prevent struggling readers from falling behind. Proven forms of cooperative learning, such as Cooperative Integrated Reading and Composition and its bilingual version (BCIRC), and PALS, discussed earlier, are particularly effective for students in the bottom quarter of their classes.[85] Cooperative learning can be as effective as one-to-one tutoring, but it should be seen as a way to reduce the numbers of children who will need tutoring, not as a substitute.

Monitoring Implementation and Outcomes

Educators seeking to improve instruction for English learners must pay close attention not only to the student outcomes a program achieves but also to how well each element of the program is implemented. In many comprehensive reform models, an on-site facilitator or coach helps implement the program and keep track of intermediate outcomes. In SFA, for example, a full-time facilitator helps all staff implement all aspects of the program, observes teachers and gives them feedback, and enables teachers of the same program component to share ideas and answer each others' questions. Facilitators work with the school staff to use online data tools to monitor continuously the reading progress of all students and to help use the data to identify students who may need tutoring, may have

problems at home, or may need to accelerate to higher-level instruction. No program is self-implementing; a model is only as good as the care with which it is implemented. Maintaining high-quality, adaptive, and effective innovations takes constant attention and effort. Technology-based observation protocols and performance assessment tools help teachers, the professionals who coach them, and the administrators who oversee them continually gauge the learning progressions of teachers and students.

Cooperative learning can be as effective as one-to-one tutoring, but it should be seen as a way to reduce the numbers of children who will need tutoring, not as a substitute.

The Council on Advancing Adolescent Literacy[86] also offers a comprehensive approach for re-engineering America's middle and high schools to prepare all students, including English learners, for college and careers. The approach has seven components. First, the school culture is organized for learning. Quality instruction is the central task that organizes everyone's work. Teachers feel personal responsibility, and the principals support their efforts. Second, student achievement data drives decisions about instruction, scheduling, and interventions. Staff receive supports to gather and analyze real-time data from formative assessments to inform instruction and to target remediation. Third, time, energy, and materials are focused on areas deemed critical for raising student achievement. Fourth, instructional leadership is strong. Principals work in partnership with subject area specialists, literacy coaches, and other professional development experts to ensure implementation of critical programs. Fifth, all content teachers participate willingly in professional development because they recognize the need to improve their work and the importance of literacy skills to content-area learning. Sixth, targeted interventions are used for struggling readers and writers. Multitiered instruction helps students build the skills and strategies needed for successes. A logical progression of interventions is available, to which learners are assigned based on their needs. Finally, all content-area classes are permeated by a strong literacy focus. Teachers offer reading and writing instruction in all core classes (math, science, language arts, social studies).

To complement high-quality instruction by ESL teachers and all content teachers, schoolwide teams supported by knowledgeable administrators meet regularly to align curriculum, plan cross-content projects, address student concerns, and monitor English learner progress. Finally, counselors who understand and are able to respond to the challenges facing English learners are available to students.[87]

An Elementary School Case. Project English Language and Literacy Acquisition (ELLA), a five-year randomized trial study funded by the Institute of Education Sciences, restructured a transitional bilingual education program in which students were moving toward instruction in English alone.[88] The experimental component of the program resembled a dual-language, or developmental, program, in which two languages are developed all

through K–12. The two languages, Spanish and English, were separated in instruction, expectations were high during instruction in both languages, and the interventions included targeted and deliberate higher-order questions.

Within that structure, the home-school connection was clear. Family activities were aligned with the school curriculum and were sent home in two languages. The teachers and paraprofessionals received monthly professional development and created a professional portfolio to enable them to reflect on their practice and improve their teaching skills.[89]

The leadership in the district directed and supported the restructuring. It used the program evaluation to compare the enhanced bilingual program model with the district's other bilingual programs by using classroom observations of the teachers in both with a specified observation tool.[90]

A Middle and High School Case. ExC-ELL was a five-year effort funded by the Carnegie Corporation of New York to design and test a professional development model for core content teachers who have English learners in their classrooms. The aim was to integrate the teaching of vocabulary, reading comprehension, and writing skills into all math, science, social science, and language arts classes. The foundation of instruction was cooperative learning for language and literacy development, performance assessments, and the use of an online observation protocol to capture teacher and student learning progressions.

The professional development consisted of three phases. An initial fifty-hour training session was followed by yearlong coaching by experts, administrators, and peers, and then by the creation of learning communities. In that third phase all content, ESL, and sheltered instruction teachers (those who specialize in teaching core content to English learners), as well as their coaches and administrators, worked together to re-engineer the way they addressed the diversity of English learners, struggling readers, and general education students. The instructional focus described above for literacy and the eight basic principles for creating an effective context for teaching reading to adolescents were the targets of the study and school restructuring. After two years, the reading scores of English learners improved 45 percent, meaning that the majority of long-term English learners, students with interrupted formal education, special education students, and newcomers attained or exceeded grade level in reading. In turn, the experimental schools advanced from low-performing to high-performing in two years.[91]

Concluding Remarks

Experts on teacher education, language-minority children, and general reading and writing instruction agree that effective teaching is critical to student learning. Concomitantly, other research shows that certain school structures facilitate effective teaching.[92] In short, effective instruction is nested in effective school structures.

As larger numbers of English learners and struggling readers reach America's middle and high schools, more and more of the nation's teachers are discovering that they need to learn how to teach these students effectively. Elementary teachers recognize that they must provide more challenging and meaningful instruction to prepare their students for secondary schools. Mainstream content teachers in middle and high schools, having seen the many English learners spilling out of ESL or

sheltered classrooms and into theirs, want to do what is right for all students. What these teachers need today from the nation's schools are the structures and support that will enable them to move in these directions. Without better support for teachers, we cannot expect better student outcomes.

As states begin debating adoption of core standards, we can be certain that accountability to all students, including English learners, will increase. These standards will surely affect the curriculum, the way students are assessed, and how teacher and administrator accountability is measured and documented. Language development progressions, reading comprehension, and writing targets will be developed along with the accountability measures for the core subjects. English learners will no longer be assessed only for oral language; they will be tested for each discipline.

Although reforms and interventions are needed in every grade, there are compelling reasons to begin in the early grades. It is easier to build a strong foundation with quality programs in preschool to the third grade, when children's needs are much more manageable and teachers are imparting new skills rather than remediating gaps. Teachers' knowledge about how children acquire languages, their grasp of when and how to maximize the use of the primary language spoken in the home, and their modeling of academic discourse in the first and second languages can have important effects on how children learn language and content.[93]

The comprehensive studies that we have reviewed show that successful schools work simultaneously on student formative assessments, school structures, professional development, teacher support, and effective instruction for English learners. The implications for school districts, state departments of education, and the U.S. Department of Education are that forthcoming regulations need to focus on whole-school interventions for English learners. Schools need time to stop and to retool all educators through comprehensive professional development—an ambitious undertaking that will require appropriate funding.

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K–12 Educational Outcomes of Immigrant Youth

Robert Crosnoe and Ruth N. López Turley

Summary

The children from immigrant families in the United States make up a historically diverse population, and they are demonstrating just as much diversity in their experiences in the K–12 educational system. Robert Crosnoe and Ruth López Turley summarize these K–12 patterns, paying special attention to differences in academic functioning across segments of the immigrant population defined by generational status, race and ethnicity, and national origin.

A good deal of evidence points to an immigrant advantage in multiple indicators of academic progress, meaning that many youths from immigrant families outperform their peers in school. This apparent advantage is often referred to as the immigrant paradox, in that it occurs despite higher-than-average rates of social and economic disadvantages in this population as a whole.

The immigrant paradox, however, is more pronounced among the children of Asian and African immigrants than other groups, and it is stronger for boys than for girls. Furthermore, evidence for the paradox is far more consistent in secondary school than in elementary school. Indeed, school readiness appears to be one area of potential risk for children from immigrant families, especially those of Mexican origin. For many groups, including those from Latin America, any evidence of the immigrant paradox usually emerges after researchers control for family socioeconomic circumstances and youths' English language skills. For others, including those from Asian countries, it is at least partially explained by the tendency for more socioeconomically advantaged residents of those regions to leave their home country for the United States. Bilingualism and strong family ties help to explain immigrant advantages in schooling; school, community, and other contextual disadvantages may suppress these advantages or lead to immigrant risks.

Crosnoe and Turley also discuss several policy efforts targeting young people from immigrant families, especially those of Latin American origin. One is the DREAM Act, proposed federal legislation to create a pathway to citizenship for undocumented youth who meet certain criteria. Another effort includes culturally grounded programs to support the college preparation of immigrant adolescents and the educational involvement of immigrant parents of young children.

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America's K–12 educational system has long been thought key to the ability of newly arriving immigrants to realize their dream of social mobility. Yet in reality the interplay of immigration, education, and social mobility in the United States is quite complicated.[1] Although some immigrant groups have used K–12 education to improve their social and economic prospects, others have faced disadvantage, discrimination, and other barriers in American schools that reinforce social stratification.[2] The U.S. educational system, in fact, can lead to intergenerational mobility for some immigrant families and to inequality and social stratification for others. We examine the role of K–12 education in the United States, focusing on specific stages of schooling and subsets of the immigrant population—those, for example, defined by generational status, region of origin, socioeconomic status, and gender. Our goal is to take a close look at overly broad characterizations of immigrants as being either consistently at-risk or consistently advantaged that have each gained footholds in social policy and public consciousness. First, we place the contemporary educational experiences of immigrants in the United States in historical context. We then summarize empirical patterns of student outcomes in secondary school and elementary school, respectively. We conclude by exploring the policy implications of research findings.

Historical Context

The connection between immigration and education in the United States has evolved over the years. A century ago, schools were viewed as prime settings for assimilating immigrants. More recently, they have often been seen as sites of immigration-related conflict and inequality. Neither perception has been entirely accurate.

During the nineteenth century, proponents of compulsory education believed that requiring all children to attend school would encourage social cohesion in an increasingly diverse population. As European immigrants poured into the United States during the early twentieth century, the nation—immigrants and nonimmigrants alike—expected public schools to help newcomers get ahead while also "Americanizing" them.[3] Partly as a result, the primarily white immigrants of the early twentieth century were largely absorbed into the nation's major social and political institutions within a couple of generations and became upwardly mobile over time.[4] The so-called linear model of assimilation derived from their experiences—gradual progress fueled, in part, by access to free education—became the dominant popular and research perspective on the connection between immigration and education in the United States.[5] The empirical support for this model, however, has gradually eroded as a result of two converging historical trends.

The first trend is the large, diverse wave of immigration set in motion by the Immigration and Nationality Act of 1965, which abolished the national origins quota system that had governed immigration since the 1920s.[6] Because of that large influx of newcomers, children of immigrants now make up 23 percent of the U.S. school-age population.[7] Latino and Asian American children—the vast majority of whom are foreign-born or have foreign-born parents—constitute 19 percent and 4 percent of American students, respectively, up from 6 percent and 1 percent in 1970.[8]

The recent wave of immigrants has been widely diverse—by race, ethnicity, region of origin, and socioeconomic status. Many, but by no means all, immigrant children are

As European immigrants poured into the United States during the early twentieth century, the nation expected public schools to help newcomers get ahead while also "Americanizing" them.

socioeconomically disadvantaged. Twenty-four percent, for example, have low-income families (compared with 15 percent of children with native-born parents), and 26 percent have no parent with a high school degree (8 percent for those with native-born parents). Half of Mexican immigrant children have no parent with a high school degree. In sharp contrast, most of their East Asian peers have college-educated parents.[9]

Not surprisingly, such group differences in socioeconomic status are linked with differences in educational outcomes. According to the immigrant "selectivity" perspective, academic disparities between immigrant groups likely reflect national differences in the kinds of people who "select" into emigrating from another country to the United States.[10] For example, the better-than-expected academic success of the children of Asian and African immigrants in the United States is partly attributable to the fact that these immigrants tend to be more educated than Asians and Africans who do not emigrate.[11] Similarly, much of the widening white-Hispanic gap in academic outcomes is explained by the greater tendency for contemporary Hispanic youth to be the children of low-skilled Mexicans coming to the United States for work.[12] In other words, given the power of socioeconomic status to stratify opportunities to learn in the United States, socioeconomic diversity in who selects into emigration from another country contributes to the diversity in outcomes among children of immigrants in this country.

The second trend that has called into question the old linear model of assimilation is the dramatic change in the U.S. economy in the past half-century. Until the middle of the twentieth century, the nation's large manufacturing base provided the means for high school graduates to get secure well-paying jobs with benefits. With the shift over recent decades into a high-tech service economy, however, the supply of jobs that do not require some postsecondary education is drying up, pushing the economic returns of higher education to historic highs.[13] The educational implications of this economic restructuring are particularly acute among immigrants. During the first half of the twentieth century, predominantly European immigrants were absorbed into manufacturing and retailing jobs that made possible the upward mobility of the next generation. By contrast, today's predominantly non-European immigrants must struggle ever harder to provide the economic foundation their children need to pursue higher education, even as that education becomes increasingly important to their children's futures.[14]

These two trends have converged to produce a large and diverse cohort of newcomers that must capitalize on public education if they are to become upwardly mobile. In this context, competitive tensions among immigrant groups within schools—over scarce resources and opportunities—are exacerbated by linked racial and ethnic, as well as socioeconomic, disparities. Some groups are at a competitive

advantage, others at a disadvantage. Asian immigrants' children, for example, benefit not only from the choice their educated parents made to emigrate to the United States, but also from the willingness of school personnel to make greater investments in children from immigrant groups that have been educationally successful. By contrast, Latin American immigrants' children are hampered not only by the greater socioeconomic disadvantages that characterize the Latin American immigration stream but also by related stereotypes that marginalize them in schools.[15]

The combination of increased diversity among young immigrants in schools and the rising long-term returns to education is having far-reaching effects. First, increased competition, exposure, interactions, and conflicts among different immigrant groups and between immigrant and native groups within schools have generated calls for multicultural education, which, in turn, have led to public concerns—especially among the white middle class—that the nation has rejected the traditional Americanizing role of schools and replaced it with efforts to preserve students' cultural differences. These concerns, however, fail to recognize immigrant families' historically consistent emphasis on schools as agents of social mobility rather than cultural separation.[16] Second, the No Child Left Behind Act of 2001 requires schools to track academic disparities by disaggregating data on standardized test performance by various socioeconomic and demographic characteristics. Taken together, many of these characteristics, such as race and ethnicity, low English proficiency, and poverty, effectively identify immigrant groups, leading to more, albeit indirect, monitoring of the progress of immigrant youth in public schools.[17] Third, as researchers continue to compare the school outcomes of the first, second, and higher generations of immigrants and the outcomes of immigrants and natives, their findings are increasingly complex and variable. No longer do almost all immigrant children move successfully through school and slowly up the socioeconomic ladder; instead outcomes vary widely and in sometimes unpredictable ways. The varying outcomes of different subgroups in the U.S. educational system have led researchers to fashion theoretical perspectives emphasizing the diverse implications of assimilation. Segmented assimilation, first outlined by Alejandro Portes and Min Zhou, is one such perspective. It posits that the interplay between an immigrant group's human capital and the way that the group is received in American society (determined by reactions to race, ethnicity, and related factors) offers some immigrant youth the promise of upward social mobility but socially marginalizes and impedes the mobility of others. In other words, whether mobility is upward or downward depends not only on the resources immigrant youth bring with them but also on how they are received in destination communities.[18]

Against this historical backdrop, we turn to the K–12 educational outcomes of contemporary immigrant youth in the United States. Because secondary education is generally either the gateway to college matriculation or the end of the educational career, it is the most common focus of research on immigration-related disparities in education. Thus we look first at the outcomes of immigrants in high school and middle school. We then review the smaller body of research on immigrants in elementary school and examine the question of school readiness.

Secondary School

Academic success in secondary school is often the only way by which immigrant

Table 1. Predicted Math and Science Standardized Test Scores by Generation and Family Socioeconomic Status (SES)

	Math		Science	
Generation	**Eighth grade**	**Tenth grade**	**Eighth grade**	**Tenth grade**
No SES control				
First	37.30	45.10	18.59	21.69
Second	36.34	44.37	18.90	21.53
Third and higher	35.70	42.99	18.66	21.39
Controlling for SES				
First	38.22	46.58	19.04	22.20
Second	37.21	45.71	19.27	21.96
Third and higher	35.87	43.48	18.82	21.52

Source: National Education Longitudinal Study of 1988.
Note: Scores calculated based on multilevel modeling coefficients, weighted and adjusted for design effects.

youth can attain intergenerational socioeconomic mobility. Perhaps that is why, of all the articles on the educational experiences of immigrant youth published in the past decade in a large sample of influential journals, the overwhelming majority has focused on secondary schooling.[19]

The Immigrant Paradox

One theme in this large body of secondary school research is that immigrant youth are often academically successful compared with children with U.S.-born parents. In New York, for example, children of immigrants generally outperform their peers with native-born parents on achievement tests.[20] These patterns are evidence of an "immigrant paradox" in education—the paradox being that immigrant youth enjoy academic advantages in the relative absence of the socioeconomic advantages, such as high parental education and income, that are usually associated with school success. And the evidence is by no means confined to New York. As table 1 shows, analyses of the nationally representative National Education Longitudinal Study (NELS) reveal that adolescents with immigrant parents typically outperform those with U.S.-born parents on math and science tests (given in English) by 5 to 20 percent of a standard deviation. A study by Grace Kao reported that this pattern held in most regional and national origin groups in NELS, although evidence of the immigrant advantage was stronger and more consistent across subjects for youth from Asian immigrant families than for youth from Latin American (especially Mexican) immigrant families. Indeed, the children of Asian immigrants often outperformed all other student populations on standardized tests in secondary school, including the children of native whites.[21] Similar patterns have also been found for other academic indicators, such as grades and graduation, in a number of data sets. Again, these patterns tend to be somewhat stronger and more consistent for youth from Asian immigrant families.[22] Before discussing possible explanations for this general immigrant paradox pattern, we raise several caveats about the current state of evidence.

First, because cultural ties tend to weaken, and economic security tends to grow, as

immigrant families and children remain longer in the United States, analysts have debated whether the immigrant paradox is stronger among U.S.-born (second-generation) or foreign-born (first-generation) adolescents with immigrant parents and, within the first generation, whether it is stronger among adolescents who came to the United States early in their lives (1.5 generation) or later. Yet, the direction and size of generational and timing effects varies a great deal by group. In the aforementioned Kao analysis, for example, second-generation Asians and Latinos typically outdid first- and third-plus-generation youth of their same ethnic background on math tests, but first-generation whites and blacks did better than later-generation youth of their same ethnic background. These patterns were not always the same, however, for other academic indicators, such as reading tests and grades. Because of this variability among immigrant groups, definitive answers about which generation best illustrates the immigrant paradox remain elusive.[23]

Second, the immigrant paradox is not solely a product of differences in socioeconomic status. In fact, accounting for socioeconomic status—that is, limiting the comparison to youth of similar status—can strengthen evidence of the paradox in many groups. Indeed, test score differences of first- and third-plus-generation youth in table 1 increased when socioeconomic status was controlled. As already mentioned, youth from Asian immigrant families tend to have more socioeconomic resources, such as parent education, than youth from other immigrant families. Thus, socioeconomic status can explain some portion of their apparent academic advantage, although not all of it.

Third, the immigrant paradox is stronger for boys than girls. As just one example, the difference between first- and third-plus-generation youth on middle school math tests in table 1 equaled 5 percent of a standard deviation for girls but 20 percent of a standard deviation for boys. Researchers cannot yet explain the source of this gendered pattern, but it may be related to and may fuel the higher educational attainment of girls than boys in the general population.[24]

Explaining the Immigrant Paradox

Explanations for the observed immigrant paradox include circumstances relating to immigrants' lives after migrating, before migrating, and during the migration. Research has found that some factors operate differently across immigrant groups and that some seemingly relevant factors, such as school context, self-esteem, and peer influences, have, in fact, limited explanatory power.

Post- and Pre-Migration Conditions

Research examining the educational outcomes of immigrants in secondary school is dominated by studies of their post-migration circumstances. Whether children of immigrants use their native language as well as English is a prime topic. Evidence suggests that mastering both a native language and English gives adolescents access to an array of community and institutional networks. When youth are connected to adults and families are connected to each other, youth may be less oriented to potentially negative peer influences.[25] Such ties to community and institutional networks could also be a conduit for transmitting the high educational expectations of immigrants to children. Moreover, although some observers believe that immigrant youths' frequent use of languages other than English interferes with their English proficiency, in fact, proficiency in a student's

first language appears to support English maintenance, especially when instruction is bilingual, and to raise grades and test scores.[26] With support from families, schools, and communities, therefore, fluency in multiple languages has academic advantages that likely factor into the immigrant paradox.

Overall, strong family ties and parental attachment and support are resources for immigrant youth, providing the security and assistance they need to meet the challenges of school. In particular, researchers have examined parental involvement in education. In part because of language barriers, immigrant parents tend to engage less in the kinds of involvement, such as joining parent-teacher organizations, that are visible to schools and measurable in quantitative data sets.[27] Yet they are involved in other, often less obvious, but important ways. For example, Asian immigrant parents, including those with little income, generally have high educational expectations for their children, talk to them often about their progress toward their expectations, find ways to marshal supplemental resources to help them, such as by sending them to Chinese schools after school, on weekends, and during school breaks, and make concrete plans for the future, such as by saving for college. Although less pronounced, something similar occurs with Latin American immigrant parents, for whom the crucial component of their involvement in education is to prepare young people to be conscientious and responsible and to work hard.[28]

Other social psychological aspects of youths' post-migration lives are clearly related to academic outcomes but may be less important than language use and parental involvement in explaining immigration-related outcome differences in secondary school. For example, much has been made of the possibility that some immigrant youth, especially youth from Latin America, will be exposed to negative peer influences that discourage achievement. Such peer influences, however, do not seem unique to immigrant groups and exist more generally across the adolescent population.[29] As another example, although self-esteem and a strong sense of ethnic identity are positively associated with multiple indicators of school achievement and adjustment, the children of immigrants tend to have lower self-esteem than their peers and similar degrees of ethnic identification as their peers. Yet they tend to do better in school.[30]

Two other important conditions of students' post-migration lives are their schools and neighborhoods. Partly as a result of high rates of Latino school segregation, adolescents from Latin American immigrant families tend to be concentrated in problematic schools, such as those characterized by more conflict, weaker academic norms, weaker ties between students and adults, and larger class sizes. Although these school disadvantages pose academic risks that could impair academic performance, such risks seem to affect these immigrant youth less than students with native-born parents, suggesting that they may be more resilient in problematic schools than their peers. Furthermore, this pattern of school disadvantage does not extend to adolescents from Asian immigrant families, most likely because of the greater socioeconomic resources in the Asian immigrant population. In addition, the "model minority" perception of Asian immigrant youth and the aforementioned steps their parents take to supplement their education provide more opportunities for them to move out of segregated schools.[31]

Similarly, immigrants tend to live in neighborhoods characterized by a diverse array of social and economic disadvantages, including

segregation.[32] Evidence is mixed, however, on whether neighborhood disadvantages are related to race and ethnicity or to family nativity. On one hand, a New York study found that regardless of family nativity, African American and Latino households with children lived in more disadvantaged neighborhoods than immigrant or nonimmigrant white households with children, suggesting that the neighborhood disadvantages of immigrants are likely attributable to race and ethnicity.[33] On the other hand, a national study highlights nativity, reporting that Latin American immigrants tend to live in more disadvantaged neighborhoods than native-born blacks.[34] What is less clear is whether such neighborhood patterns factor into the immigrant paradox. Certainly, neighborhood disadvantage has been linked to educational outcomes, but this link has rarely been explored with a focus on immigrants. Moreover, research has generally not implicated neighborhood disadvantages in immigration-related educational patterns. Indeed, one study suggests that a commonly cited neighborhood disadvantage of immigrants—residential segregation—may not be problematic if it means that youth are embedded in enclave communities with strong intergenerational networks.[35] To the extent that immigrants are disadvantaged by their neighborhoods, those neighborhood disadvantages could only suppress the immigrant paradox, not explain it. Disadvantage should reduce the academic performance of immigrants, not increase it. At the same time, some neighborhood characteristics that appear to be disadvantages may in reality mask neighborhood advantages that could explain the immigrant paradox.

Researchers have also examined immigrants' experiences before leaving their countries of origin in relation to their school outcomes in the United States. Some emphasize immigrant selectivity—as noted, the degree to which pre-migration circumstances affect the likelihood of migration in ways that create advantages or disadvantages for immigrants in the new country. One type of selectivity concerns the extent to which immigrants are more or less educated than their nonimmigrant counterparts left behind in their country of origin. Cynthia Feliciano has reported that for all but one (Puerto Rico) of thirty-two countries and territories, immigrants to the United States were more educated than their peers who remained in their country of origin. In turn, such educational selection of immigrants was associated with the educational attainment of their children in the United States.[36] Other characteristics of countries of origin and the people who leave them for the United States have been linked to the educational outcomes of immigrant youth but not always in expected ways. For example, political stability, but not economic development, in the country of origin is associated with the math performance of the children of immigrants in host Western countries.[37]

In general, these studies suggest that some pre-migration conditions help to explain educational variation among immigrants. Most studies, however, rely on country-level data, so the pre-migration histories of immigrant families are proxied by the general characteristics of their home countries or of the migration stream from those countries. Yet aggregate measures, such as educational attainment in a country and average educational attainment of migrants from a country, might subsume a great deal of variability in educational attainment across regions or social strata in that country and not accurately tap the pre-migration characteristics of immigrants. One study shows

The very act of migrating from one country to another likely is a shock sufficiently large to affect the educational outcomes of immigrants and thus the immigrant paradox.

variation within the home country by finding that Mexican-origin high school students in the United States who had received some schooling in Mexico reported higher grades than those who had received none.[38] But that study included no information about the type or quality of schooling in Mexico, an omission that is a significant data limit in itself. Overall, the study of pre-migration conditions is promising, but more work is needed to determine how much of the immigrant paradox is a function of what occurred before immigration rather than of what immigrants do once in the United States.

Migration and Other Transitions

The very act of migrating from one country to another likely is a shock sufficiently large to affect the educational outcomes of immigrants and thus the immigrant paradox. Studying this issue is challenging because it is hard to compare migrants with nonmigrants who, by definition, not only do not experience a move but also do not experience the schools of the destination country. Several studies, however, suggest that a change as small as moving from one school to another within the same country or even within the same school district can affect students' academic achievement. Regardless of whether the move takes place within or between academic years, or voluntarily or not, switching schools can disrupt students' academic progress. Indeed, data from New York show that school transfer is among the biggest academic risks faced by immigrants.[39] Switching to an entirely new school system in a completely different country is likely to be harmful temporarily, even if the new educational context eventually leads to more favorable outcomes.

One type of school move is the transition between school levels. The transition from middle to high school, for example, contributes to racial and ethnic, as well as socioeconomic, disparities in academic indicators because the experience tends to be more disruptive in more marginalized groups. But analysts rarely explore this transition in relation to immigration. One NELS analysis reveals that discrepancies between middle school performance and high school course placement—specifically, being placed in high school courses at a level below what middle school performance suggests would be appropriate—were greater for students learning English than for others.[40] In other words, changing schools may create a period of vulnerability for immigrant youth greater than it does for native children.

Limitations and Future Directions of Research

Future work on generational, national-origin, linguistic, and socioeconomic differences in the connection between immigration and secondary schooling should address not only the data limitations already noted but also other data issues. For example, large-scale data sets often omit school dropouts and nonenrollees. Yet youth from many immigrant groups, such as Mexicans, have dropout rates higher than the general population, and some youth who come to the United States as teenagers

may not enroll in school at all.[41] Such omissions would tend to raise measured school outcomes, potentially overstating the immigrant paradox in education. Compounding this bias, many data sets, such as the NELS, exclude English language learners. New data sets should track students, dropouts, and nonenrollees together and sample students with a range of language proficiencies, especially on the national level. In addition, many studies of immigrants in secondary school use data from large metropolitan areas, which have especially sizable and diverse immigrant populations. Researchers should explore whether the mechanisms that affect immigrants' educational outcomes in these cities differ from those shaping outcomes in other parts of the country. The need to do so has only been magnified by the unprecedented immigrant dispersal, which has had profound impacts on schools.

These data issues aside, research on immigrants in secondary school does suggest an immigrant advantage arising from some mixture of pre- and post-migration conditions. The extent of this advantage, however, varies across segments of the immigrant population, with those from Asian countries the most advantaged and those from Latin American countries the least advantaged. This variation likely reflects mechanisms that differ across each group or that function differently for each group. For Latin American immigrants, the mechanisms that seem to hold the most promise for explaining the immigrant paradox include strong family and community ties that protect from potentially negative peer orientations and support resilience within disadvantaged schools and neighborhoods. For Asian immigrants, the ways in which parents proactively take steps to manage their children's journey through school and seek out supplemental educational opportunities and supports for their children are likely important to understanding the stronger immigrant paradox in this population. In both cases, immigrant selectivity is also likely a key factor, although in different ways. Asian immigrants tend to be of higher socioeconomic status than other immigrants in the United States or others from their home countries. The same is not true of Latin American immigrants, but they might be selective in other ways—in terms of motivation, efficacy, health, or other qualities—that do contribute to the immigrant paradox. Despite years of research on the immigrant paradox, however, group-specific mechanisms are still not well understood and need to be studied more closely.

Elementary School

As noted, research on immigrant youth in secondary school dwarfs that on elementary school. This lack of balance is problematic for several reasons. First, the greater returns to investment in early education compared with later stages of schooling make elementary school, especially the primary grades, a critical point of intervention. Thus, the relative lack of interest in elementary school means that researchers have not paid enough attention to what may be a key period for immigrants.[42] Second, the immigrant population is growing younger, making it all the more important to shift research attention to elementary schools.[43] Third, the immigration bias already noted in secondary school data means that early schooling data may be more representative of the immigrant population. As we explain shortly, elementary school data do have limitations, but their improvement on immigration bias is a clear strength. Fourth, given the cumulative nature of instruction and learning, a fuller understanding of secondary school patterns can be

achieved by examining their potential origins in elementary school.[44]

One reason for this imbalance in scholarly attention is undoubtedly data availability. Although national data collections on secondary education are common, those on elementary education were, until recently, either nonexistent or poorly suited to studying children from immigrant families. State and local studies have followed immigrant children in elementary school, but these samples often lack within-group racial and ethnic, socioeconomic, and geographic heterogeneity.[45] Thus, the Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K), a nationally representative sample of 1998 kindergarteners, is a valuable resource. Despite some limitations (for example, ECLS-K excludes English language learners from reading, but not other, tests), analysis of ECLS-K has illuminated early disparities related to immigration.[46] Along with information from other data, ECLS-K has revealed trends in immigrants' elementary school trajectories different from their secondary school trajectories. Specifically, immigrant advantages seem to be weaker, at least at the very start of elementary school. Below, we discuss this evidence of and explanations for this weaker immigrant advantage in elementary school.

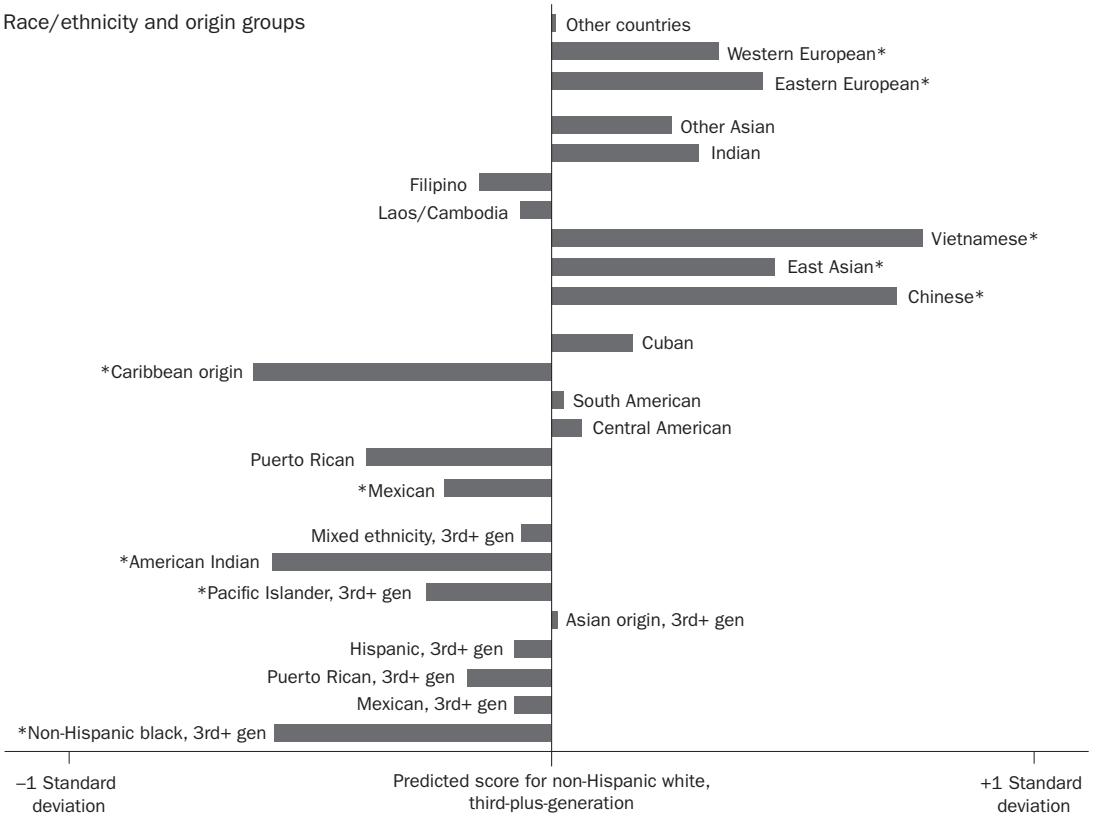
School Readiness and Subsequent Achievement

One important focus for researchers examining the school performance of young immigrant children is school readiness—the degree to which very young children are prepared to actively and independently meet the academic and social demands of school.

Notable disparities in school readiness exist among young immigrant children. Children of Latin American immigrants, for example, tend to have lower levels of school readiness than other groups of immigrant and nonimmigrant children.[47] The average child of Mexican immigrant parents in ECLS-K scored eight points lower on a standardized kindergarten math test than the average white child (a difference equaling nearly one-quarter of a standard deviation) and three points lower than the average child of U.S.-born Latinos.[48] Similar patterns for Mexican-origin children have been found in many community samples, and children with Central American parents tend to look more similar to Mexican-origin children than to those whose parents emigrated from other parts of Latin America.[49] By contrast, the children of Asian immigrants tend to score higher on academic school readiness. On average, their measured school readiness was similar to or better than that of the children of native-born whites in ECLS-K. The children of black immigrants, whether from Africa, the West Indies, or other regions, fell somewhere between these two other larger segments of the immigrant population.[50] Relative socioeconomic status plays a part, but not a definitive part, in these differences. Comparing youth of similar socioeconomic status reduces but does not eliminate these disparities in school readiness.[51]

Although many children from immigrant families are at risk in terms of academic skills on entering school, they have potentially counterbalancing advantages in socioemotional school readiness, such as interpersonal competence. Indeed, ECLS-K teachers rated the children of both Hispanic and Asian immigrants as better adjusted than children of U.S.-born white, Asian, Hispanic, and black parents. Although children of Mexican immigrants scored lower on math tests in kindergarten than children of native-born whites, teachers rated their work habits

Figure 1. Predicted Third-Grade Math Achievement for the Children of Immigrants and Third-Plus-Generation Children, by Race and Ethnicity and by Nation and Region of Origin



Source: Jennifer Glick and Bryndl Hohmann-Marriott, "Academic Performance of Young Children in Immigrant Families," *International Migration Review* 41, no. 2 (2007).
Note: Data from the Early Childhood Longitudinal Study-Kindergarten Cohort, weighted and adjusted for design effects.
*Predicted value is significantly different from non-Hispanic white, third-plus-generation.

as being 10 percent of a standard deviation higher than those of native white peers of similar socioeconomic status.[52] Thus, the academic disadvantage of Mexican-origin children coexisted with a behavioral advantage. Interestingly, black immigrant children in ECLS-K did not demonstrate this pattern of immigrant advantages in teacher-rated socioemotional school readiness, suggesting that the well-documented tendency for teachers to view black children's behavior in school as problematic may trump the more positive views they tend to have of immigrant children.[53] Children of Asian immigrants are an exception to the general pattern, in that they often demonstrate advantages across all domains of school readiness.

Generally speaking, educational research shows that deficiencies in school readiness lead to poorer educational outcomes. Inadequate entry-level skills influence class placements and teacher and peer expectations that then affect subsequent skill development, which then affects future placements, and so on.[54] Yet this general pattern does not hold up for immigrant youth. Although the children of Latin American immigrants often enter school with less developed academic skills, they make up

ground over time.[55] For example, the average difference in math scores between children of Mexican immigrants and third-plus-generation whites in ECLS-K decreased by 40 percent between kindergarten and third grade.[56] By contrast, the gains in skills made by children of Asian immigrants, especially those from East Asia and India, are not as pronounced over time despite their relatively advantaged starting positions. This pattern among East Asians could reflect ceiling effects in testing or the fact that they have less to gain in the early years of school that concentrate instruction on foundational skills they already have. Notably, the children of Southeast Asian immigrants tend to be more similar to the children of Latin American immigrants.[57]

One comprehensive study of elementary school disparities related to immigration was conducted by Jennifer Glick and Bryndal Hohmann Marriott using ECLS-K.[58] Figure 1 presents their results for third-grade math scores, broken down by regional and national origin for the children of immigrants and by race and ethnicity for third-plus-generation children and controlling for, among other things, socioeconomic status, language proficiency, and previous math scores. In this figure, third-plus-generation whites are the reference group for comparison. As such, their predicted test score is represented by the vertical line in the middle of the figure. Bars extending to the right (for example, Western European immigrants) indicate test scores greater than third-plus-generation whites, and bars extending to the left (for example, Caribbean-origin immigrants) indicate test scores lower than third-plus-generation whites.

Scoring lowest was a collection of mostly nonimmigrant groups (for example, third-plus-generation blacks and American Indians) along with the children of Caribbean immigrants. Children from Mexican immigrant families tended to score roughly the same as many other Hispanic groups, both immigrant and nonimmigrant. Thus, these children caught up to, and possibly even surpassed, their third-plus-generation Mexican American peers of similar socioeconomic status. Children with South or Central American or Cuban immigrant parents scored on par with third-plus-generation whites. Finally, a diverse set of immigrant groups—Chinese, East Asian, Vietnamese, European—scored at the high end, outperforming third-plus-generation white and Asian American children of similar starting points and socioeconomic status. Although black and Hispanic groups generally cluster on the left side of this figure and white and Asian groups generally on the right, there are deviations in this pattern. Moreover, children of immigrants generally outperformed their peers of the same race and ethnicity with U.S.-born parents. This evidence of a within-race and ethnic group immigrant advantage, however, emerged primarily after socioeconomic status and language proficiency were taken into account. Although this analysis gives a comprehensive accounting of the early educational patterns of many different groups at the same time, it does not say much about the mechanisms underlying group differences. We discuss those mechanisms shortly.

After young children of immigrants enter school, therefore, many academic risks appear to decrease. Indeed, in some cases, their disadvantage may even become an advantage. Furthermore, the socioemotional advantages demonstrated by many immigrant groups at school entry are stable or even widen over time.

Explaining Observed Elementary School Patterns

As noted, differences in socioeconomic status explain a portion of immigration-related differences in children's elementary school outcomes. Thus some combination of the way different kinds of parents select into migration to the United States and the racial and ethnic stratification of socioeconomic opportunities in the United States produces observed differences between immigrant and nonimmigrant children.[59] For example, Mexican immigrants typically enter the United States with fewer socioeconomic resources, after which a variety of factors related to their race, ethnicity, and immigrant status, such as discrimination, segregation, and political scapegoating, reduce their opportunities for improving their socioeconomic circumstances, thereby putting their children at a disadvantage. Importantly, however, socioeconomic status is not the sole factor at work in immigration-related disparities in elementary education.

As with secondary school students, the high level of school transitions and segregation of Latin American immigrants tends to coexist with many elementary school disadvantages, including teacher turnover and disorganized curricula, but such disadvantages account for only a small portion of observed academic disparities.[60] The relatively small contribution of school inequalities to immigration-related disparities in academic achievement in elementary school likely reflects the critical role of school readiness in these disparities. For the most part, school factors have a bigger impact on educational disparities in later stages of schooling than in early stages, given the relative lack of exposure to school factors in the early stages.[61] Other contexts must be contributing to skill gaps during this period, especially at school entry.

In recent years, increasing attention has been paid to differences in preschool attendance and early child-care use between immigrant and nonimmigrant groups. The article in this issue by Lynn Karoly and Gabriella Gonzalez covers this topic in detail, but the bottom line is that immigrant children tend to have less exposure to preschool and center care than the children of U.S.-born parents, even when the children are of the same race or ethnicity and socioeconomic status.[62] Given the generally strong links that researchers find between preschool attendance and school readiness, this pattern suggests a likely explanation for (or suppressor of) the school readiness disparities described above.[63]

On a related note, family factors, including aspects of parenting and home environment, tend to be more closely related to educational and cognitive disparities in early childhood and elementary school, reflecting the role of the home as the primary context of children's lives and their lack of exposure to other institutional settings.[64] Immigrants' parenting behaviors, although appropriate to their home culture, do not always align with what is demanded and rewarded by American schools. For example, *educación* is a parenting style among many Mexican immigrants that instills obedience and respect for authority in children and recognizes the complementary roles of families and schools.[65] That parenting style could explain why teachers rate the young children of Mexican immigrants more positively in behavioral domains, and also why—given the ample evidence that a sense of entitlement on the part of children tends to be rewarded in American schools—these children encounter greater academic problems early in their schooling.[66] Similarly, the *chiao shun* parenting style among Chinese immigrants, which emphasizes the teacher-apprentice aspects of the parent-child

relationship, may be viewed by teachers as overly controlling.[67] Because the children of Chinese immigrants typically perform well in elementary school, this difference in perspective of parents and teachers would be a suppressor—meaning that, if it occurs, it reduces the size of the Chinese immigrant advantage. As noted, the children of Chinese immigrants tend to start school with well-developed academic skills but do not demonstrate higher rates of gains in the early years of elementary school than children from other immigrant groups. The possibility that the mismatch between *chiao shun* parenting and elementary schools could contribute to this pattern needs to be explored.

Other factors are also clearly at work. For example, the health disparities between the children of Latin American immigrants and their peers in early childhood—the former tend to have more physical health problems —appear to contribute to differences in school readiness, interfering as they do with learning activities and preschool and school attendance.[68] In all likelihood, however, a constellation of factors explains why the children of immigrants from a variety of regions tend to enter school with less developed skills and then gain ground over time and why the children of Asian immigrants start school in a better position but lose some of this advantage over time.

Policy and Programs

In general, the empirical evidence suggests that immigrant youth are doing well in school. The children of Latin American immigrants seem to be one segment of the immigrant population who may be at heightened academic risk. As a result, policy and programs targeting immigrants have generally focused on compensatory efforts aimed at Latinos. The evidence base, however, does not clearly point to immigrant status per se as the driving force behind this risk. Socioeconomic status is important, as is language proficiency. The Latin American immigrant population is one group in which these factors come together, with the added effects of ethnic discrimination against Latinos and the rising anti-immigrant sentiment that focuses on Latinos specifically. Thus, targeting this population is one way for policy makers to address numerous kinds of educational disparities. Moreover, given the many community and family strengths of Latin American immigrants, this population has potential to respond positively to interventions targeting these related disparities.

One policy effort specifically about immigrant status includes laws targeting the education of children who are undocumented or have undocumented parents (about 7 percent of the U.S. school population).[69] The controversy has been particularly acute in Texas. Beginning in 1975, public school districts in that state were allowed to charge tuition to undocumented students. The majority of districts, including the largest (Houston), indicated they might pursue this possibility, although few did so in the end.[70] That practice was struck down by the U.S. Supreme Court in 1982 in *Plyler v. Doe*.[71] In that ruling, the court allowed the unfettered enrollment of undocumented children in public schools, saying that the Texas tuition plan was a state action violating federal authority, that it would hurt children who can contribute socially and politically to the United States, and that such aims would help to create a subclass of individuals vulnerable to unemployment and crime.[72]

After *Plyler v. Doe,* debate turned to whether undocumented students of college age should be admitted to college, establish residency,

and pay in-state tuition.[73] A 1996 federal law, the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA), contained provisions that restricted benefits associated with postsecondary education, such as grants and loans, for undocumented students.[74] It did not, however, preclude states from enacting residency statutes that granted undocumented youth state residency and its associated benefits. For example, several states, including Texas, have passed tuition eligibility requirements allowing undocumented students to pay in-state tuition. Such policies appear to be boosting the college enrollment of foreign-born noncitizen Latinos (who are the most likely to be undocumented).[75] Furthermore, federal legislation to repeal IIRIRA was reintroduced in 2003 as the Development, Relief, and Education for Alien Minors (DREAM) Act. It has not yet been passed by Congress. It would, if approved, allow undocumented college students who entered the United States before the age of sixteen, lived continuously in the United States for at least five years, and completed two years of college or military service to begin the process of legalization. It would also protect from deportation students over the age of twelve who have not yet graduated from high school.[76] The intent of DREAM, versions of which have been enacted in several states, is to promote the social and economic benefits of immigration while reducing the costs of a poorly educated population.

The college-going of immigrant youth is an issue that extends beyond the undocumented. As detailed in the article in this volume by Sandy Baum and Stella Flores, some immigrant groups, such as the children of Latin American immigrants, lag behind the general population in college enrollment and graduation. Partly, this situation reflects financial constraints, but it also may be related to inadequate academic preparedness as well as limited knowledge about applying for college, partly because of youths' immigration status itself. For example, high-level coursework in high school, such as Advanced Placement courses and calculus, improves standardized test performance, makes students more attractive to colleges, and decreases the likelihood of remediation in college. Yet because such coursework is often optional, a "scarce" resource, and controlled by institutional gatekeepers, children of immigrants who try to enroll may be at a competitive disadvantage because of their families' race and ethnicity, socioeconomic status, limited English, or lack of inside knowledge.[77] Indeed, among the children of Latino immigrants who have academic achievement problems in high school, low-level coursework seems to be a more important factor than low English proficiency.[78]

Thus, efforts by policy makers to promote college-going among immigrant youth must focus on coursework as well as on other areas of college preparation that require inside knowledge, such as knowing how to apply for aid. Publicly supported educational interventions, such as Upward Bound on the federal level, aim to improve academic preparedness through supplemental instruction and to remedy gaps in instrumental resources, such as practical knowledge and guidance about the curricular and extracurricular steps necessary to getting into college, by matching youth from at-risk groups with college-educated mentors. A number of community-based programs are tailored to Latino youth by, for example, drawing mentors from the Latino community and encouraging supplemental coursework emphasizing Latino culture.[79] The need for such tailoring in this and other programs is motivated by

the special circumstances of Latino youth, especially those who are immigrants. For example, Latin American immigrant parents often have little experience in U.S.-style formal education. In addition, cultural values and strong intergenerational ties seem to discourage Latino youth from moving away from home to attend college, thus working somewhat counter to the policy goal of promoting college-going.[80]

Another policy issue concerns parental involvement in education. Because a lack of contact between immigrant families and schools might contribute to immigrant risks and undercut immigrant advantages, efforts to open dialogue between the two could be valuable. For example, fewer English language learners are placed in lower-level courses at the start of high school when middle school personnel serve as liaisons between their students' parents and future high school counselors.[81] School-directed efforts, however, have to be grounded in the lives of families. Gerardo López and his colleagues have documented how some schools serving migrant communities increased parental involvement by having flexible definitions of what involvement could entail and by working around parents' schedules and language barriers.[82] Culturally grounded community-based programs to increase the involvement of Latin American immigrants, such as "Abriendo Puertas" and "Lee y Serás," also have promise. Such programs typically seek to demystify the American educational process and help parents become home teachers for their children and learn how to communicate with school personnel. Another possibility is to invest directly in the human capital of immigrant parents themselves, such as through continuing education, so that they can more effectively manage their children's education, a strategy that has been adopted by many child-focused educational interventions targeting Latinos in general.[83]

Conclusion

Social and behavioral research on education over the past twenty years has revealed that educational disparities vary across the immigrant population. In general, evidence points to an immigrant advantage in many indicators of academic progress and educational attainment. This apparent advantage, however, is more pronounced among the children of Asian and African immigrants than other groups. It is also more consistent in secondary school than in elementary school, at least early in elementary school, which could reflect disparities in early childhood education and cognitive development as well as potential immigration-related sampling biases in secondary school education. Moreover, for some groups, it is often observed only after family socioeconomic circumstances and language use are controlled. For others, it is at least partially explained by the socioeconomic selectivity of immigration. In view of these findings, researchers have replaced the traditional linear model of assimilation with a model that recognizes a more complex mix of immigrant advantages and risks and that stresses the socioeconomic, racial and ethnic, and other disparities that are related to immigrant status and could produce different patterns across diverse segments of the immigrant population. Moreover, policy action tends to focus on the subset of immigrants who seem to be more at risk, especially young children of Latin American immigrants, because of the clustering of disparities related to their immigration status or that their immigration status proxies.

A future challenge for researchers is to make sense of what this diversity means. For example, are immigrant selectivity and assimilation

models synergistic rather than competing explanations? Can different outcomes across immigrant groups reflect a similar underlying theoretical process? Furthermore, recent evidence suggests that native-born internal migrants, such as native blacks who move from one part of the country to another, demonstrate economic advantages over otherwise similar native-born nonmigrants that are similar to the immigrant paradox. As a result, comparing immigrants' and migrants' educational experiences across racial and ethnic groups may lead to a broader perspective on migration and education of which immigrant advantages and risks are simply a subset.[84] These avenues represent future opportunities for refining theoretical understanding of the connection between immigration and education and for crafting a more cohesive policy approach to serving the growing population of immigrant youth in the United States.

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Immigrants in Community Colleges

Robert T. Teranishi, Carola Suárez-Orozco, and Marcelo Suárez-Orozco

Summary

Immigrant youth and children of immigrants make up a large and increasing share of the nation's population, and over the next few decades they will constitute a significant portion of the U.S. workforce. Robert Teranishi, Carola Suárez-Orozco, and Marcelo Suárez-Orozco argue that increasing their educational attainment, economic productivity, and civic engagement should thus be a national priority.

Community colleges offer one particularly important venue for achieving this objective. Because they are conveniently located, cost much less than four-year colleges, feature open admissions, and accommodate students who work or have family responsibilities, community colleges are well suited to meet the educational needs of immigrants who want to obtain an affordable postsecondary education, learn English-language skills, and prepare for the labor market. The authors explore how community colleges can serve immigrant students more effectively.

Already, more immigrant students attend community colleges than any other type of postsecondary institution. But community colleges could attract even more immigrant students through outreach programs that help them to apply and to navigate the financial aid system. Federal reforms should also allow financial aid to cover tuition for English as a Second Language courses. Community colleges themselves could raise funds to provide scholarships for immigrants and undocumented students.

Although there are many good ideas for interventions that can boost enrollment and improve the performance of immigrant students in community colleges, rigorous research on effective programs is scant. The research community and community colleges need to work together closely to evaluate these programs with a view toward what works and why. Without such research, policy makers will find it difficult to improve the role of community colleges in increasing the educational achievement of immigrant students.

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In the context of America's vast system of postsecondary education, community colleges are of particular importance for immigrant students. Today more than 1,200 community colleges offer an accessible and affordable postsecondary education that accommodates many of the needs of immigrant students. Community colleges—offering certificates, associate's degrees, and a range of courses on topics ranging from the philosophical to the practical—give immigrants access to affordable and accessible postsecondary education, opportunities to learn English, and training for the labor force. These institutions are also a source for civil and cultural engagement in the local community, catering to working adults with evening courses and offering postsecondary education in proximity to homes and jobs.

Obtaining a certificate or associate's degree from a community college is also a significant factor in the economic mobility of immigrants. In 2008, for example, adults with at least some college or an associate's degree experienced unemployment rates that were about half those of adults who had not completed high school.[1] In 2009, the median income within all racial groups for adults with an associate's degree was nearly twice that of persons who did not complete high school and nearly 40 percent greater than that of persons whose highest level of educational attainment was high school completion.[2] These data underscore the importance of community colleges for access to good jobs in an economy that has an ever-increasing number of jobs that require at least some postsecondary education or training.[3]

More immigrant students attend community colleges than any other postsecondary institution. In this article, we consider the opportunities and challenges that immigrant students present to community colleges and suggest strategies that community colleges can use to serve this rapidly growing student population more effectively.

As Jeffrey Passel demonstrates in his article in this volume, immigrants to the United States, particularly immigrant youth and the children of immigrants, make up a large and increasing share of the nation's population. Between 2005 and 2050, the U.S. population is projected to expand by 48 percent, with immigrants expected to make up 82 percent of that growth. By 2050, nearly one in five U.S. residents will be foreign-born and about one in three will be foreign-born or the children of immigrant parents. A large share of both groups will be young. Youth aged seventeen to twenty-four, for example, made up nearly 25 percent of total immigrants in the 2000 census, up from 13 percent in 1990, and this percentage is expected to keep rising.[4]

As immigrants' numbers and population share have grown, their composition has become more diverse. Before passage of the Immigration and Nationality Act of 1965, the vast majority of immigrants arrived from Europe. Today immigrants come from all corners of the world, with more than three-quarters arriving from Latin America and Asia. They leave their countries of origin under widely different circumstances, arrive under a variety of conditions with differing assets and challenges, and bring with them a wide range of educational backgrounds and goals.

While many Asian immigrants come from educated and elite families, a large sector of the Asian-immigrant population arrives from impoverished rural areas, having grown up in families with little or no formal education.[5]

The nation's largest immigrant population, that from Mexico and other Latin American countries, has a high concentration of adults with limited formal education. In 2008, approximately 7.5 million foreign-born Latinos over age twenty-five in the United States had no high school degree.[6] Between 2010 and 2025, as the predominantly white baby boomer population exits the U.S. workforce, the population of working-age Latinos is projected to increase by 13.5 million.[7] Because of the weak condition of the nation's economy and projected shortfalls in funding for public retirement programs, increasing the educational attainment, economic productivity, and civic engagement of immigrants and their children should be a national priority.[8]

Community Colleges and Immigrant Students

Lacking a reliable national data source on immigrant students who attend community colleges, researchers have only limited knowledge about foreign-born students' immigration status and country of origin.[9] What data there are on these students often confound "international students" (foreign-born, attending college with a student visa, and intending to return to their country of origin) and "immigrant students" (foreign-born, attending college as an immigrant, and intending to remain in the United States). Our concern in this chapter is primarily with the latter.

Student Characteristics and Needs

International college students typically earn their high school credentials in their country of origin. Many, though not all, are well prepared academically; their major challenges are typically to improve their English language skills and to become familiar with U.S. educational norms. By contrast, immigrant college students experience varying degrees of academic preparation and academic challenges. Although immigrant students have varying skills in academic English, depending in part on the quality of the schools they attended, those who entered the U.S. educational system at an early age are typically well acculturated and speak English fluently by the time they graduate from high school. Many are the first in their families to attend college. Some are undocumented. By contrast, students who entered the U.S. educational system after age thirteen often attend schools that "overlook and underserve" them[10] and, depending on their previous educational experiences both in their country of origin and in U.S. schools, may face more serious language and academic hurdles. Students who arrive in the United States having completed their secondary education abroad may be prepared academically but often lack English proficiency. They may also face documentation challenges and be unfamiliar with U.S. educational customs. The available national and institutional data rarely distinguish among these populations, although the needs of each, while overlapping, are quite distinct.

The best estimate is that in 2003–04, about a quarter of the nation's 6.5 million degree-seeking community college students came from an immigrant background.[11] Some studies specific to certain states or community college systems cite a much higher proportional representation. A study of the 25,173 students in the freshman class at the City University of New York (CUNY) system in 1997 found that 59.9 percent of the foreign-born students began in an associate's degree program. Among the foreign-born, a greater proportion of first-time students who attended high school outside the United States began CUNY in an associate's program (66.5 percent) than those who attended high school in it (58.5 percent).[12] The proportion of immigrants who were low-income

and therefore eligible for Pell grants (the largest federal program that subsidizes college costs for low-income students) was similar to the proportion of low-income native-born students.[13]

Researchers have found significant differences in college participation among immigrant students by racial and ethnic background. One study differentiated institutional representation of immigrant and native-born students using data from the National Educational Longitudinal Study (NELS:88),[14] which includes a national longitudinal sample of eighth-grade students first interviewed in 1988 and followed up four times between 1988 and 2000. For all high school graduates, immigrants were more likely than native-born students of the same racial or ethnic group to enroll in any form of postsecondary education.

Data from the same study for high school graduates who attended college show obvious and important trends in the type of college attended by first-generation immigrants and the native-born. Among Latino immigrants who went to college, 57.9 percent attended community colleges or vocational programs, compared with only 50.5 percent of native-born Latinos who went to college.[15] Similarly, Asian and Pacific Islander immigrants were more likely to be enrolled in community colleges or vocational programs (32.3 percent) than their native-born counterparts (23.7 percent). Conversely, a greater proportion of native-born blacks attended community colleges (32.8 percent) than foreign-born blacks (20.9 percent).

Research that compares foreign-born and native-born college students reveals both the resiliency of foreign-born students as well as the unique challenges they face. Immigrant college students are at higher risk of dropping out of college than native-born students. More than half of immigrants in college, for example, are over the age of twenty-four, one-third have dependents, and three-quarters work either part or full time while attending college as part-time students[16]—all characteristics that are risk factors for dropping out of college. A study in California found that Mexican and Central American immigrant students often had obligations and responsibilities to their family, including running errands, caring for siblings, translating for their parents, and contributing to the household income; similar obligations may not be as likely among native-born students.[17] Another study of college students in New York City found that immigrant college students spent as many as fifteen hours more a week on family responsibilities than did their native-born peers.[18]

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Nevertheless, within the major racial and ethnic groups, foreign-born students experience success on an array of postsecondary indicators, including credit accumulation, degree attainment, and transfer rates, which are equal to or exceed those of their native-born counterparts.[19] In other words, some studies have found that foreign-born students exhibit rates of persistence and degree attainment that are similar to or greater than their native-born counterparts.[20]

Student Needs

Like community college students generally, many immigrant students are not well prepared academically for college coursework. Before they can enroll in college-level courses, these students often need remedial education, which has been found to be correlated with low rates of persistence and degree attainment. In a longitudinal study of community college students, less than 25 percent of students who began community college in remedial courses completed a degree or certificate within eight years, compared with 40 percent of community college students who did not enroll in any remedial courses as first-time freshmen.[21] The effects of remediation on persistence and degree attainment are particularly salient issues for immigrants who arrived with all or some of their schooling outside the United States, and for those who attended U.S. schools with inadequate resources and limited access to academic enrichment.[22] In a study of a single urban community college, 85 percent of immigrants required remediation as first-time freshmen, often as a result of deficient English-language skills, compared with 55 percent of native-born students.[23]

Not surprisingly, immigrant students in community colleges have a wide range of language-related needs. In 2006, for example, approximately half of foreign-born adults age twenty-five or older had limited English proficiency; the Asian American foreign-born population alone spoke more than 300 languages. We deal with language issues in more detail below and simply stipulate here that one of the greatest needs of immigrant students is to improve their English-language skills. If community colleges are to serve immigrant students effectively, they have no choice but to provide instruction in English-language skills.

Affordability also figures importantly in the decision of immigrants to attend community college. While immigrant adults have a lower unemployment rate than native-born adults, their wages are consistently lower. The median weekly wage for immigrants, for example, was 25 percent less than for native-born workers in 2005 ($511 versus $677).[24] Latino immigrants had a particularly low weekly wage of $412, 39 percent less than native-born workers. Lower wages among immigrant adults make it difficult for them or their children to afford college.

Many immigrant students have great financial need but often lack information about how to finance college costs. They are less likely than other students to apply for student loans; research shows that they borrow less and cover more of their college cost themselves.[25] Both financially independent immigrant adults and the children of immigrants underuse financial aid, and many experience confusion about access to aid because of their own U.S. resident status or that of their parents.[26] While naturalized citizens and legal permanent residents are typically eligible for in-state tuition, nonpermanent residents and undocumented students are treated differently from one state to the next. Undocumented students are ineligible for federal aid and for most forms of state aid, a penalty that greatly limits their opportunities for postsecondary education.[27]

Expanding Opportunities and Improving Outcomes

The barriers that immigrant students face in obtaining a postsecondary education have long-term economic and social consequences, not only for the students personally but also for the nation as a whole. Community colleges provide immigrants with access to degrees, certificates, and noncredit courses,

which are all correlated with better outcomes in the workforce. In this section, we examine how state and postsecondary institution practices and policies affect the opportunities and outcomes of immigrant youth.

Expanding Opportunities through Outreach

Jeffrey Passel writes, "By 2050 immigrant youth [including U.S.-born to immigrant parents] are likely to represent about one-third of all children."[28] Thus, given the widely accepted national goal of increasing the educational attainment of the nation's young adults, higher education institutions should make it a priority to expand access and opportunities for this large and growing pool of immigrant youth. Creating more college opportunities is particularly important for Latinos, given that a large share of Latino high school graduates is not attending college.[29] Low college enrollment rates are also characteristic of other immigrant groups of color, but not to the same extent as Latinos. A postsecondary education affords all immigrants, including Latinos, a range of opportunities including social integration, civic engagement, and workforce preparation. Given their affordability, accessibility, open enrollment, and flexibility, community colleges are a particularly important route to postsecondary education for immigrants.

Outreach programs can help immigrants in secondary school better define their objectives in attending college. The role of outreach is of particular importance for students and families who have limited access to information, knowledge, and resources that are necessary to make the transition from high school to college[30] and is of utmost importance for those immigrant students who are the first in their families to attend college. In New York City, for example, the New York Immigrant Coalition targets college outreach services to immigrant students by providing them with mentors "who guide them through the process of applying to college and help them deal with circumstances unique to their status as immigrants."[31]

The University of California's Early Academic Outreach Program (EAOP), which is the state's oldest and largest outreach initiative, serves both middle and high school students. This program, while not targeted specifically at immigrant populations, assists students and families with academic and financial planning, helps students complete college applications, and conducts college visits and educational field trips. Through targeted services at low-performing schools, these programs are reaching immigrant students of color who will pursue both two-year and four-year degrees. Research has found that EAOP students are more academically prepared for college and have a higher college attendance rate than nonparticipants.[32] In 2002, 33 percent of EAOP students attended a public four-year college in California, and an additional 15 percent attended a community college.[33]

Accelerated "pathways to college" programs that combine high-intensity instruction with curricular and precollege efforts aim to improve academic preparation for immigrant students during high school while strengthening their postsecondary aspirations and expectations. A program called College Now exposes public high school students to college-level coursework and college enrichment through a partnership between the City University of New York and the New York City public schools. Students in College Now have opportunities to take college courses for credit during high school and to attend events on college campuses. Although the program

is not targeted specifically at immigrants, it reaches these populations because more than 60 percent of New York City's public school students are immigrants.[34] Through partnerships with community-based outreach programs that work with immigrants, resources can target immigrants through programming that supports their unique needs. One of these partnerships, between Asian Americans for Equality and two public high schools in Queens, provides targeted services for immigrant youth such as college outreach, informal gatherings, field trips, and information sessions for the students and their families. Although rigorous evaluation of these outreach programs is needed, these efforts seem to be effective in boosting the postsecondary enrollment of underrepresented minorities, including immigrants.[35]

Given their affordability, accessibility, open enrollment, and flexibility, community colleges are a particularly important route to postsecondary education for immigrants.

Another example of targeted services for immigrants with a college outreach component can be found at Triton College in Illinois. The program, called Nuevos Horizontes, offers citizenship classes, parenting workshops, academic counseling, cultural events, and tutoring in Spanish, English, and math in a culturally friendly atmosphere for immigrant students and families.[36] These services help respond to the frequent lack of connection between immigrant families and social services and school personnel, increasing the information and knowledge critical for immigrant students and families to access resources and opportunities.[37]

Financial Aid and Tuition Policy

One key to participation and persistence for many college students is their knowledge of, access to, and use of financial aid. Increasing knowledge about and awareness of financial aid for immigrant students and their families is essential. Although immigrant students often have greater financial need than nonimmigrants, many challenges are also associated with the perceptions immigrant students and their parents have about college costs and access to aid. One study found that half of immigrant student respondents indicated that federal and state financial aid was not available to legal residents and 25 percent of the respondents thought that their parents needed to be citizens for them to receive aid, neither of which is true.[38] So, even for immigrants who are permanent residents, there is a need to improve knowledge of financial aid. Government, the private sector, and two- and four-year colleges themselves can support programs to inform immigrant families about their options and can also offer assistance in navigating the financial aid system.[39]

Financial aid poses a particular challenge for undocumented immigrants. In the 1990s, states began to impose residency restrictions that disqualified undocumented immigrants for in-state tuition rates and financial aid.[40] Section 505 of the federal Illegal Immigration Reform and Immigrant Responsibility Act of 1996 specified that unauthorized aliens "shall not be eligible on the basis of residence within a state (or political subdivision) for any postsecondary education benefit unless a citizen or national of the United States is

eligible for such a benefit."[41] This law was met with different interpretations from one state to the next.

In 2001, after unsuccessful attempts by some members of Congress to repeal Section 505, states began creating their own in-state resident tuition legislation to support undocumented high school graduates. Ten states—including California, Illinois, New York, and Texas, which have large populations of undocumented immigrants—allowed unauthorized college students to establish residency and to pay the lower, in-state tuition. New York, for example, offers in-state tuition to undocumented students if they "enroll in college within five years of graduating from a New York high school they attended for at least two years … and … file an affidavit stating that they will apply for legal immigration status."[42] Fourteen additional states are debating similar bills. In several studies, extending in-state tuition for undocumented students has been linked with increased participation in college.[43] Neeraj Kaushal analyzed outcomes specifically for Mexican noncitizens and concluded that offering in-state tuition is associated with increases in college enrollment, the number of students with at least some college education, and the proportion of Mexican noncitizens with at least an associate's degree.[44]

Critics of in-state tuition policies suggest that supporting illegal immigrants creates an incentive for additional foreign-born youth to migrate to the United States for education, while deflecting resources from native-born students. Supporters of in-state tuition programs for undocumented residents argue, in rebuttal, that most undocumented immigrants stay in the United States regardless of educational attainment and that states should maximize their human capital and economic potential by offering the undocumented a chance to improve their education. Although research about the validity of either position is limited, a legal case recently decided by the California Supreme Court, *Martinez v. Regents of the University of California*, upheld the provisions of the California state statute according undocumented students and others in-state resident tuition status. The ruling overturned an appellate decision that found the provision in violation of state and federal law. The statute allows those who attended California high schools for three years and graduated to establish in-state residency.

Because of their low tuition, community colleges are more accessible to undocumented youth who lack financial aid than are four-year colleges. The federal DREAM Act (Development, Relief, and Education for Alien Minors Act), which has been introduced in Congress many times since 2003 but never enacted, would make postsecondary education (at minimum, an associate's degree) or military service a viable path toward citizenship for undocumented immigrants. The DREAM Act could produce significant increases in immigrant enrollment at community colleges if it eventually becomes law.[45]

The outcome of legislation like the DREAM Act aside, states, higher education systems, and other educational institutions can still be responsive to the needs of immigrant students. Community colleges themselves can conduct fundraising campaigns to provide financial scholarships for immigrants and undocumented students.[46] They can also provide financial assistance through services such as transportation and child care.[47] These services are particularly

important for institutions where immigrants and undocumented students constitute a high proportion of their total enrollment. Although state and local governments and most of the nation's colleges and universities are now under financial pressure as a result of the Great Recession, the American economy will eventually rebound. That will be the moment when proposals to provide additional help to the nation's immigrant postsecondary students—including the undocumented—should receive careful attention by policy makers.

Because community colleges rely on state financial support, they are vulnerable to changes in state funding for higher education, which is the largest discretionary item in state budgets.[48] As four-year institutions increasingly restrict enrollment and as community colleges remain largely open access, it is important that tuition remain low for community college students. More specific to immigrants in community colleges, reform is needed so that federal and state aid can cover tuition for English as a Second Language (ESL) courses and remediation. Federal Pell grants, for example, may be used to fund no more than thirty credit hours of remedial, non-credit-bearing courses. This limitation is problematic for students who are required to enroll in a series of remedial education courses in each subject area. The use of Pell grants to finance ESL instruction should be broadened.[49]

Language Programs

Immigrants' command of English affects their ability to understand content in the classroom as well as to participate fully in the workforce and society. Academic language proficiency is *sine qua non* for academic engagement and success.[50] Indeed, many immigrants attend community colleges specifically to improve their English language skills.[51] ESL courses provide immigrants with a range of benefits in addition to the development of language skills, including opportunities to receive peer support and informal counseling from their ESL instructors.[52] These programs are not without their challenges, however. In addition to a shortage of ESL faculty, low levels of funding, and few ESL courses that offer college-level credit, attrition rates in ESL courses are often high. Because ESL courses are usually prerequisites for college-level courses, these high attrition rates are a serious problem.[53]

To ensure immigrants' access to high-quality English language programs in community colleges, college leaders and government policy makers should be willing to fund high-quality adult ESL instruction. Federal programs like "English Language Civics" (designed for citizenship classes but usable for more general ESL instruction) can help offset costs to institutions. In general, appropriations for ESL infrastructure by local and state governments should be increased.[54]

Within community colleges themselves, high-intensity language programs can extend students' learning outside the classroom by using different curricula to meet the needs of various types of immigrant students. For example, one curriculum could be offered for immediate job marketability and another for eventual transfer to academic courses.[55] A strong recruitment and counseling system can increase the rate at which noncredit ESL students transition into academic courses.

One such strategy is the "bridge" programs that integrate English-language skills with content knowledge.[56] These programs enroll students in ESL and academic classes

concurrently, so ESL students can begin to earn credit toward a degree or certificate while they improve their mastery of the English language. The Accelerated Content-Based English (ACE) Program at Miami Dade College, for example, offers a fast-track curriculum to immigrants with stronger academic backgrounds, including those with degrees from their countries of origin. This accelerated option features content-based instruction in which students learn English at the same time they are studying academic subjects such as psychology or biology. Another program, the CUNY Language Immersion Program (CLIP), is a noncredit program in which first-time college students acquire English-language skills by learning about the arts, humanities, and sciences. In addition, students acquire technology, research, and study skills; learn about citizenship requirements; and gain exposure to American higher education and culture, career opportunities, and resources in New York through guest speakers and field trips. While there is little research on the CLIP program, CUNY claims that most CLIP participants eventually transfer to CUNY degree programs.[57]

Community colleges should also take action to hire more ESL faculty and to improve their preparation for teaching English to immigrant students. Hiring more ESL faculty would not only augment instructional offerings but also help to establish a more robust language program beyond classes. Recruiting high-quality faculty who recognize the role they can play beyond teaching content to students is also key. Research has found that ESL faculty can provide encouragement and guidance to language minority students.[58] High-quality faculty are essential to the effectiveness of ESL programs in terms of student learning gains, retention, and transition to regular academic classes. Although the research on qualifications of effective faculty members is thin, some experts recommend that all ESL faculty have a master's degree in either Teachers of English to Students of Other Languages or applied linguistics, as well as experience working with adult ESL students. They also recommend that ESL courses and resources be placed in academic departments with tenure-track faculty positions, rather than in an English department, a remedial education department, or an adjunct division. These recommendations seem reasonable, but until more research is conducted, it is difficult to determine whether they will boost the English skills of immigrant students.

High-quality faculty are essential to the effectiveness of ESL programs in terms of student learning gains, retention, and transition to regular academic classes.

Academic Advising and Support Services

Community colleges should provide counseling, orientation, and academic planning tailored to the needs of immigrant students. According to one study, high-quality academic advising is a strong positive determinant of student persistence; conversely, inadequate advice is the single strongest negative determinant.[59] High-quality advising and support services are of particular importance for immigrants in community colleges because the unique needs and the risks they face often translate into delayed matriculation and lower rates of progress during college. One project

that is targeting counseling in community colleges is the Opening Doors program, which gives community college students access to academic counselors with whom they are expected to meet at least two times a semester for two semesters. The Opening Doors program is testing a model of greater access to counseling accompanied by a modest cash reward for completing coursework with a passing grade. Findings from these programs, based on rigorous research, show that students in the program exhibit greater persistence and earn more academic credits than students who are not receiving these services and cash payments.[60]

Some newer models for counseling in community colleges use cohort approaches similar to those in selective four-year institutions with more homogeneous student populations. Freshman success programs give students opportunities for college orientation, counseling, and participation in learning communities. For students struggling to maintain academic progress, advisers make use of supplemental instruction, language and reading labs, and social networks. A high-quality study by MDRC of a learning community program at Kingsborough Community College in New York City, which is composed predominately of immigrant students, found that the program improved students' integration and engagement with the campus community, improved their persistence and credit accumulation, and resulted in greater success in remedial English.[61]

Although counseling services are showing signs of effectiveness for community college students generally, there is a need for more research that looks specifically at the impact of these innovative counseling services on immigrant student populations, particularly for institutions that serve large concentrations of immigrants and language minorities. Research is needed on counseling that is delivered in students' native language and on counseling aimed at students enrolled in bilingual education and ESL courses.

One area of counseling for immigrants that is emerging in a number of community colleges is career placement, which involves matching the abilities and backgrounds of immigrants to particular occupations. One program, Northern Virginia Community College's ESL for Employment Initiative, enrolls ESL students in a sixty-hour noncredit course to help participants master English and the cultural competencies needed for entry-level, career-track jobs. The program also provides the language and cultural competencies needed for job search and exposes students to volunteers from the business community through job fairs. Although these services are often provided by community-based organizations, community colleges provide a venue to centralize these services for local immigrant communities. As we have emphasized repeatedly, programs like this one seem to provide needed services to immigrant students, but until they are assessed by high-quality evaluation designs we cannot confidently claim that they actually help these students.

Finally, immigrant students are best served by counselors who are trained to address the specific psychological needs associated with immigration itself. Forthcoming research by Carola Suárez-Orozco, Hee Jin Bang, and H. K. Kim finds that large shares of immigrant children and youth undergo long periods of separation from their parents that result in stress, anxiety, depression, and withdrawal.[62] Many immigrant students juggle their academic responsibilities with financial and family responsibilities, which can result in additional stress and can distract

them from their college studies.[63] Research has found that immigrant college students experience challenges related to adjustment, isolation, and poor self-efficacy.[64] Responding to these needs may warrant a team-based approach that includes counselors and faculty who can help make the classroom a safe environment for peer support and informal counseling in which students converse with and learn from each other.[65]

Conclusion

With America's immigrant population at its highest number ever and growing rapidly, and with many nationality groups falling behind in educational attainment, postsecondary educational institutions could play a much greater role in helping immigrants achieve levels of education that will boost both their income and economic integration into American society. The immigrant population is diverse, geographically dispersed, and constantly in flux, which presents a complex set of challenges to which higher education must respond. More so than any other sector of higher education, community colleges play an important role in responding to these challenges, particularly the needs of immigrant and undocumented students to improve their English-language skills and to become familiar with U.S educational practices while juggling multiple responsibilities.

Unfortunately, the potential of immigrant youth is often unrealized, and their dreams are thwarted. The barriers they often face stand in painful conflict with American ideals and have unfortunate consequences for society and the economy. At a time when international competition demands that the nation increase the proportion of the population that has a college degree, immigrants are being neglected and their potential is being overlooked. Policy makers and community college leaders must find ways to enroll more immigrant students and to ensure that a much higher percentage of them complete at least an associate's degree.

It is equally important for the research community to work more closely with community colleges to evaluate and assess the effectiveness of efforts to increase the educational achievement and degree completion of immigrant students. There is simply a dearth of research to inform a broad understanding of the experiences and outcomes of immigrant students in community colleges, including the demography of the immigrant student population and the array of unique challenges this population presents for individual campuses, states, and the nation's higher education priorities generally.

With greater attention and responsiveness to immigrants in community colleges, and higher education as a whole, immigrants will be more productive and better contributors to the well-being of society. In other words, responding more effectively to their aspirations and potential will result not only in personal gain for these students and their families but also in gains for our nation as a whole.

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Higher Education and Children in Immigrant Families

Sandy Baum and Stella M. Flores

Summary

The increasing role that immigrants and their children, especially those from Latin America, are playing in American society, Sandy Baum and Stella Flores argue, makes it essential that as many young newcomers as possible enroll and succeed in postsecondary education.

Immigrant youths from some countries find the doors to the nation's colleges wide open. But other groups, such as those from Latin America, Laos, and Cambodia, often fail to get a postsecondary education. Immigration status itself is not a hindrance. The characteristics of the immigrants, such as their country of origin, race, and parental socioeconomic status, in addition to the communities, schools, and legal barriers that greet them in the United States, explain most of that variation.

Postsecondary attainment rates of young people who come from low-income households and, regardless of income or immigration status, whose parents have no college experience are low across the board. Exacerbating the financial constraints is the reality that low-income students and those whose parents have little education are frequently ill prepared academically to succeed in college.

The sharp rise in demand for skilled labor over the past few decades has made it more urgent than ever to provide access to postsecondary education for all. And policy solutions, say the authors, require researchers to better understand the differences among immigrant groups.

Removing barriers to education and to employment opportunities for undocumented students poses political, not conceptual, problems. Providing adequate funding for postsecondary education through low tuition and grant aid is also straightforward, if not easy to accomplish. Assuring that Mexican immigrants and others who grow up in low-income communities have the opportunity to prepare themselves academically for college is more challenging. Policies to improve the elementary and secondary school experiences of all children are key to improving the postsecondary success of all.

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Like native youths whose parents have no college experience and others from low-income backgrounds, many immigrants and their children face significant barriers to enrolling and succeeding in postsecondary education. Their difficulties are frequently compounded by inadequate information about college opportunities and how to access them, cultural differences, citizenship issues, language barriers, and, too frequently, discrimination. By contrast, other immigrants find the doors to U.S. higher education wide open and surpass native white youth in enrolling and succeeding in postsecondary education. Recent immigrant flows to the United States have, in essence, divided newcomers into two groups, each with highly distinctive characteristics. One is composed of highly skilled professionals primarily from Asia who fill high-demand positions in engineering, the medical professions, and other technical occupations. The other consists of unskilled labor and manual workers primarily from Latin America, the Caribbean, and some Southeast Asian countries.[1] The latter group of immigrants faces obstacles to getting a postsecondary education that are difficult to overcome, while the former does very well in U.S. higher education. Not surprisingly, the differences among immigrants are reflected in the experiences of succeeding generations.

Largely because of the variation in immigrant characteristics, the links between immigrant status and postsecondary educational outcomes in the United States are complex and highly dependent on country of origin. Immigrants' prior education when they enter the United States plays a large role in the subsequent educational attainment of their children. Immigration status itself is not a hindrance. The characteristics of immigrants when they arrive and the subcultures in the United States into which they are absorbed—and in which they raise the second generation—explain most of the variation in overall postsecondary outcomes in the United States. Over generations, even the most traditionally disadvantaged immigrants, such as Mexicans, show some gains in educational attainment, although in terms more of high school completion than of postsecondary success.

For all immigrants and their descendants to succeed in postsecondary education would not only improve prospects for both economic and social mobility for individuals but also confer benefits on society as a whole. With the already sharp rise in demand for skills and education in the U.S. labor market likely to continue,[2] the cost to the nation of failing to minimize the barriers to postsecondary education for less-skilled immigrant groups is high. Especially in view of recent increases in the immigrant population share and the resulting shift in the ethnic and racial composition of the United States, policy makers and educators should focus on increasing immigrants' participation in postsecondary education to ensure the long-run strength of the U.S. economy.

We begin by comparing the educational attainment of different subgroups of immigrants and their children and by comparing their educational attainment with that of U.S. natives. We then examine several competing explanations for the differing educational outcomes of subgroups of immigrants. We distinguish between characteristics of immigrants themselves, such as country of origin, race, and education on the one hand, and structural factors, such as communities, the quality of schools, and legal barriers shaping their experiences on the other. We conclude by assessing the payoff to postsecondary

Table 1. Educational Attainment of Immigrants Aged Twenty-Five to Thirty-Four by Generation, 1999 and 2009, by Percent

	1999				2009			
Generation	**Less than high school**	**High school**	**Some college or associate's degree**	**Bachelor's degree or higher**	**Less than high school**	**High school**	**Some college or associate's degree**	**Bachelor's degree or higher**
First	30	24	19	27	29	25	17	29
Second	9	25	32	34	10	25	31	34
Third or higher	8	33	30	29	7	29	31	33

Source: U.S. Bureau of the Census, Current Population Survey, March Supplement, 1989, 2009 (cps.ipum.org).
Notes: First generation refers to individuals born outside the United States; second generation refers to individuals born in the United States with at least one parent born outside the United States; third generation or higher refers to individuals who were born in the United States to parents born in the United States.

education in U.S. society and examining the implications for all individuals regardless of immigrant origin.

The Educational Attainment of Immigrants and Their Children

Although the educational attainment of immigrants and their children differs from that of nonimmigrants, or natives, in many ways, differences across subgroups of immigrants are frequently even greater than those between "average" immigrants and natives. For example, on average, in 2000, children of immigrants were nearly as likely as children in native families to have a father with a B.A. degree. The averages, however, obscure the reality that 50 to 80 percent of foreign-born fathers from Africa, Japan, Korea, Hong Kong, Taiwan, India, Pakistan/Bangladesh, and Iran were college graduates, compared with only 4 to 10 percent of fathers from Mexico, the Caribbean, Laos, and Cambodia.[3] These differences in parental education have a profound effect on the experiences of their children.

Approximately one in eight U.S. residents today is an immigrant, while nearly a quarter of all of the nation's children are the children of immigrants. These children make up approximately 30 percent of all low-income U.S. children.[4] The children of undocumented immigrants, 73 percent of whom are U.S. citizens, make up an estimated 7 percent of elementary and secondary school students in the United States.[5]

Tables 1–5, based on data from the U.S. Current Population Survey (CPS), show differences in educational attainment for different generations of immigrants. The tables rely on a widely used definition of generational status.[6] First-generation immigrants are foreign-born; second-generation immigrants were born in the United States and have at least one foreign-born parent; natives—third generation or higher—include individuals who were born in the United States and both of whose parents were born in the United States. The CPS data offer the advantage of being able to capture the nativity, or country of origin, of both the respondents and their parents. As cross-sectional data, however, they do not allow the presentation of actual intergenerational mobility without the use of statistical techniques not employed here.[7] Therefore, individuals of the second generation are not the direct descendants of the first generation captured in the same tables during the same time frame.

Table 2. Share of Immigrants Aged Twenty-Five to Thirty-Four with a Bachelor's Degree or Higher by Generation and by Race and Ethnicity, 2009, by Percent

Generation	Hispanic	Black	Asian	White
First	9	30	63	54
Second	19	42	57	48
Third or higher	16	18	33	37

Source: U.S. Bureau of the Census, Current Population Survey, March Supplement, 2009 (cps.ipum.org).

Table 1 compares the educational attainment in 1999 and 2009 of first-generation immigrants aged twenty-five to thirty-four with that of their second-generation and third-generation-or-higher counterparts of the same age. In 1999, first-generation immigrants were less likely than subsequent generations to have completed high school, and that pattern had not changed measurably in 2009. Bachelor's degree attainment rates were much more similar across immigrant generations. In 2009, 29 percent of first-generation immigrants of this age group had completed a bachelor's degree, compared with 34 percent of the second generation and 33 percent of the third generation (again, U.S.-born to U.S.-born parents).

Some groups of immigrants come to the United States with high levels of education and fare well as they integrate into an unfamiliar society. As reported in table 2, about two-thirds of Asian and more than half of all white immigrants aged twenty-five to thirty-four have earned at least a bachelor's degree, compared with only 9 percent of Hispanic immigrants. Second-generation black and Hispanic individuals are much more likely than their first-generation counterparts to complete four-year college degrees, narrowing the racial and ethnic gaps among the second generation to some extent. Among blacks in particular, but to a lesser extent for all racial and ethnic groups, the bachelor's degree attainment rate is lower for the third generation than for the second generation, who are the children of immigrants.

About half of all Hispanic immigrants aged twenty-five to thirty-four have no high school diploma, compared with 9 percent of black immigrants and 5 percent of Asian and white immigrants in this age range.[8] The lack of a high school degree, insufficient English language proficiency, the social and cultural capital networks of the receiving U.S. communities in which immigrants locate, and differences in degrees of discrimination or social acceptance all affect the prospects for social mobility.[9]

Determinants of Higher Education Participation and Success

In this section we examine several characteristics that help to determine success in higher education, with an emphasis on those specific to immigrants and their children.

Parental Education

Research has shown that parental education is a strong predictor of children's educational attainment.[10] Even when analysts control for income—that is, when they compare only youth with similar family income—they find that young people whose parents have no college experience are much less likely than others to enroll and succeed in postsecondary education. According to 2006 American Community Survey data, 26 percent of children of immigrants, compared with only 8 percent of those with native-born parents, lived in families where no parent had completed high school or the equivalent. Almost half of Mexican-origin youth have parents with no high school degree.[11]

As the data in table 1 indicate, the gap between immigrants and the native-born is greater for high school than for college completion. Immigrants from the Middle East, South Asia, East Asia, other Pacific nations, and Europe are more likely than native-born individuals to be college graduates, whereas those from Mexico, Central America, the Spanish Caribbean, Laos, and Cambodia have much lower educational attainment. The differences are dramatic. More than two-thirds of immigrants from the Middle East and South Asia have at least a bachelor's degree, compared with only 7 percent of those from Mexico.[12] This bimodal distribution of educational attainment among immigrants translates into a built-in advantage for some and severe disadvantage for others—disadvantage that persists across generations.

Academic Preparation

While imperfect measures, high school grades and standardized test scores are the best available indicators of academic preparation. Both are highly correlated with socioeconomic status. SAT scores are not available by country of origin, but the gaps among ethnic groups are notable. In 2009 white high school seniors averaged 528 on the verbal and 536 on the math SAT. Asian students scored slightly lower than whites on the verbal and higher on the math. Black students had the lowest scores, averaging 429 verbal and 426 math, but Hispanics were not far ahead of blacks. Mexican, Puerto Rican, and other Hispanic students averaged between 452 and 455 on the verbal SAT and between 450 and 463 on the math.[13]

The fundamental issue of school quality is beyond the scope of this paper. The importance of academic preparation in determining postsecondary prospects, however, makes an understanding of the factors affecting the quality of elementary and secondary schooling critical. U.S. schools vary dramatically in their financial resources, their facilities, the quality of their teachers, and the characteristics of their student bodies. Focusing on relationships between immigrant students and school personnel, Carola Suárez-Orozco, Allyson Pimentel, and Margary Marin found that school-based supportive relationships contributed to engagement with school and greater student effort, as well as academic performance as measured by grades. Other predictors of increased academic achievement for immigrant students are English language skill, being female, having two parents in the home, and having an employed father.[14]

Age at Immigration

Age at immigration also makes a predictable difference in educational attainment. Immigrants who enter the country before age thirteen generally do as well as their native-born peers.[15] Individuals who come to the United States as young children are likely to have an easier time learning the language and internalizing the norms of American society. By contrast, those who immigrate between the ages of thirteen and nineteen have the lowest levels of educational attainment. In 2005 only 26 percent of immigrants aged eighteen to twenty-four who arrived in the United States between the ages of thirteen and nineteen had enrolled in college, compared with 42 percent of those who immigrated before age thirteen.

Table 3 shows patterns of educational attainment by age (younger than twelve, twelve to eighteen, and older than eighteen) at immigration for youth from Mexico and other Latin American countries. Because of sample size limitations in the data, it is not possible to isolate a narrow age range for these comparisons. Mexican immigrants are less

Table 3. Latin American Immigrants Aged Twenty-Five and Older without a High School Diploma and with a Bachelor's Degree or Higher, by Age at Immigration, 2009, by Percent

Region of origin	Age at immigration	Percentage with less than a high school diploma	Percentage with a bachelor's degree or higher
Mexico	<12	35	10
	12–18	60	3
	>18	64	6
Other Latin America	<12	13	30
	12–18	25	20
	>18	35	19

Source: U.S. Bureau of the Census, Current Population Survey, March Supplement, 2009 (cps.ipum.org).
Note: Because of census data reporting, some immigrants arrived in the United States when they were slightly younger than the age categories listed here.

likely to have completed high school or college than those from other Latin American countries. Within both origin groups, immigrants who came to the United States before age twelve are much more likely to have completed high school and college than those who arrived later in their lives. Hispanic immigrants are more likely to enter the country as teenagers and young adults than are other groups.[16] This differential pattern of age at entry compounds the gaps in the higher educational outcomes of Hispanics.

Interpreting differences in educational attainment by age at immigration is complicated by the reality that many immigrants in their late teens—particularly those from Mexico—immigrate to find work, never enrolling or intending to enroll in U.S. schools. R. S. Oropesa and Nancy Landale find that excluding these adolescents from the analysis substantially reduces gaps in school enrollment between Mexicans and whites and between native- and foreign-born Mexicans. Among sixteen- and seventeen-year-olds in 2000, 94 percent of U.S.-born Mexicans were in school, compared with only 71 percent of immigrants. However, 85 percent of the foreign-born who were ever enrolled in a U.S. school remained enrolled.[17] Low educational attainment among those who immigrate with no intention of enrolling in U.S. schools is not an indication of a lack of success in the U.S. educational system. U.S. schools must, however, address the barriers facing immigrants and the children of immigrants who enter the system but do not succeed.

Complexity of Applying for College

Lack of familiarity with the U.S. postsecondary education system is a challenge for immigrants—especially those who do not attend U.S. high schools and whose parents are not proficient in English.

Limited English proficiency is a particular problem for some groups of immigrants. In California in 2006, among Spanish-speaking immigrants (54 percent of all immigrants in the state), only 26 percent spoke English well, and 21 percent spoke no English at all. In contrast, about 65 percent of Filipino and Hindi-speaking immigrants spoke English very well; only 1 percent and 5 percent, respectively, spoke no English.[18] Not surprisingly, greater English proficiency boosts educational attainment among immigrants.[19]

Applying for college and financial aid—a complex task even for students with English-speaking parents who are themselves college graduates[20]—is far more difficult for the children of non-English-speaking immigrants, even those who are themselves fluent.

Educational Outcomes

Although many subgroups of immigrants do not fare well in the U.S. postsecondary education system, overall—because of the wide gaps in educational attainment by group—immigrants are actually more likely than their native counterparts to enroll in postsecondary education, and most children of immigrants attain higher levels of education than their parents. Among a few groups, however, most notably Mexicans, progress is more limited by most measures. Using various U.S. Census and Current Population Surveys over multiple decades to measure intergenerational mobility, James P. Smith finds that although schooling gaps for certain groups of immigrants, especially Mexicans, are large, they narrow by the second generation and appear to continue to narrow in the third generation.[21] But despite evidence of progress across generations of Mexicans, the gap in educational attainment relative to other racial and ethnic groups, particularly whites and Asians, remains large.

The Immigrant Advantage

Researchers commonly find that immigrants, as well as their children, have higher levels of postsecondary educational attainment than do natives. Using data on the sophomore and senior high school classes of 1980, Georges Vernez, Allan Abrahamse, and Denise Quigley found that, controlling for other factors such as race and socioeconomic status, Hispanic and black immigrants were more likely to enroll in college than their native counterparts, while immigrant status had no measurable effect among whites and Asians.[22]

Allison Hagy and J. F. O. Staniec find similar results using more recent data. They examine postsecondary enrollment patterns within two years of graduation among 1992 high school graduates. Defining the first generation as the foreign-born children of immigrants and the second generation as U.S.-born children of immigrants, they observe that 75 percent of first-generation and 71 percent of second-generation high school graduates enrolled in postsecondary education, compared with only 65 percent of natives. Controlling for individual characteristics, Hagy and Staniec find that first-generation immigrant status is significant in increasing the probability of enrolling in college.[23]

Hagy and Staniec find that Hispanics have the lowest four-year college participation rate within each generation. Second-generation Hispanics do have somewhat higher four-year enrollment than other Hispanics—31 percent compared with 28 percent of their native counterparts. Seventy percent of all second-generation Asian and Pacific Islanders enrolled in four-year institutions, compared with 46 percent of the native population and 55 percent of their first-generation counterparts. Although these averages conceal differences among Asian countries, the general pattern is that first- and second-generation immigrants have four-year college enrollment rates at least as high as, and generally higher than, native high school graduates of the same ethnicity.[24]

Many researchers argue that the immigrant advantage is a result of "positive selection"—that immigrants from all countries tend to have higher levels of human capital and motivation than is typical in their

countries of origin.[25] The degree of positive selection is likely to be greater when the difficulty of immigrating is greater.[26] Another explanation for the immigrant advantage is "immigrant optimism." If immigrants come to the United States with high expectations, they may have psychological resources to overcome socioeconomic disadvantages.[27] In other words, although immigrants vary widely by country of origin, they tend to share characteristics that improve their chances for success, and immigrant status per se does not appear to prevent people from accessing higher education.

College Success

For a variety of reasons, whether they are immigrants or natives, low-income students and youth whose parents have no college experience are more successful getting into college than they are in completing a degree.[28] Financial barriers certainly play a role here, and students with family obligations are most likely to find it difficult to piece together adequate funds without working excessive hours that interfere with their studies. But inadequate academic preparation, unrealistic expectations, and insufficient information to make sound choices about which institution is most suitable all contribute to the low completion rates of disadvantaged students.

A growing body of evidence on college-going youth generally suggests that those who attend the most selective institutions for which they are eligible are significantly more likely to complete degree requirements than similar students who enroll in less challenging institutions.[29] Because immigrant students tend to be unfamiliar with the U.S. higher education system, they are less likely to make optimal choices. Anna Zajacova, Scott Lynch, and Thomas Espenshade found that immigrant students overlooked significant differences among institutions and based their choices on cost and location, not on quality measures.[30]

Using data from the Beginning Postsecondary Students Longitudinal Study, Wendy Erisman and Shannon Looney found that approximately half of students who entered four-year and two-year colleges in 1995 had earned a credential six years later. The figure was similar for immigrants and for the native-born (including the children of immigrants). But although 30 percent overall had earned a bachelor's degree, only 23 percent of immigrant students (and 19 percent of noncitizens) had done so. Immigrants, instead, were more likely to have earned an associate's degree. In other words, on average immigrants were as likely as others to complete their course of study, but the course of study they undertook was less ambitious. Black immigrants in particular had a high completion rate because the credential they pursued was a certificate. Among Hispanic immigrants, only 43 percent had earned any credential. Few black or Hispanic immigrants had earned a bachelor's degree—10 percent of blacks and 14 percent of Hispanics, compared with 31 percent for white and Asian and Pacific Islander immigrants.[31] Hispanic immigrants alone have disproportionately low completion rates.

Risk factors associated with low persistence and attainment in postsecondary education are more prevalent among immigrant undergraduates than among undergraduates in general. In 2003–04, 62 percent of immigrant students for whom data on parental income were available were in the bottom 40 percent of the income distribution. Students in this category are more likely than average to attend part time, be older, and support

Table 4. Bachelor's Degree Attainment of First- and Second-Generation Immigrants Aged Twenty-Five to Thirty-Four by Region of Origin, 2009, by Percent

Region of origin	First generation	Second generation
Mexico	6	15
Other Latin America	17	31
Africa and Caribbean*	32	45
Southeast Asia (excluding India, Pakistan)**	43	45
Southeast Asia (including India, Pakistan)	64	51
East Asia***	66	72
Europe	59	49

Source: U.S. Bureau of the Census, Current Population Survey, March Supplement, 2009 (cps.ipum.org).
*Caribbean nations included with Africa: Antigua and Barbuda, Bahamas, Barbados, Dominica, Grenada, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago.
**Southeast Asia includes Bangladesh, Burma, Cambodia, Indonesia, Laos, Malaysia, Nepal, Philippines, Singapore, Thailand, Vietnam, and Sri Lanka.
***East Asia includes China, Hong Kong, Japan, South Korea, and Taiwan.

dependents. They also have higher unmet financial need. These circumstances make it particularly impressive that immigrant students have rates of completion largely comparable to those of nonimmigrants.

Variation by Country of Origin

Generalizations about the educational attainment of the immigrant population may be misleading because outcomes among immigrant groups themselves are so diverse. In a study of educational attainment of immigrants arriving in the United States before age eighteen, Rubén Rumbaut found Chinese, Indians, and Koreans to be the most educated groups. Dominicans, Puerto Ricans, Laotians, and Cambodians had very high school dropout rates. The least educated were the Mexican, Salvadoran, and Guatemalan foreign-born. For every Asian and Latin American ethnicity, the share of college graduates rose for the second generation while the share of high school dropouts fell. The differences across groups by country of origin also diminished among the second generation.[32]

First- and second-generation Asians are much more likely to enroll in a four-year postsecondary school and much less likely than other immigrant groups or than high school graduates in the native population not to enroll in college at all. In contrast, first- and second-generation Hispanic immigrants are most likely not to enroll in postsecondary education. Their low enrollment rates are consistent with the patterns observed among Hispanics in the third generation or higher.[33]

The variation in educational attainment among immigrants has grown as the Hispanic share of the immigrant population has increased. The overall educational attainment of immigrants rose from 1970 to 1990, though it rose less than that of the native population. The decline in the educational attainment of immigrants relative to natives is entirely attributable to declines in attainment at the bottom of the income distribution. At the 25th percentile the gap in the education of immigrants and natives grew; at the 50th percentile educational attainment rose for immigrants but not for natives; at the 75th percentile increases in attainment were

similar for the two groups. At the upper end of the distribution the immigrant population is and was at least as educated as the native population, but the educational attainment of immigrants at the lower end of the distribution has declined relative to natives, and the education level of Hispanic immigrants in particular has not increased.[34]

Census data for 2009 reveal dramatic differences in the bachelor's degree attainment rates of immigrants from different countries (see table 4). About two-thirds of twenty-five- to thirty-four-year-old immigrants from East Asia and Southeast Asia have a bachelor's degree or higher, compared with 6 percent of Mexican immigrants and 17 percent of those from other Latin American countries. The children of Latin American immigrants, however, are much more likely than the first generation to have a four-year college degree, while for Southeast Asian and European immigrants the second generation is less likely than the first generation to have a degree. As a result, the gaps across countries of origin are smaller for the second generation.

Further information on differences by country of origin comes from Rubén Rumbaut, who studied a sample of immigrants in their mid-twenties. Of the sample as a whole, 20 percent had completed a bachelor's degree. Graduation rates ranged from 8 percent for Mexicans and 14 percent for Cambodians and Laotians to 47 percent for those from China, Taiwan, and other Asian countries.[35] Examining the determinants of educational attainment in this sample, Rumbaut found that having a U.S.-born parent was negatively associated with children's attainment—a finding consistent with evidence that assimilation into some ethnic cultures in the United States is associated with an eroding work ethic and deteriorating educational outcomes. The strongest predictor of educational attainment was youths' expectations measured in junior high school and again in senior high school. Parental socioeconomic status was also a strong predictor. Being of Vietnamese origin had a positive link with educational attainment, while being of Cambodian origin had a negative link. Understanding why these two refugee groups differ so much would help clarify the divergent fates of immigrant groups in the United States. Despite the differences in overall college enrollment rates across immigrant groups, Hagy and Staniec conclude that if Asians and Hispanics had similar socioeconomic backgrounds, their postsecondary enrollment patterns would be indistinguishable from those of white immigrants.[36] As for high school graduates generally, family income, parents' education, and youths' educational achievement influence college enrollment. Being an immigrant—or belonging to a particular ethnic group—is not the primary determinant of postsecondary participation or of college enrollment.

Mexican Immigrants

As a group, Mexican immigrants are outliers in the stories of immigrant success in the U.S. postsecondary education system. They tend to enter the United States with little education, are less likely than other immigrant groups to enroll in college, and experience less continued improvement in education across generations than immigrants from other countries.

As reported in table 5, between 1999 and 2009, the share of Mexican immigrants aged twenty-five to thirty-four without a high school diploma fell from 60 percent to 55 percent. The contrasts between the first and the second generations are sharp, with only 19 percent of the U.S.-born children of immigrants in 2009 lacking a high school diploma.

Table 5. Educational Attainment of First- and Second-Generation Mexican Immigrants, 1999 and 2009, by Percent

Generation		No high school diploma	High school diploma	Some college or associate's degree	Bachelor's degree or higher
First	1999	60	25	10	4
	2009	55	29	10	6
Second	1999	17	33	34	16
	2009	19	35	32	15

Source: U.S. Bureau of the Census, Current Population Survey, March Supplement, 2009 (cps.ipum.org).

Fifteen percent of the second generation held at least a bachelor's degree, and another 32 percent had at least some college experience. In contrast, only 6 percent of the first generation held a bachelor's degree, and another 10 percent had completed some college.

Second-generation Mexican Americans, on average, advance well beyond the first generation. But they start far behind other groups, and, to complicate matters, 42 percent of second-generation Mexicans are teen parents and 11 percent are incarcerated. Mexicans, however, are not the only group with negative outcomes: immigrants from Haiti and from Laos and Cambodia follow similar patterns.[37]

One factor that may diminish college enrollment rates for the children of Mexican immigrants is parental preference for children not to leave home for college. Ruth López Turley has found that immigrant parents, particularly those of Hispanic origin, feel this preference strongly, thus lowering the probability that their children will enroll in college.[38]

As noted, there is considerable evidence that immigrants from all countries are positively selected from their national populations—that those who leave are better educated, more highly skilled, and more motivated than those who stay. Cynthia Feliciano, however, finds that the difference is narrower in Mexico than in other countries. That is, Mexicans who immigrate tend to have higher average socioeconomic status than those who stay in Mexico, but the difference is smaller than in other countries. Most Mexican immigrants tend to start out on the bottom rungs of the ladder in the United States.[39] Low socioeconomic status surely explains some of the difficulties this group faces in accessing postsecondary opportunities, as does the fact that a disproportionate number of Mexican immigrants are undocumented.

As with educational attainment, the earnings trajectory across generations of Mexican immigrants suggests continuing problems. Examining the wage structure across generations of male Mexican immigrants based on 1979 and 1989 cross-sectional census data, Stephen Trejo finds considerable improvements between immigrants and their children. The second generation enjoys a sizable earnings advantage over first-generation Mexicans not only because of improved education and English proficiency, but also because of high returns to extra years of schooling. The pattern does not continue between the second and third generations. Educational attainment increases slightly, but this is not reflected in a measurable earnings increment.[40]

In a study examining the intergenerational integration of the Mexican-origin population into American society in the latter half of the twentieth century, Edward Telles and Vilma Ortiz find similar if not more discouraging results.[41] Using a longitudinal, intergenerational design of five generations since immigration, the authors find a progressive decline in years of education for each subsequent generation since immigration, with the third and fourth generations exhibiting the lowest levels of schooling. Educational attainment explains a consistent lack of economic progress across generations for the Mexican-origin population.

The large and growing number of Mexican immigrants in the United States makes a specific focus on this group important. Research is vital because improving the prospects of immigrants from Mexico requires understanding how their circumstances differ from those of other immigrants.

Black Immigrants

Like many Hispanic immigrants, black immigrants to the United States enter a society in which members of their racial group have lower-than-average incomes and low rates of postsecondary participation and success. The patterns observed in Hispanic and black immigrant groups are quite different, however, largely because of the differences in their backgrounds when they enter the United States. Black immigrants are less likely than native-born blacks to have the characteristics that tend to reduce college enrollment rates. They more often come from two-parent families, attend private schools, and live outside rural areas than do native-born blacks. They are also less likely than native-born blacks to have low test scores. Black immigrant success, particularly evident in the frequency of enrollment in selective colleges and universities is, however, limited to those from select countries.[42] Other groups of black immigrants, including Haitians, face significant hardships.

What Accounts for the Differences?

A significant portion of the differences in educational outcomes across immigrant groups is attributable to their pre-immigration characteristics and experiences. Much of the difference in attainment can be explained by parent income and education. Researchers have produced some evidence, for example, that most Hispanics perform as well as native whites when comparisons are made between youth of similar socioeconomic background.[43]

Background, however, does not tell the whole story. Parental income and education do not account well, for example, for all high Asian achievement. High performance of Southeast Asian children from refugee families is explained by peer and parent support, children tutoring each other, and a feeling of obligation to their immigrant parents, including a strong sense of responsibility about education, which families value highly.[44] Alejandro Portes, Patricia Fernández-Kelly, and William Haller find that a strong parental figure and attachment to cultural identity and traditions increase the probability of success for young people from groups with otherwise low success rates.[45]

Hispanic immigrants are said by some to have lower expectations than other groups do for the educational attainment of their children.[46] A 2008 Public Agenda survey, however, explored the attitudes of Hispanic parents and contradicted this conventional wisdom, finding that these parents place even higher value on going to college than other parents do. Hispanic young adults are, however, less

A significant portion of the differences in educational outcomes across immigrant groups is attributable to their pre-immigration characteristics and experiences. Background, however, does not tell the whole story.

confident than other groups that funding is available to help pay for college, and many who are enrolled in postsecondary schools say they would have gone to a different college had money not been an issue. Fewer than half of the Hispanic respondents believe that qualified students can find a way to pay for college. Inadequate information and low expectations about the opportunities available to them appear to impede the academic achievement of Hispanic youth.[47]

Governmental and Institutional Structures

The demographic characteristics of immigrant populations and their experiences before they enter the United States decisively shape their—and their descendants'—participation in the nation's postsecondary education system. And so do the social, economic, and legal structures that immigrants encounter once they enter the United States. Some immigrants who arrive with high expectations and aspirations, particularly those with postsecondary educational experience in a home country, are able to navigate their new educational environment more successfully than many native Americans are. Others, however, settle in communities beset with social and economic problems and with limited opportunities to become proficient in English. The guidance and experience necessary to take full advantage of the postsecondary education system in the United States are rarely available in these environments. Particularly in the case of undocumented immigrants, legal barriers also prevent many young people from enrolling and succeeding in postsecondary education.

Legal Barriers

A growing number of children of immigrants under the age of eighteen are undocumented, and an even greater number—who are U.S. citizens themselves—are born to undocumented parents.[48] According to Jeffrey Passel and D'Vera Cohn, 53 percent of undocumented immigrants between the ages of twenty-five and sixty-four have graduated from high school, compared with 78 percent of legal immigrants. Almost half of the eighteen- to twenty-four-year-old undocumented immigrants who have high school degrees are in college or have attended college. Among those who arrived before the age of fourteen, 61 percent have attended college.[49]

Such a high postsecondary participation rate reflects unusual success at overcoming not only the barriers confronting all immigrants and particularly those from less advantaged backgrounds, but also formidable legal and financial barriers. Ineligible for federal and most state financial aid, undocumented students frequently confront out-of-state tuition rates. A few states, such as South Carolina and Georgia, bar their admission to many colleges and universities, but paying for college is generally the highest hurdle.

Many undocumented college students arrived in the United States at a young age and are less likely to suffer from the language barriers faced by those arriving later in life. Tuition and financial aid are critical to their college access.

Most of the recent progress in lowering the hurdles faced by undocumented students has been made by state legislatures.[50] Over the past decade, a number of states have implemented policies that offer in-state college tuition to out-of-state students who meet certain requirements, including graduating from an in-state high school.[51] These laws, however, do not resolve issues of legal status, legal employment, or citizenship, nor do they make students eligible for the federal student aid they need.

Evidence about the effect these laws are having in increasing college enrollment among undocumented students is mixed. Both Neeraj Kaushal and Stella M. Flores find that students likely to be undocumented are more likely to attend college in states that offer them in-state tuition.[52] And Flores and Catherine Horn find that in-state tuition beneficiaries at a selective public institution in Texas who are likely to be undocumented are as likely to persist and graduate as U.S.-born Latino students, the group most likely to share similar demographic characteristics.[53] In contrast, Aimee Chin and Chinhui Juhn find a small increase in college enrollment among Mexican men aged twenty-two to twenty-four who are likely to be undocumented, but no measurable change among women or other age groups. They hypothesize that in the absence of financial aid and solid employment prospects, lower tuition alone cannot increase these students' participation and success in higher education.[54]

The primary effort at the national level to mitigate the problems facing undocumented students who aspire to, and are prepared to, attend college is the proposed Development, Relief, and Education for Alien Minors (DREAM) Act. The legislation, which would open the door to legal status and citizenship for undocumented youth who succeed in postsecondary education, failed once again in 2010 to pass Congress, and, in the current political environment, appears unlikely to pass. College access for undocumented students is likely to remain, at least for now, the domain of state legislatures.

The Payoff to Higher Education

Enrollment in postsecondary education is increasingly closely tied to labor market success in the United States. Although having any postsecondary education pays off, completing a degree or certificate brings the most significant rewards. Four-year degrees have the highest economic value, but the average payoff to any postsecondary credential compared with a high school diploma is significant.[55] Adults with bachelor's degrees typically earn more than 50 percent more a year than their counterparts with only a high school education. For those with associate's degrees, the differential is about 30 percent, and even those with some college but no degree earn about 16 percent more than typical high school graduates.[56] The benefits of higher education are not all monetary; college graduates have broader career choices, prepare their children better for educational opportunities, and tend to have lifestyles that prolong their lives.[57]

It is clear that limiting postsecondary opportunities is inequitable. It is, in addition, inefficient, because the benefits do not all accrue to the individuals who participate, but extend to society as a whole. People

who attend college pay higher taxes and are less likely to depend on public support than those who do not. Their increased productivity in the workplace is reflected in more rapid economic growth and higher earnings for their less educated co-workers. College graduates are also active citizens who, for example, vote and volunteer more regularly than others.[58]

Today postsecondary education is widely recognized as being essential to economic security. The sharp rise in demand for skilled labor has increased the urgency of providing access to education for all.[59] Although earlier generations of immigrants may have been able to start at the bottom of the occupational ladder and see their children gradually climb up, the middle of that ladder is largely missing now. To move out of the low-paid, secondary labor market, most people need to build human capital through postsecondary education. Recent immigrants enter a very different economy than did those arriving a century ago.[60]

Immigrants earn less, on average, than native-born Americans, but the relevant question here is how much their earnings increase with rising postsecondary educational attainment. Julian Betts and Magnus Lofstrom find that lower levels of immigrant schooling, as opposed to country of origin, race, and other characteristics, explain more than half of the approximately 18 percent wage gap between immigrants and natives. Researchers should learn more about why immigrants earn less than natives with similar years of education.

Available evidence indicates that for both Mexicans and whites, returns to postsecondary education are higher for natives than for immigrants.[61] In other words, the differences are related to having been born outside the country. Returns are essentially the same for the second generation of all immigrants as for third-generation whites. An encouraging finding is that for Mexicans, the returns increase for each year of U.S. work experience, and for the third and higher generations, returns look similar for Mexicans and whites.[62]

Stephen Trejo finds that among U.S.-born workers, no matter what generation, returns to work experience are similar for all ethnicity and generation groups. He suggests that for workers with the same number of years of total work experience, more years of U.S. work increases immigrant earnings.[63]

Attending postsecondary institutions in the United States also boosts earnings. When Zhen Zeng and Yu Xie compared the earnings of foreign-educated and U.S.-educated Asian immigrants they found that earnings differences between Asian immigrants and native-born whites with similar postsecondary education disappeared when foreign education was taken into consideration. Although U.S.-born whites, U.S.-born Asian Americans, and U.S.-educated Asian immigrants all had comparable earnings, foreign-educated Asian immigrants earned about 16 percent less than the other three groups.[64] In this case, it appears, then, to be the characteristics—or the perceived characteristics—of the educational credentials, not race or nativity per se, that create earnings differentials. Other researchers have found that U.S.-born Asian Americans earn at least as much as whites of equivalent educational attainment and that only foreign-born Asian men are disadvantaged relative to white men. Opinions differ about whether nativity per se or the associated language and cultural issues explain earnings differentials.[65]

Zeng and Xie also find differential impacts of foreign postsecondary education within subgroups of Asian immigrants. Earnings differences among subgroups are small for those educated in the United States but quite large for those educated abroad. For example, immigrants educated in Japan earn about 40 percent more than native-born whites, while Filipino foreign-educated immigrants earn about 23 percent less. The authors conclude that differences in human capital between foreign- and U.S.-educated individuals generate the earnings gaps.[66] It is of course possible that this difference results from a lack of information about foreign credentials or discrimination against these credentials rather than from differences in productivity. The idea that immigrants' human capital attained abroad may not be fully valued in the labor market is not new.[67]

In sum, the smaller earnings benefit of additional years of education for immigrants appears to be related to attending postsecondary institutions and gaining work experience in other countries.

Conclusion and Policy Implications

Immigrants from Mexico and other Latin American countries and their descendants constitute a rapidly growing portion of the population of the United States. Like others in the United States who grow up in households with low educational attainment and low earnings, these Latin American immigrants have, on average, relatively low rates of participation and success in postsecondary education. Language barriers and lack of familiarity with U.S. social institutions create difficulties, but it is not immigrant status per se that explains the unsatisfactory outcomes for these immigrant populations. Overall, immigrants and their children are actually more likely than natives to earn college degrees. But the gaps among groups from different countries of origin are large. Those from China, Japan, and many African countries have high success rates. Those from Mexico, Guatemala, Haiti, Laos, and Cambodia fare less well. The children of immigrants who benefited from postsecondary education in their countries of origin are likely to succeed in the United States. The children of parents who are not in a position to help them prepare for and navigate the postsecondary system are likely to struggle.

Overall, immigrants and their children are actually more likely than natives to earn college degrees. But the gaps among groups from different countries of origin are large.

Solutions can emerge only from improved understanding of the differences among these groups, both in terms of their own characteristics and the human capital they bring to their new country, and in terms of the social and structural environments into which they are received.

Postsecondary attainment rates of young people who come from low-income households and, regardless of income, whose parents have no college experience, are low across the board. Because there will always be children growing up in such households—and because immigrants from certain countries are disproportionately represented among these children—designing policies that can help them is imperative. Doing so is

not only a matter of equity and of living up to the "American dream." It is also a matter of the well-being of the nation's economy and its society.

The similarity of the barriers to postsecondary education facing immigrants from Mexico and a number of other countries and those facing low-income American students—including large portions of the black and Hispanic populations—should make addressing the problems easier from a political perspective. Because immigration has become such a divisive political issue in the United States, focusing on the benefits to society of opening doors to higher education for all is the most promising strategy.

For young people from low-quality schools and from families and communities with little or no postsecondary experience, paying for college can be an enormous burden. Only those with legal permanent resident status and U.S. citizens are eligible for federal student aid, and much of that aid comes in the form of loans. Although there is considerable discussion about Hispanic students being particularly reluctant to incur debt, the evidence is weak, and it is likely that having better information and counseling about student financial aid could go a long way toward changing attitudes and making Hispanic students more likely to take out loans.[68]

Making funds available is important, but it is only one part of the process. The students most in need of support generally lack the information they need to access these funds. Considerable evidence suggests that the effectiveness of financial aid programs now available to low-income students is diminished by their complexity and unpredictability.[69] An experiment that gave low-income students help in filling out the federal financial aid form significantly increased their college enrollment, even without providing any additional funding.[70] Sometimes, changes in motivation and behavior resulting from financial incentives, rather than the extra funds themselves, can be central to improved postsecondary success. Judith Scott-Clayton, for example, found that West Virginia's state grant program increases college completion rates by establishing clear academic goals and providing incentives to meet them.[71]

Exacerbating the financial constraints is the reality that low-income students and those whose parents have little education are frequently ill prepared academically to succeed in college. Many also lack support networks that would bolster aspirations and expectations about postsecondary education.

Improving the postsecondary success rates of the most vulnerable populations requires not only understanding the problems, but also gathering solid evidence about the effectiveness of potential policy solutions. Undocumented immigrants face legal barriers to education and to the employment opportunities for which they may be prepared. Removing these barriers for undocumented students poses political, not conceptual, problems. Similarly, providing adequate funding through some combination of low tuition and grant aid is straightforward, if not easy to accomplish. Ensuring that Mexican immigrants and others who grow up in low-income communities have the opportunity to prepare themselves academically to succeed in college is much more challenging. Policies to improve the elementary and secondary school experiences of all children are likely the most important components of a strategy to improve the postsecondary success of immigrant children.

Given the increasing role that immigrants and their children, especially those from Latin America, will play in American society in the coming years, it is essential to give as many young people as possible the opportunity to enroll and succeed in postsecondary education. Policies for removing financial barriers and improving elementary and secondary school outcomes are vital for all segments of American society. That the most vulnerable group of immigrants is likely to continue to be the fastest growing only increases the urgency of finding the most effective policies.

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The Physical and Psychological Well-Being of Immigrant Children

Krista M. Perreira and India J. Ornelas

Summary

Poor childhood health contributes to lower socioeconomic status in adulthood. Subsequently, low socioeconomic status among parents contributes to poor childhood health outcomes in the next generation. This cycle can be particularly pernicious for vulnerable and low-income minority populations, including many children of immigrants. And because of the rapid growth in the numbers of immigrant children, this cycle also has implications for the nation as a whole. By promoting the physical well-being and emotional health of children of immigrants, health professionals and policy makers can ultimately improve the long-term economic prospects of the next generation.

Despite their poorer socioeconomic circumstances and the stress associated with migration and acculturation, foreign-born children who immigrate to the United States typically have lower mortality and morbidity risks than U.S. children born to immigrant parents. Over time, however, and across generations, the health advantage of immigrant children fades. For example, researchers have found that the share of adolescents who are overweight or obese, a key indicator of physical health, is lowest for foreign-born youth, but these shares grow larger for each generation and increase rapidly as youth transition into adulthood.

Access to health care substantially influences the physical and emotional health status of immigrant children. Less likely to have health insurance and regular access to medical care services than nonimmigrants, immigrant parents delay or forgo needed care for their children. When children finally receive care, it is often in the emergency room after an urgent condition has developed.

To better promote the health of children of immigrants, health researchers and reformers must improve their understanding of the unique experiences of immigrant children; increase access to medical care and the capacity of providers to work with multilingual and multicultural populations; and continue to improve the availability and affordability of health insurance for all Americans.

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Health status is a vital aspect of human capital. Unhealthy workers are less productive, more costly for employers, and earn less over their lifetimes. A growing literature links adult ailments to childhood experiences. For example, childhood asthma and obesity rates are associated with a myriad of chronic illnesses in adulthood (such as diabetes, hypertension, and coronary disease). For the children of immigrants, poverty, the stresses of migration, and the challenges of acculturation can substantially increase their risk for the development of physical and mental health problems. This article documents the evidence about differences in the health status of immigrant youth, including systematic variation in health-compromising behavior and access to health services. It concludes with a discussion of policy implications and strategies to reverse the troubling trends.

Numerous studies document the human capital cost of poor health in adulthood. Obesity, psychiatric disorders, and substance use, for example, affect large numbers of Americans and have all been shown to reduce adult employment and earnings significantly.[1] Largely because of technical challenges and data limitations, fewer studies have examined the human capital costs of poor health in childhood. Nevertheless, evidence that poor childhood health negatively influences adult education, employment, and socioeconomic status has begun to accumulate.

Early research into the human capital costs of poor childhood health evaluated the educational consequences of teenage childbearing and substance use, especially alcohol and illicit drug use. Results were mixed, with some analysts finding significant reductions in educational attainment—lower rates of high school graduation, college graduation, and years of schooling—related to illicit drug use. Other studies found small or insignificant reductions in educational attainment related to alcohol use or teenage childbearing.[2]

More recent studies have examined the consequences of childhood illnesses, nutrition, physical activity, excessive weight, and mental health for educational attainment, measured by grade completion and graduation, and for achievement, measured by grades and test scores. These analyses demonstrate that the negative consequences of poor childhood health are apparent as early as kindergarten and continue into adulthood.[3] Childhood asthma and other illnesses result in frequent emergency room visits, hospitalizations, and school absenteeism, and consequently lower math and reading achievement.[4] Childhood mental health or behavioral problems such as depression and hyperactivity negatively influence performance on standardized math and reading scores in elementary school. Mental health and behavioral problems also increase the likelihood of dropping out of high school and not attending college.[5] In contrast, good nutrition and regular physical activity in elementary school can improve school attendance, engagement in school, and academic performance.[6]

Even when studies find that child health or health behaviors have only a small influence on educational outcomes, the economic costs of poor child health and health behaviors can be high. The negative effects of poor health in childhood can persist and accumulate over time. Therefore, adults with poor childhood physical or mental health or unhealthy behaviors can experience lower rates of labor force participation, employment, and, ultimately, earnings.[7] Subsequently, the low socioeconomic status

of these adults contributes to poor childhood health outcomes among their children. As a result, poor childhood health perpetuates socioeconomic inequalities across family generations.[8] This cycle can be particularly pernicious for low-income minority populations such as the children of disadvantaged immigrants and, because of the rapid growth in the numbers of immigrant children, for the nation as a whole.

The Role of Migration in Shaping Children's Health

Migration and the subsequent acculturation experiences of children growing up in immigrant families increase the potential vulnerability of these children and can profoundly shape their health. The concept of acculturation describes the process of cultural change and adaptation that occurs when two or more ethnic groups come into contact with one another. The concept of enculturation describes the opposite—the process of retaining distinct cultural identities, beliefs, and norms of behavior that distinguish one ethnic group from another. Both influence child development and health outcomes.

Cultural-ecological theories argue that the resources in children's families, schools, and neighborhoods influence their lifestyles, daily experiences, and developmental outcomes.[9] Because migration exposes children to unique developmental demands and stressors associated with acculturation, it reshapes their normative development. To adapt, immigrant children and their families choose different combinations of acculturation and enculturation strategies.

A modified version of Carlos Sluzki's framework for the stages of migration provides a template for understanding sources of stress throughout the migration process and the health consequences of these stressors.[10] In the pre-migration stage, children's parents decide to leave their home country. These decisions typically reflect economic hardships in their home countries, political unrest and persecution, or the desire to reunify with family already living in the United States. This background sets the stage for children's subsequent migration and acculturation experiences and their influence on children's health. The migration stage captures the mobility process of migrating, including whether the children walk, drive, fly, or come by ship; whether they travel with a trusted family member or friend or are smuggled into the country; and whether they experience hardships during travel such as detainment in a refugee camp, assault, or hunger. The post-migration stage pertains to the settlement experiences of children; the process of navigating life in a new country; and the realization of changes in family economic situations, dynamics, and social roles. Pre-migration and migration influences are critical to children of immigrants, whereas post-migration influences are critical to second and later immigrant generations as well.

In this article the term "first-generation immigrant children" refers to foreign-born children with foreign-born parents. The term "second-generation immigrants" refers to U.S.-born children with at least one foreign-born parent. The term "children of immigrants" refers to both first- and second-generation immigrants as a whole. U.S.-born children with U.S.-born parents are considered "native," or third generation and higher.

Pre-Migration Experience and Health

Poverty, family separation, and political violence can substantially influence the health of children who immigrate to the United States. Yet few studies of immigrant

health examine these pre-migration influences. For example, in less developed countries, the prevalence of excessive weight (overweight and obesity) tends to increase with socioeconomic status—higher incomes are associated with the adoption of high-calorie diets and an increase in sedentary activities such as watching television. Thus, low-income children who migrate from these countries are more likely to be at risk of malnutrition and stunting than of being overweight. To demonstrate the importance of pre-migration poverty, Jennifer Van Hook and Kelly Balistreri examined differences in body mass index (BMI) by levels of economic development in children's country of origin.[11] They found that the BMIs and BMI growth rates were lower for low-income children of immigrants (aged five to eight) from less developed countries than for children of immigrants from high socioeconomic backgrounds in the same countries or for children of immigrants from more developed countries.

In another study of 385 young children of immigrants (aged nine to fourteen), Carola Suárez-Orozco and others found that as many as 85 percent of these children had been separated from one or both parents for a few months to a few years.[12] Central Americans and Haitians experienced the highest family separation rates (96 percent), whereas Chinese children had the lowest rates (37 percent). These family separations placed children and their mothers at risk for depressive symptoms. A study focusing on children in Mexico whose primary caregivers had migrated found that these children were more likely than children in nonmigrant households to have frequent illnesses (10 percent versus 3 percent), chronic illnesses (7 percent versus 3 percent), emotional problems (10 percent versus 4 percent), and behavioral problems (17 percent versus 10 percent).[13] Thus, as Nancy Landale, Kevin Thomas, and Jennifer Van Hook also highlight in the article in this issue on living arrangements, separation from a parent or primary caregiver who has migrated is associated with poor emotional and physical health among the children left behind.

Although a relatively small population (21,713 children under age eighteen in 2008) the children of refugees can experience additional hardships.[14] Studies focusing on refugee populations and forced migration find that 80–90 percent of refugee children have experienced extreme hardships such as witnessing murders or mass killings, enduring forced labor, or going without sufficient food for long periods of time.[15] Others survive combat experiences as child soldiers, life in refugee camps, and, for children who migrate to the United States to seek asylum and who do not have a guardian, long waits in detention centers or juvenile jails. Studies of adolescent Cuban and Cambodian refugees have found a high prevalence (50–60 percent) of both post-traumatic stress disorder and depression for up to two years after they arrive in the United States. In addition to exposures that threaten their emotional health, refugee children often have endured diarrheal disease, malnutrition, fractures, and other acute physical health problems, and experience chronic health problems after resettlement. Latent tuberculosis infections, fungal and parasitic infections, and lead poisoning are just a few of the physical health ailments common to refugee children.

These risk factors (poverty, family separation, and political violence), together with low rates of health insurance coverage and health care use, should lead to poorer health among foreign-born children than among U.S.-born

Separation from a parent or primary caregiver who has migrated is associated with poor emotional and physical health among the children left behind. Nevertheless, researchers consistently find an immigrant health advantage across a variety of medical outcomes.

children. Nevertheless, researchers consistently find an immigrant health advantage across a variety of medical outcomes. Three causes partially explain this paradox. First, foreign-born immigrant children engage in a variety of more positive health behaviors than their U.S.-born peers. They smoke less, drink less, and eat more nutritional and fewer snack foods. Second, foreign-born children tend to live in two-parent and multigenerational households with high levels of family support and other social support that can mitigate stress, especially during the initial settlement period.[16] Third, children who immigrate may be a selectively healthy group. Parents whose children have physical or emotional health problems could be less likely to immigrate or bring their children to the United States or more likely to send ill children back to their home countries. Although skeptics abound, research provides weak support for the selective migration of healthy adults.[17] But to our knowledge, no studies have examined the selective migration of children. In addition, most studies of health selection have focused on Mexican populations, and selection effects may vary by country of origin or even by regions within a country.

Migration Experience and Health

Few quantitative survey data exist about the nature of youths' migration experiences, but ethnographers and journalists have written extensively about these experiences. For documented children, migration to the United States may involve a relatively short plane trip and little trauma. For undocumented children, the migration journey can take months and involve severe physical and emotional hardship. *Enrique's Journey,* the true story of a sixteen-year-old boy's perilous trip from Honduras in search of his mother, typifies the physical and emotional trauma that at least some first-generation children experience on their way to the United States.[18]

In one mixed-methods study, 59 percent of Latino adolescents, aged twelve to eighteen, who had recently immigrated to North Carolina told researchers that the migration experience was somewhat to very stressful.[19] Although only 8 percent of these youth traveled alone or with a smuggler, 46 percent of the adolescents surveyed were concerned for their safety during their travels, 4 percent were robbed, 1 percent were physically attacked, 11 percent were accidentally injured, and 16 percent fell sick. Many of these migrants arrived in the United States injured, emotionally distressed, and in need of either physical or mental health services.

Post-Migration Experiences, Acculturation, and Health

Most of the research on the well-being of first-generation children focuses on their post-migration experiences. These experiences include a large number of acculturation stressors such as learning a new lan-

guage, coping with changes in family roles and responsibilities, protecting one's legal status or the legal status of family members, and encountering racism or discrimination. Although these stressors are common, their influence on a child's health can vary tremendously depending on the length of time the child has lived in the United States, the broader social context of settlement, and the child's age or developmental stage at migration.

Studies measuring the influences of these post-migration stressors on the health of Hispanic children typically use stress inventories such as the Hispanic Stress Index and the Societal, Attitudinal, Familial, and Environmental Acculturative Stress Scale. Nearly all of these studies focus on the strong negative relationship between stressors and children's emotional well-being. Researchers have not yet evaluated relationships between acculturation stressors and physical health outcomes; acculturation stress inventories have not yet been developed for use among Asian populations; and many analyses using stress inventories fail to differentiate the consequences of various sources of acculturative stress such as discrimination, family conflict, language skills, or legal status.

The current evidence does clearly indicate a link between racial discrimination and health. Youth who experience or perceive discrimination report more anxiety, more depressive symptoms, more risky health behaviors, lower self-esteem, and reduced academic motivations and expectations.[20] Moreover, researchers have begun to link racial discrimination to a variety of physical health outcomes in minority children, including elevated blood pressure, elevated levels of glucocortisol hormones in the blood stream, and insulin resistance—conditions associated with high rates of coronary heart disease and inflammatory disorders.[21]

Evidence also shows a strong link between immigrants' family environments and health. On the one hand, familism—the strong family ties, trust, loyalty, and spirit of mutual support cultivated by many immigrant parents—and family responsibilities such as language brokering for adult parents can positively influence youths' emotional well-being.[22] On the other hand, family conflict, parent-child acculturation gaps, and numerous family obligations can add to the stress experienced by children of immigrants and compromise their well-being.[23]

Much of the acculturation literature uses first- and second-generation immigrants' preferences for reading, writing, and interacting with friends in English rather than a foreign language as a primary measure of acculturation. These studies find that linguistically more acculturated youth have poorer health and engage in more risky health behaviors. In contrast, researchers know less about how age of migration, legal status, and the institutional and social contexts of reception influence children's health.

Children who immigrate at younger ages have greater language acquisition and better educational outcomes than children who immigrate at older ages, especially after puberty. However, their health risk profiles are more similar to children born in the United States to foreign-born parents. These young migrants find themselves caught between two worlds—the cultures of their parents and the cultures of their new communities. As they struggle to adapt, they tend to adopt more risky health behaviors such as alcohol use, smoking, and early sexual activity than their peers who immigrate at older

ages.[24] In addition, they face a higher risk of psychiatric disorders such as depression.[25]

Living in a liminal state between countries and without legal status can create daily hassles and become a source of chronic stress for children and their parents. A recent study of U.S.-born and foreign-born children of immigrants (from birth to age eighteen) whose parents had been arrested, detained, or deported during workplace raids by immigration officers sheds some light on the health consequences of legal status.[26] It found that children in these families experienced feelings of abandonment, fear, social isolation, and anger. Moreover, family friends and teachers noticed changes in these children's behaviors immediately after the raids.

Finally, the influence of each of these stressors may vary by an immigrant's state of residence. Several researchers have begun to evaluate the link between how well immigrants are received in an institutional and social context and health outcomes.[27] Historically, immigrants settled in six traditional gateway states—California, Florida, Illinois, New Jersey, New York, and Texas. Since 1990 immigrants have begun settling in new destination states across the Midwest (such as Indiana, Iowa, and Nebraska) and the South (such as Georgia, North Carolina, and Tennessee). These new destination states lack many of the institutional resources and multilingual professionals who help new immigrants settle and navigate complex U.S. health systems. Immigrants settling in these states also have smaller co-ethnic networks on whom they can rely for assistance and who can reinforce positive cultural norms and health behaviors for their children. Consequently, these immigrants have less access to health care and can be at greater risk of worsening health with time in the United States.[28]

Promoting Physical Well-Being in Immigrant Children

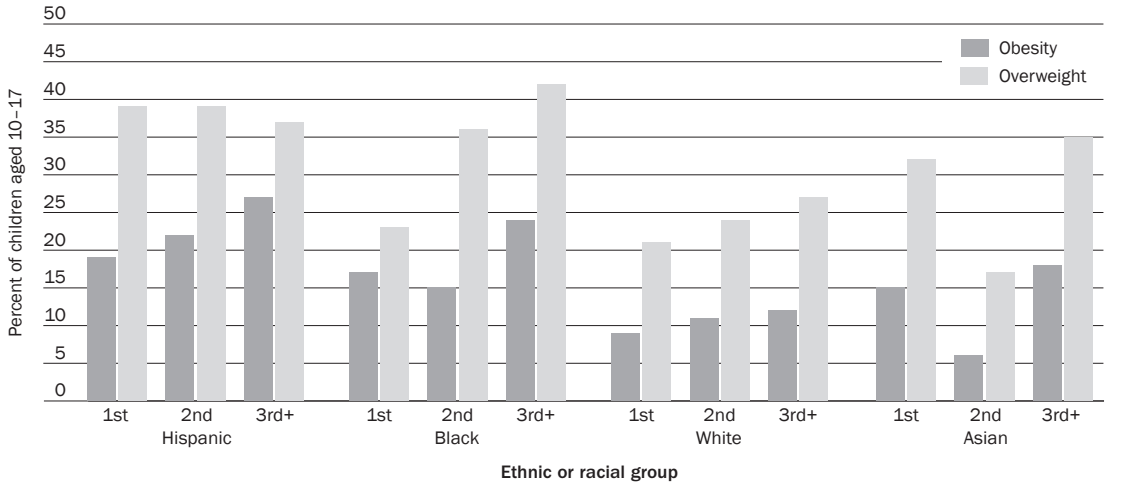
Pre-migration, migration, and post-migration stressors have the potential to harm the well-being of children of immigrants. Yet for a number of health indicators, foreign-born children experience better outcomes than do children in U.S.-born families. Foreign-born immigrant children typically have *lower* mortality and morbidity risks than both U.S.-born children of immigrants and U.S.-born children of natives within their same racial-ethnic group;[29] they have fewer specific acute and chronic health problems; and they have a lower prevalence of accidents and injuries than U.S.-born children.[30]

Over time and across generations, however, the health advantage of immigrant children fades. In this section, we summarize prevalence data on two key physical health indicators—obesity and asthma. These are two leading childhood health conditions in the United States with increasing prevalence among children of immigrants and long-term consequences for adult well-being. Because of the paucity of research on European and African children of immigrants, this summary focuses on Asian and Hispanic populations. To the extent that data are available, we highlight differences across immigrant generation and country of origin. In general, much of the research on Asian populations focuses either on Southeast Asians such as Vietnamese and Cambodians, Chinese, or Filipinos. Research on Hispanics focuses on Mexicans and Puerto Ricans.

Overweight and Obesity

Over the past three decades, the prevalence of excessive weight among children (aged six to nineteen) has increased from 5–7 percent to 17–18 percent.[31] Likely to become overweight adults, overweight children are at

Figure 1. Prevalence of Overweight and Obesity among Children, by Ethnicity or Race and Immigrant Generation



Source: Adapted from data in Gopal K. Singh, Michael D. Kogan, and Stella M. Yu, "Disparities in Obesity and Overweight Prevalence among U.S. Immigrant Children and Adolescents by Generational Status," *Journal of Community Health* 34, no. 4 (2009): 271–81.

increased risk of developing serious health conditions, including diabetes and cardiovascular disease.

Studies comparing foreign-born and U.S.-born adolescents (aged twelve to twenty-six) have found that the share of adolescents who are overweight or obese is lowest for foreign-born youth, but these shares grow larger for each generation and increase rapidly as youth transition into adulthood.[32] Among children aged ten to seventeen whose parents or grandparents are immigrants, Hispanics are most at risk of being overweight or obese, whereas non-Hispanic whites and Asians are the least at risk. Among all youth, third-generation blacks have the highest rates of excessive weight (figure 1).[33] These findings parallel those identified in studies of younger children (aged five to ten).[34] As with adolescents, second-generation Hispanic boys are at greater risk of being overweight or obese than second-generation children of any other racial or ethnic background.

Diet significantly contributes to excessive weight among children and adolescents. As immigrants become more acculturated to U.S. society, they adopt American diets, which typically include greater amounts of fat, processed meats, snack foods, and fast foods than the diets in their countries of origin.[35] Although these changes in dietary intake among immigrant adults are well documented, studies among youth are more limited.[36] One study using the National Longitudinal Study of Adolescent Health (also known as Add Health) found that foreign-born Hispanic youth aged twelve to eighteen had generally healthier diets than Hispanic youth born in the United States.[37] A second study using the 2001 California Health Interview Survey found that Asian and Latino foreign-born youth aged twelve to seventeen drank fewer sodas and ate more fruits and vegetables than non-Hispanic white U.S.-born children.[38] But Latinos' fruit and vegetable consumption decreased and their soda consumption increased over time,

while Asians' fruit, vegetable, and soda consumption stayed constant. Thus Asian children tended to maintain a lower risk of being overweight or obese than Latino children.

Low levels of physical activity further contribute to overweight and obesity among children. Rates of physical inactivity are high among foreign-born children.[39] Eighteen percent of foreign-born immigrant children aged six to seventeen do not get any vigorous exercise in a typical week, and 56 percent do not take part in any team sports or games. By comparison 11 percent of U.S.-born children with U.S.-born parents do not exercise regularly, and 41 percent do not participate in organized sports. Compared with foreign-born Asian children, Hispanic foreign-born children had triple the rates of physical inactivity (22.5 percent to 7.4 percent); two-thirds of the Hispanic children did not participate in sports, compared with slightly more than one-third of the Asian children (66.6 percent to 37.6 percent). Asian children's higher rates of physical activity may also contribute to their reduced risk of obesity. Immigrant families may not be fully aware of the physical and mental health benefits of physical activity, may place a higher value on family or school activities, or may discourage participation in physical activities and sports. Most importantly, the structure of their daily lives (such as parents' work schedules) and their living conditions (neighborhood environments and access to recreational facilities, for example) may limit immigrant children's ability to engage in physical activities.[40]

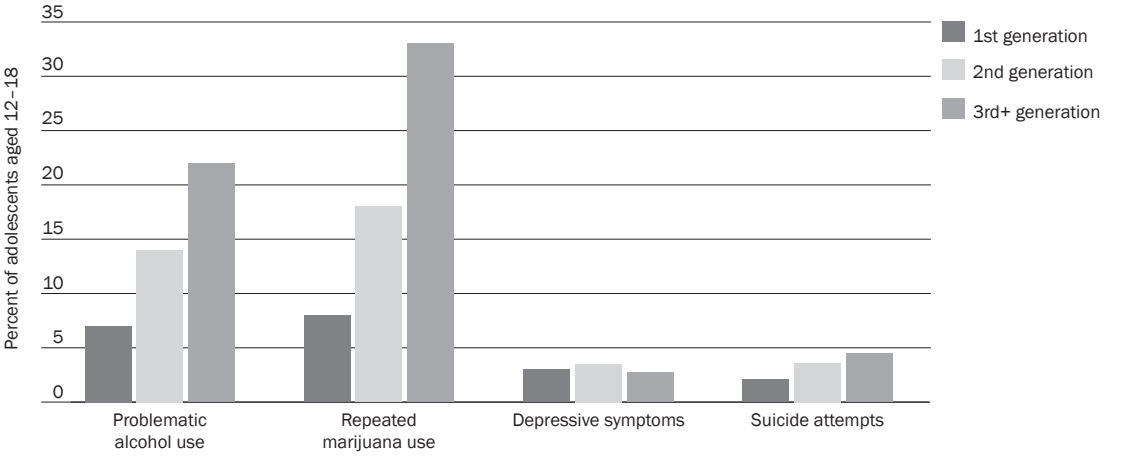
Asthma

In 2008, nearly one of every ten U.S. children up to age seventeen had asthma, a leading chronic childhood disease, and rates of asthma are increasing worldwide. Patterns of asthma prevalence vary considerably by racial and ethnic group, with Asians having the lowest prevalence (4 percent), followed by Hispanics (7 percent), whites (9 percent), and blacks (16 percent).[41]

Although few studies have disaggregated the prevalence of asthma by country of origin or nativity, evidence suggests that across all racial and ethnic groups the children of immigrants have a lower lifetime prevalence of asthma than native children.[42] Among Hispanic groups, Puerto Rican children have one of the highest rates of childhood asthma (19.2 percent in 2007), whereas Mexican children, whether immigrant or not, have one of the lowest rates (6.0 percent in 2008).[43] Prevalence rates among Asian children aged two to seventeen vary from 4 percent for Asian Indians, to 5 percent for Chinese, to 11 percent for Filipinos.[44]

Because a diagnosis of asthma requires a visit to a health care provider, and because immigrants have less access to the health care system than nonimmigrants, rates among these groups may be underreported. Moreover, barriers to accessing health care can contribute to higher rates of hospitalization for asthma and poor asthma management among Hispanic children, immigrants, and other minority groups.[45] In a recent study of Hispanic children aged five to twelve in New York City, asthmatic children from Spanish-speaking families were less likely to have an asthma diagnosis than children from English-speaking families but were twice as likely to be hospitalized for asthma (9.4 percent to. 4.4 percent).[46] Another study of families in California found that asthmatic children of immigrants aged one to eleven were more likely to lack a usual source of care, report a delay in medical care, and report fair or poor health status than asthmatic children in nonimmigrant families.[47]

Figure 2. Prevalence of Substance Abuse and Mental Health Problems among Latinos, by Immigrant Generation



Source: Adapted from data in Juan Peña and others, "Immigration Generation Status and Its Association with Suicide Attempts, Substance Use, and Depressive Symptoms among Latino Adolescents in the USA," *Prevention Science* 9, no. 4 (2008): 299–310.

Protecting Emotional Well-Being in Immigrant Children

While first- and second-generation children fare well on many aspects of physical well-being, this advantage relative to their native peers does not always translate into good mental health. Immigrant families experience a number of stressors that can affect the psychological well-being of all family members. These stressors affect children's emotional well-being, both directly and indirectly, by hindering parents' capacities to nurture their children's socioemotional development.[48] As examples of how immigration influences children's emotional well-being, we look specifically at patterns of substance use, internalizing behavioral problems such as anxiety and depression, and externalizing behavioral problems such as hyperactivity, aggression, and conduct disorders. According to the U.S. Surgeon General's most recent report on mental health, these are the most common mental health concerns for children and adolescents.[49]

Substance Use

When they first arrive in the United States, children tend to participate in fewer risky health behaviors than those born in the United States.[50] However, risky behaviors among foreign-born children increase with time spent in the country, especially during adolescence. Among these behaviors, patterns of substance use are particularly well documented among foreign-born adolescents aged twelve to seventeen. According to data from the 1999 and 2000 National Household Survey on Drug Abuse (NHSDA), rates of substance use (including cigarette, alcohol, marijuana, and other illicit drug use) were lower among foreign-born adolescents (9 percent for cigarettes, 12 percent for alcohol, and 4 percent for marijuana), in particular those who had been in the United States less than five years, than among U.S.-born adolescents (15 percent for cigarettes, 17 percent for alcohol, and 8 percent for marijuana).[51] Prevalence estimates for foreign-born adolescents in the United States for ten or more years were not significantly

different from estimates for U.S.-born youths, with one exception. U.S.-born youth had higher rates of heavy alcohol use than foreign-born adolescents.

Several studies examining substance use among Latino adolescents aged twelve to eighteen in Add Health found that second-generation youth were more likely to smoke cigarettes and use alcohol and marijuana than first-generation youth (figure 2).[52] U.S.-born Hispanic youth were more likely than foreign-born Hispanic youth to report associating with substance-using peers, and peer substance use was directly associated with increased substance use.[53]

Few studies have assessed the impact of acculturation on the substance use of Asian children of immigrants. Asian American adolescents tend to have lower rates of smoking, alcohol, and drug use than other racial and ethnic groups. However, despite low rates overall, there are major differences by Asian ethnic group. Pacific Islander adolescents have higher rates of substance use, including alcohol, marijuana, and illicit drug use, compared with youth of other Asian ethnic groups.[54] One smaller study of Asian first- and second-generation adolescents aged fourteen and fifteen showed increases in substance use with length of time in the United States and interactions with substance-using peers.[55]

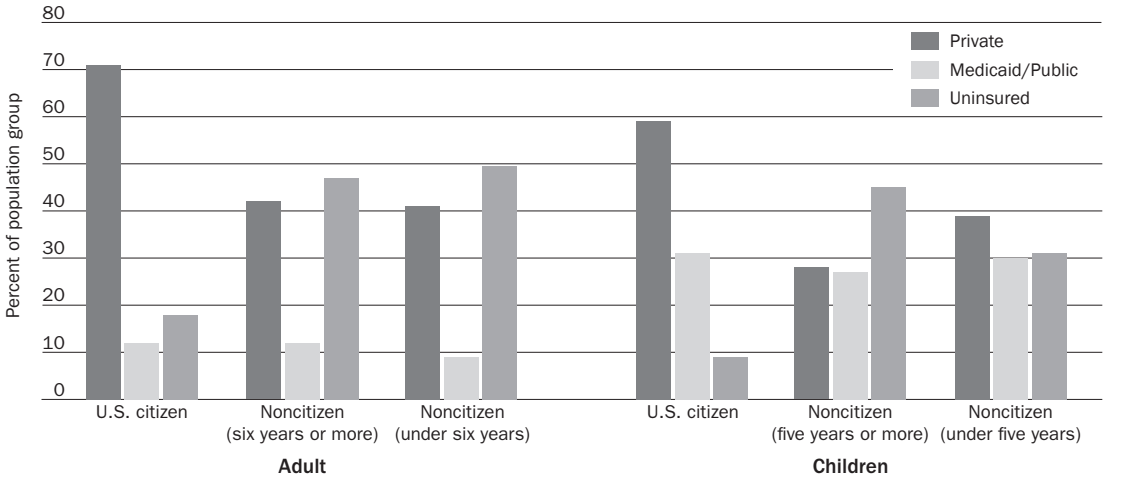
Depression and Suicide

Although no psychiatric epidemiological studies of children in the United States have been conducted, smaller community-based studies and studies of symptom-level psychopathology indicate that anxiety and depression are the most prevalent conditions affecting the emotional well-being of children.[56] In any given year, approximately 13 percent of children aged nine to seventeen experience symptoms of anxiety and 10–15 percent experience symptoms of depression. In addition, the vast majority of children and adolescents who commit suicide have experienced either anxiety or depression.

Although not conclusive, current research suggests that exposure to culture-related stressors and acculturation to the U.S. mainstream increases the risk of anxiety and depression among children of immigrants. In contrast, adherence to heritage cultures, a sense of belonging to their ethnic groups, and a number of family influences protect the children of immigrants from developing symptoms of anxiety and depression. Thus, mainstream integration may be problematic only when it is *not* coupled with the retention of one's cultural heritage, ethnic identity, and family strengths.[57] For example, one study of Chinese immigrant families found that twelve- to fifteen-year-olds whose levels of acculturation were different from their fathers were more likely to report depressive symptoms.[58] But another study of Chinese immigrant families found that a strong sense of family, measured by family obligations, was associated with decreased depressive symptoms among thirteen- to seventeen-year-olds.[59] Similarly, data from Add Health suggest that social support from family, friends, and neighbors attenuates the risk of depressive symptoms and enhances the likelihood of positive well-being for all first- and second-generation adolescents aged twelve to eighteen.[60] Parental closeness and the absence of parent-child conflict reduce the risk of poor mental health outcomes for second- and third-generation adolescents.

At its most extreme, poor mental health can lead to suicidal ideation and suicide among children of immigrants. Suicide is

Figure 3. Health Insurance Coverage, by Citizenship and Length of Time in the Country



Source: Adapted from data in Kaiser Commission on Medicaid and the Uninsured, "Health Insurance Coverage in America, 2008" (Washington: Henry J. Kaiser Family Foundation, 2009).

the third-leading cause of death among all fifteen to twenty-four-year-olds. Although the 2007 Youth Risk Behavior Survey (YRBS) does not contain information on immigrant generation or acculturation, its data indicate that Hispanic students were as likely to have seriously considered suicide in the past year as other racial and ethnic groups but that more Hispanic youth reported making a suicide plan.[61] Hispanic youth (both boys and girls) were also more likely to have attempted suicide (10 percent) than non-Hispanic white (5.6 percent) or black (7.7 percent) youth. A study using YRBS data from 1991 to 1997 found that Asian and Pacific Islander youth were less likely than Hispanics and more likely than either non-Hispanic white or non-Hispanic black students to have made at least one suicide attempt.[62]

Those studies with specific data on immigrant generation or acculturation have found that acculturative stress is positively associated with suicidal ideation among Latino youth.[63] In addition, the risk of attempted suicide among Latino adolescents doubles between the first and second generations (see figure 2). Research among Asian immigrant youth is much more limited, but results support acculturative stress theory. Under conditions of high parental-child conflict, less acculturated Asian adolescents report higher levels of suicidal behavior than do more acculturated youth.[64]

Attention-Deficit/Hyperactivity Disorder

Whereas internalizing behavioral problems such as depression tend to be most prevalent among females, externalizing symptoms associated with hyperactivity and conduct disorders are most prevalent among males.[65] Furthermore, rates of attention-deficit/hyperactivity disorder (ADHD) and conduct disorders are increasing among children and adolescents in the United States.

Although no national studies have assessed patterns of ADHD and conduct disorder

among immigrant families, the prevalence varies significantly by racial and ethnic group. Data from the 2008 National Health Interview Survey showed that among three- to seventeen-year-olds, Hispanics were roughly half as likely as non-Hispanic whites or blacks to have been diagnosed with ADHD.[66] Only Asians reported fewer cases of ADHD than Hispanics, but the data are too imprecise to report. Once again, however, ethnic differences in diagnosed cases may reflect access to regular sources of medical care rather than true differences in prevalence rates. Even after receiving a diagnosis, both Hispanic and Asian children (aged three to eighteen) receive fewer medical care services than non-Hispanic whites.[67]

Improving Access to Health Insurance and Health Care

Access to health care substantially influences the physical and emotional health status of children of immigrants. Less likely to have health insurance and regular access to health care services, immigrant parents delay or forgo needed care for their children. When children finally receive care, it is often in the emergency room after an urgent or life-threatening condition has developed.

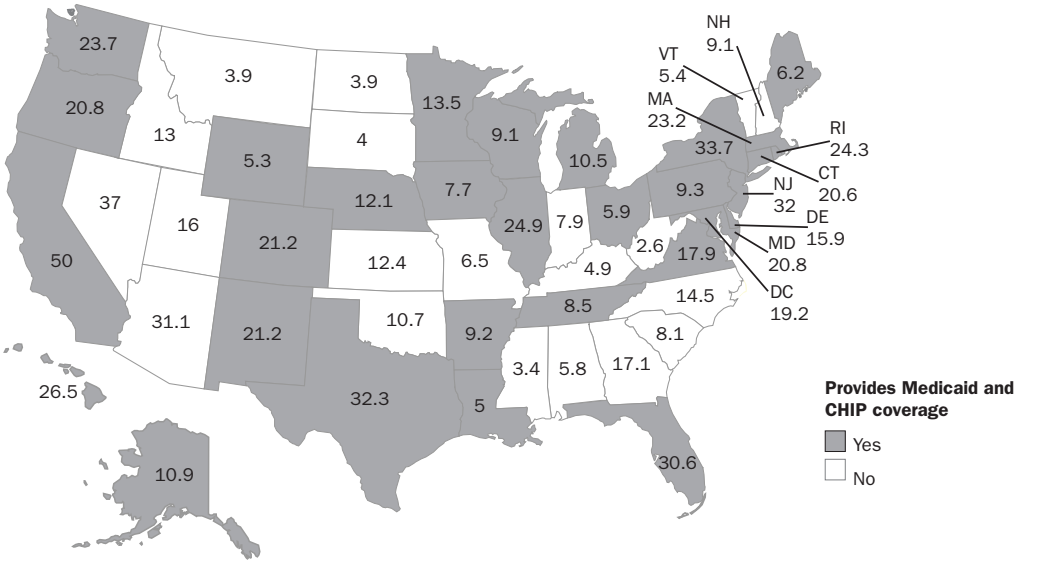
Health Insurance

In 2008, nearly 45 percent of noncitizen U.S. residents, 18 percent of naturalized citizens, and 13 percent of U.S.-born citizens lacked health insurance coverage.[68] Because most children depend on their parents to obtain health insurance, parental citizenship and immigration status can influence children's health insurance status (figure 3). Foreign-born parents and their children are more likely to be uninsured because parents are frequently self-employed or working for employers who do not offer health insurance, have lower incomes limiting their capacity to purchase insurance in the private market, and face restrictions on eligibility for public insurance programs.[69] When offered insurance coverage by their employers, roughly 85 percent of employees take up this coverage, and there are no differences in take-up rates between citizens and noncitizens.

Immigrants' eligibility for public health insurance is dependent on federal and state policies. Coverage rates among legal immigrants have declined over the past decade as a result of 1996 welfare reforms that prohibited foreign-born children from receiving federally funded Medicaid and state Children's Health Insurance Program (CHIP) coverage until they had been in the country for at least five years. To fill this coverage gap, some states provided public insurance coverage using state-only funds. In the interest of promoting the health of newborns, several of these states also provided prenatal coverage to immigrant women regardless of their immigration status. In early 2009 the federal Children's Health Insurance Program Reauthorization Act updated the funding rules for CHIP and provided federal matching funds to states that covered eligible legal first-generation immigrant children and pregnant women regardless of their date of entry into the United States. However, states are not required to provide access to CHIP and can choose not to take advantage of the new option. As of February 2010, thirty states and the District of Columbia had chosen to provide public health insurance coverage to at least some qualified legal immigrants (figure 4).[70] In these thirty states, nearly one of every five children is a child of an immigrant.

Still, many children of immigrants (56 percent of children with two immigrant parents and 66 percent of children with one foreign-born and one U.S-born parent) eligible

Figure 4. Medicaid or Children's Health Insurance Program Coverage of Pregnant Women and Children and Share of Children in Immigrant Families, by State



Source: Adapted from data compiled in National Immigration Law Center, Medical Assistance Programs for Immigrants in Various States (www.nilc.org/pubs/guideupdates/med-services-for-imms-in-states-2010-02-24.pdf); authors' calculations using U.S. Bureau of the Census, 2006–08 American Community Survey three-year estimates.

for public health insurance do not enroll.[71] Approximately 81 percent of children (up to age eighteen) in immigrant families were born in the United States and are U.S. citizens. But an estimated 30 percent of children of immigrants are unauthorized or living with a parent who may not be living in the United States legally.[72] Thus, parents of U.S. citizen children may forgo public health insurance and other services because of their own legal status and mistaken fears that they will be deemed a "public charge" if their children receive public health insurance benefits.[73] Immigrants deemed a public charge can be denied U.S. citizenship or prohibited from sponsoring the immigration of a family member. In addition to concerns regarding their legal status, immigrant parents face financial and language barriers that can limit their capacity to enroll in both private and public health insurance programs.

Health Care Use

Without health insurance and even with insurance, families sometimes forgo critical preventive, diagnostic, and treatment services for their children. Among noncitizen children up to age seventeen, 37 percent lacked a usual source of care and 30 percent had not seen a medical doctor in the past year. Only 5 percent of citizen children lacked a usual source of care; only 9 percent had forgone an annual doctor's visit. Because they use less care, annual medical expenditures per capita were substantially lower for noncitizen children and their parents ($1,797) than for citizens ($3,702) in 2005.[74]

Both financial and nonfinancial barriers compromise the ability of immigrant parents to obtain access to medical care.[75] Financial impediments include not only out-of-pocket costs for services and prescriptions but

also the lack of paid sick leave or the ability to leave work to take their children to appointments during standard office hours. Language is one particularly important nonfinancial barrier for the children of immigrants and their parents. Immigrants with limited English proficiency report lower satisfaction with care, less knowledge of their medical condition, and difficulty understanding instructions on medication usage. Additionally, low levels of health literacy limit immigrant parents' abilities to use health services effectively or to act as advocates for their children in health care settings.

When immigrants face challenges obtaining physician-based medical care, they may turn to complementary and alternative medical providers such as acupuncturists or spiritual healers. Data from the California Health Interview Survey show that more than 22 percent of Latino and 23 percent of Asian adults reported using alternative medicine providers, and almost 20 percent of Latinos and 50 percent of Asians reported using traditional or herbal remedies.[76]

In addition, uninsured immigrants turn to health care providers working in federally qualified community health centers (FQHCs)—public and private nonprofit organizations serving populations with limited access to care.[77] In 2008 FQHCs provided care to 17 million patients. Of these, 25 percent primarily spoke a language other than English, 36 percent were children, and 38 percent were uninsured.[78] Uninsured immigrants, however, are less likely to use emergency rooms. Only 13 percent of adult and 12 percent of child noncitizens report an emergency room visit in the past year compared with 20 percent of adult and 22 percent of child citizens.[79] Despite this lower frequency of use, emergency room expenditures are three times higher per capita for foreign-born children than for U.S.-born children.[80] Thus, at least for children, delaying medical care can have substantial costs. Moreover, because immigrant parents cannot build long-term relationships with providers in these settings, their children may receive lower-quality care.

Strategies to Promote Health

To better promote the health of immigrant children, health researchers and reformers must improve their understanding of these children's unique experiences, reduce barriers to medical insurance for immigrant populations, and improve access to care and the capacity of providers to work with multilingual and multicultural populations.

Understanding the Unique Experiences of Immigrant Children

In the past decade, scholars have learned much about the immigrant experience and its influence on children's health. Still, critical knowledge gaps remain. As research progresses, scholars need to develop country-of-origin-specific, longitudinal, and binational data—data collected both in immigrants' countries of origin and in the United States—on immigrant parents and their children.

In the absence of data specific to country of origin, researchers classify immigrants into large pan-ethnic groups such as Asian and Hispanic. These groupings obscure substantial socioeconomic, cultural, and political differences that exist between the immigrant children from different countries of origin within the same world region and can lead to erroneous conclusions regarding the relationship between migration and health.

To better understand the developmental consequences of migration, national longitudinal data on the children of immigrants are also sorely needed. Most data are gathered in specific geographic regions of the United States, are cross-sectional, and do not contain detailed information on both immigrant parents and their children. Consequently, researchers know little about how migration and acculturation experiences shape the development of children over time and across family generations. Moreover, the data do not allow researchers to identify how the context of settlement into particular areas of the United States shapes the health and development of immigrant children. States and communities vary widely in their cost of living, employment opportunities, racial composition, and infrastructure for serving immigrant families—all factors that can influence the health and development of children of immigrants.

Finally, comparable binational data are needed on the health of children and their parents. We cannot fully understand how migration and acculturation influence health without knowing more about the health of the populations from which immigrant children come and the context of their migration to the United States. Binational data will enable evaluations of how health, beliefs and attitudes about health, and health care use patterns in primary sending regions differ from those of the children of immigrants living in the United States. These data are critical for understanding health selection effects and designing effective prevention and treatment programs for an increasingly transnational population.

Reducing Barriers to Medical Insurance

Once immigrant parents and their children are in the United States, their health depends critically on their access to care—a factor influenced substantially by insurance coverage. Four-fifths of the nation's 46 million uninsured are U.S. citizens. The Congressional Budget Office estimates that health care reform will, by 2019, reduce the number of uninsured to 23 million, one-third of whom will be nonelderly, unauthorized immigrants.[81] Thus, health reform has important implications for access to medical care for immigrants and their children.

With the passage of the 2009 Children's Health Insurance Program Reauthorization Act, states now have the option of providing legal immigrant children and pregnant women access to federally funded health insurance through CHIP regardless of how long they have lived in the United States.

Investments in health and health care are essential to the economic well-being of future generations of Americans.

The policy for adults remains more restrictive. The health insurance reform bill passed in 2010, formally known as the Patient Protection and Affordable Care Act, bars legal immigrants from receiving Medicaid during their first five years in the country. However, immigrants who earn up to 400 percent of the federal poverty level and have no access to employer-provided coverage may purchase federally subsidized insurance through state exchanges. The new law makes unauthorized immigrant children and adults

ineligible for Medicaid coverage and insurance options available through the exchanges. Medicaid will continue to cover only emergency care services for uninsured, unauthorized immigrants.

Despite the continued restrictions on adult immigrants' access to Medicaid, expansions in the availability of employer-provided coverage and in the eligibility of Medicaid will likely improve access to care. Employers with more than fifty employees will now be required to offer coverage to their workers, including immigrants and, potentially, their children. Additionally, single adults without children and with incomes up to 133 percent of the federal poverty line will now be eligible for Medicaid. Previous Medicaid eligibility requirements substantially limited coverage for adults without children. Finally, insurers will be required to cover children with preexisting medical conditions, and children can stay on their parents' insurance until age twenty-six. These are substantial improvements that will benefit millions of Americans, including immigrants.

Improving Access to Medical Services

On average, immigrants use less medical care, including less emergency room care, and have lower average medical expenditures than U.S. citizens. Health reform will begin to improve immigrants' access to care by relaxing restrictions on eligibility for public insurance and by improving affordability for individuals purchasing insurance through the nongroup market. However, additional steps will be needed to further promote access to care for the children of immigrants.

First, health care providers need to be sensitive to immigrants' cultures and their preferences for particular modes of delivery (that is, times, locations, and language). The availability of culturally competent care that respects patients' religious, family, and cultural values can improve the doctor-patient relationship and make it easier for immigrant parents to seek care. For example, because some immigrant populations rely on family, social networks, and complementary and alternative medicine for information about health and medical services, medical care providers can improve access to care by establishing lay health adviser programs designed to educate natural leaders in immigrant communities and build liaisons with these communities. Because immigrants can have limited access to a car and may not have a driver's license, providers can improve access by locating clinics within immigrant communities or near public transportation. And because immigrant parents may not have sick leave or flexible work schedules, clinic hours that extend beyond the standard 9–5 schedule can be essential to improving access. These and other possible strategies go beyond addressing the financial and linguistic barriers to medical care for immigrants.

Second, policy makers need to reduce additional structural barriers limiting the ability of immigrant children and their parents to access care. For example, federal civil rights policies require publicly funded providers to ensure that non-English speakers are able to access all their services, including applications and telephone appointment services. However, many states have not strictly enforced these requirements. Although Medicaid and CHIP allow states to include foreign-language interpreter services as an option, only twelve states currently do so. To encourage states to expand their translation and interpretation services, the health reform law has increased federal Medicaid and CHIP matching funds for these services.

In addition, policy makers can also remove state and local ordinances requiring a patient to show proof of citizenship before receiving care provided by local public health departments and community clinics. These policies reduce access to care not only for immigrants but also for many citizens who lack proper forms of documentation such as birth certificates and passports.

Finally, states will need to invest in outreach to increase enrollment in health insurance programs and use of existing services. Studies have shown that outreach efforts can ensure that immigrants take advantage of available services and use them efficiently.[82] Without outreach efforts, immigrants may fail to take advantage of expansions in health insurance coverage and may remain unaware of improvements in other aspects of care (such as the availability of translators) available to them.

Conclusion

Poor health in childhood clearly can result in serious consequences for health, education, and employment in adulthood. Investments in health and health care are therefore essential to the economic well-being of future generations of Americans. Even though most foreign-born children arrive in the United States in good health, this health advantage dissipates over time as factors associated with migration and acculturation take hold. Low rates of health insurance and poor access to health care compound the risk for deteriorating health. Recent health reforms are a step in the right direction. To further promote the health of future generations of immigrant children, researchers and policy makers will need to better understand their unique experiences and continue to improve programs and policies that promote their access to medical services.

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The Adaptation of Migrant Children

Alejandro Portes and Alejandro Rivas

Summary

Alejandro Portes and Alejandro Rivas examine how young immigrants are adapting to life in the United States. They begin by noting the existence of two distinct pan-ethnic populations: Asian Americans, who tend to be the offspring of high-human-capital migrants, and Hispanics, many of whose parents are manual workers. Vast differences in each, both in human capital origins and in their reception in the United States, mean large disparities in resources available to the families and ethnic communities raising the new generation.

Research on the assimilation of these children falls into two theoretical perspectives. Culturalist researchers emphasize the newcomers' place in the cultural and linguistic life of the host society; structuralists, their place in the socioeconomic hierarchy. Within each camp, views range from darkly pessimistic—that disadvantaged children of immigrants are simply not joining the American mainstream—to optimistic—that assimilation is taking place today just as it has in the past. A middle ground is that although poorly endowed immigrant families face distinct barriers to upward mobility, their children can overcome these obstacles through learning the language and culture of the host society while preserving their home country language, values, and customs.

Empirical work shows that immigrants make much progress, on average, from the first to the second generation, both culturally and socioeconomically. The overall advancement of the immigrant population, however, is largely driven by the good performance and outcomes of youths from professional immigrant families, positively received in America. For immigrants at the other end of the spectrum, average socioeconomic outcomes are driven down by the poorer educational and economic performance of children from unskilled migrant families, who are often handicapped further by an unauthorized or insecure legal status. Racial stereotypes produce a positive self-identity for white and Asian students but a negative one for blacks and Latinos, and racialized self-perceptions among Mexican American students endure into the third and fourth generations. From a policy viewpoint, these children must be the population of greatest concern.

The authors cite two important policy measures for immigrant youth. One is to legalize unauthorized migrants lest, barred from conventional mobility channels, they turn to unorthodox means of self-affirmation and survival. The other is to provide volunteer programs and other forms of outside assistance to guide the most disadvantaged members of this population and help them stay in school.

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The rapid growth of the immigrant population in the United States is one of the most important demographic and social trends confronting this society. Close to 13 percent of the U.S. population today is foreign-born. In 2008, 1.11 million immigrants were admitted for legal permanent residence; another 72,000 as refugees and asylees.[1] Although the flow of unauthorized immigration slowed in the wake of the economic crises beginning in 2007, the resident unauthorized population approaches, according to the best estimates, 12.5 million.[2]

Among the most important social consequences of this large immigrant flow are the reconstitution of families divided by migration and the procreation of a new generation. Unlike adult immigrants, who are born and educated in a foreign society and whose outlook and plans are indelibly marked by that experience, the children of immigrants commonly become full-fledged members of the host society with outlooks and plans of their own.[3] If their numbers are large, socializing these new citizens and preparing them to become productive and successful in adulthood becomes a major policy concern.

That is the challenge facing the United States today. The rapid growth and diversity of this young population have naturally sparked worries and questions about its future. We review in the next section the various theoretical perspectives that researchers have advanced on the question of how young immigrants are adapting to life in the United States and shaping their futures, but first it is necessary to make some important preliminary distinctions. Although public discourse and some academic essays treat this young population in blanket terms, the truth is that the term *migrant children* conceals more than it reveals because of the heterogeneity of its component groups.

First, there is a significant difference between children born abroad and those born in the host society. The former are immigrant children, while the latter are children of immigrants—the first and second immigrant generation, respectively. Research points to major differences in the social and cultural adaptation of the two groups.[4] Another distinct group, the "1.5 generation," includes children born abroad, but brought to the host society at an early age, making them sociologically closer to the second generation.

Vast differences in the human capital origins of these populations and in the way they are received in the United States translate into significant disparities in the resources available to families and ethnic communities to raise a new generation in America.

These young immigrants also differ by their countries of origin and their socioeconomic background. It turns out, though, that the two characteristics overlap to a large degree because immigration to the United States has divided into two streams. One is made up of highly skilled professional workers coming to fill positions in high-tech industry, research centers, and health services. The other is a

larger manual labor flow seeking employment in labor-intensive industries such as agriculture, construction, and personal services.[5] Professional migration, greatly aided by the H1-B temporary visa for highly skilled workers that was approved by Congress in 1990, comes primarily from Asia, mainly from India and China, with smaller tributaries from the Philippines, South Korea, and Taiwan. Manual labor migration comes overwhelmingly from adjacent Mexico, and secondarily from other countries of Central America and from the Caribbean. To the disadvantages attached to their low skills and education are added those of a tenuous legal status, as the majority of these migrants come surreptitiously or with short-term visas.[6]

To the extent that migrant workers, either professional or manual, return promptly to their countries of origin, no major consequences accrue to the host society. In reality, however, many of them, both professionals and manual workers, stay and either bring their families or create new families where they settle. Over time, the divide in the major sources of contemporary migration has given rise to two distinct pan-ethnic populations in the United States—"Asian Americans," by and large the offspring of high-human-capital migrants, and "Hispanics," the majority of whom are manual workers and their descendants.[7] Vast differences in the human capital origins of these populations and in the way they are received in the United States translate into significant disparities in the resources available to families and ethnic communities to raise a new generation in America. Naturally, the outcomes in acculturation and social and economic adaptation vary accordingly.

The research literature has focused on these differences, although it has been largely oblivious of their historical origins, treating "Hispanic" and "Asian" as almost timeless, immanent categories. In examining research findings about the adaptation of migrant youths from these distinct groups, it is important to keep in mind that adaptation is not a process that happens to a child alone. Rather, it entails constant interaction with others. Language and cultural learning, for example, involve not just the individual but the family, with parents and children commonly acculturating at different paces. Similarly, self-esteem and future aspirations are not developed in isolation or even under the influence of families alone. And many circumstances (including, for example, age of migration) shape the varied types of social interactions that migrant children will have in the host society.

Theoretical Perspectives on the Future of the Second Generation

Social scientists have offered a range of perspectives on the future of this large cohort of immigrant children, each with its own implications for both the second generation and society as a whole. In this section, we outline briefly these contrasting perspectives; later we review empirical findings bearing on them. Researchers' explanations of and predictions about the social and economic assimilation of children of immigrants vary according to their views on the nature of assimilation, the extent to which assimilation will take place, and the segment of society into which the children of immigrants will assimilate.

Theoretical perspectives fall into two groups that may be labeled "culturalist" and "structuralist." Culturalist views emphasize the relative assimilation of immigrants into the cultural and linguistic mainstream; structuralist perspectives emphasize the newcomers' place in the socioeconomic hierarchies

Table 1. An Overview of Theoretical Perspectives on Assimilation

Perspective	Primary proponents	Views toward assimilation	Empirical basis
		Cultural perspectives	
Hispanic challenge	Samuel Huntington	Pessimistic, not happening	Theoretical
The new melting pot	Richard Alba and Victor Nee	Optimistic, occurring just as in generations past and transforming society's mainstream	Secondary review of historical and contemporary research on immigrant assimilation
		Structural perspectives	
Second-generation advantage	Philip Kasinitz, John Mollenkopf, Mary C. Waters, and Jennifer Holdaway	Optimistic, the second generation is situated in a social and cultural space that works to its advantage.	Cross-sectional study of second-generation young adults in New York City
Generations of exclusion	Edward Telles and Vilma Ortiz	Pessimistic, Mexican Americans stagnating into the working class or assimilating into a racial underclass	Longitudinal study of three-plus generations of Mexican Americans in Los Angeles and San Antonio
Segmented assimilation	Alejandro Portes and Rubén Rumbaut	Mixed, assimilation may help or hurt social and economic outcomes depending on parental human capital, family structure, and contexts of incorporation.	Longitudinal study of second-generation youths in San Diego and South Florida from early adolescence to young adulthood
Age of migration	Rubén Rumbaut, Dowell Myers, and Barry Chiswick	Mixed, native-born youths and those arriving at an early age have definite linguistic and educational advantages. Migrants arriving in adolescence are at risk.	Analysis of 2000 census data and various Current Population Survey data

of the host society and focus on such areas as occupational achievement, educational attainment, poverty, early childbearing, and incarceration. The two broad types of assimilation need not have parallel outcomes. For instance, an individual who is fully assimilated into society's cultural and linguistic mainstream can still experience poor outcomes in the labor and educational markets. Conversely, an individual may not become fully integrated culturally and still do well both economically and occupationally. For the most part, these views have been formulated by U.S. scholars and are grounded on the American experience. Although the body of research on the European second generation is growing fast, no comparable set of theories has emerged so far. Table 1 presents a summary of the views to be reviewed next.

Culturalist Perspectives

Cultural theories range from pessimistic to optimistic in their view about how and how well immigrants and their children are joining American society's mainstream. At the pessimistic end is the belief championed by political scientist Samuel Huntington that children of immigrants are not assimilating.[8] In this "Hispanic challenge" view, certain groups—Hispanics in particular—have arrived in such large numbers in concentrated parts of the country that they are not inclined to acculturate. Immigrants and their children resist learning English, place allegiance in the interests of their ethnic communities and home countries, and reject the traditional Anglo-Protestant culture of the United States.[9]

Huntington's perspective is not rooted in original empirical research, but is rather a response to what he perceives to be cultural forces within the immigrant community that prevent current immigrants from assimilating. Critics have had no difficulty countering his theoretical assertions with evidence that immigrants are capable of assimilating culturally and linguistically. For instance, there is

little evidence that children of immigrants avoid learning English or that they continue to use their native languages past the second generation.[10] Nevertheless, Huntington's Hispanic-challenge theory remains important because it resonates with a certain set of the American public that continues to suspect, evidence to the contrary, that immigration harms the institutions of the nation.

On the more optimistic side of the culturalist approach are those researchers who have dusted off the traditional melting-pot theory for the twenty-first century. They argue that cultural and political assimilation continues to take place just as it has in the past and that immigrants assimilate not into specific segments of society, but rather into a broad mainstream that is simultaneously changed by them. The champions of the "new melting-pot" viewpoint, Richard Alba and Victor Nee, describe assimilation as "something that frequently happens to people while they are making other plans."[11] Although assimilation may take time, they say, the children of today's immigrants and subsequent generations will eventually join the body of society, even if they do not ultimately achieve upward mobility.

In Alba and Nee's new melting-pot view, exposure to the host society and assimilation are inevitable. For policy makers, this view implies the need to increase the exposure of children of immigrants to the institutions of the mainstream by, for example, accelerating their learning of English and providing migrant children and their families with information about educational programs and occupational opportunities. The challenge is to avoid the suggestion, implicit in the old melting-pot perspective, that assimilation essentially means imposing the dominant culture on newcomers.[12] As supporters of the new melting pot see it, the mainstream is changing along with immigrants: assimilation is a two-way process. According to Alba and Nee's perspective, assimilation is occurring. Social thinkers should be concerned more with its nature and mechanics than with its factual existence.

Structuralist Perspectives

Structuralist perspectives too can be organized by their degree of optimism about the future of immigrants and their children. According to the more pessimistic "generations-of-exclusion" hypothesis, so named after the book of that title by sociologists Edward Telles and Vilma Ortiz, immigrants and their children are isolated from the opportunities for mobility offered by the mainstream, not because they avoid assimilation, but because they belong to heavily disadvantaged ethnic and racial groups. In the generations-of-exclusion view, Hispanic immigrants and their descendants move into communities and segments of society that have been racialized—that is, identified in negative racial terms—and marginalized. Past waves of immigrants from Europe were able to assimilate both culturally and economically by gradually elbowing their way into the more privileged "white" segments of the American racial hierarchy.[13] By contrast, today's Hispanic immigrants, whose roots are European, risk becoming a distinct race with consistently worse outcomes than whites.

The research of Telles and Ortiz into Mexican American communities over several generations has borne out many of the expectations of this racialization view.[14] In 2000, they re-interviewed Mexican Americans who had been part of a 1965 study of the social condition of the Mexican American community. They then constructed a longitudinal data set following the original respondents

and their descendants into the third, fourth, and sometimes fifth generation. Most members of those latter generations, they found, still lived in predominantly Hispanic neighborhoods, married within their ethnicity, and identified as Mexican. Socioeconomic gains made between the first and the second generations stalled thereafter, as poverty rates in the third and fourth generations stayed high and educational attainment fell.

According to the generations-of-exclusion perspective, children of immigrants can expect to assimilate into the racial and ethnic categories seen as "theirs" by the host society. Outcomes, therefore, will not differ much across generations. These children will not join an all-inclusive American "mainstream," but rather settle into their place in a segmented and racially divided society. From a policy perspective, the aim would be to integrate the second and subsequent generations socially and economically primarily using the same strategies used to address racial and ethnic inequalities among native-born minorities.

Proponents of another structural theory, the "second-generation advantage," see benefits for children of immigrants from living in two societies and cultures. Empirical support for the idea of a second-generation advantage comes from a study of young adults in New York City conducted by Philip Kasinitz and his colleagues.[15] The study finds that members of the second generation supplement their searches for employment by tapping into immigrant social networks and by making use of resources and institutions established to aid native racial minorities achieve upward mobility.[16]

At its core, the second-generation-advantage perspective is that the information and support available to youths who exist at an intersection of several social and cultural currents give them a significant edge for upward mobility. From a public policy standpoint, the aim would be to maximize the ability of these youngsters to make use of their distinct resources. Part of doing so is recognizing that children of immigrants have multiple pathways for transitioning successfully to adulthood.

Between optimism and pessimism lies "segmented assimilation," a structural view that does not automatically predict positive or negative outcomes. From this perspective, the forces underlying second-generation advantage may indeed be at play, but specific groups of immigrants face distinct barriers to upward mobility. Three forces—the co-ethnic community, government policy toward these groups, and the groups' race and ethnicity—can work either to raise or to lower the barriers to successful assimilation. Supporters of segmented assimilation focus less on whether children of immigrants are assimilating and more on the segment of society that is their destination. They see assimilation not as leading automatically upward into the middle class, but also as potentially leading downward.[17]

The segmented-assimilation perspective is supported mainly by findings of the Children of Immigrants Longitudinal Study (CILS) by Alejandro Portes and Rubén Rumbaut. The CILS followed thousands of second-generation youths in San Diego and South Florida from middle school through high school and into post-college young adulthood. The original survey, conducted in 1992–93, interviewed a sample of 5,266 eighth- and ninth-grade students statistically representative of the universe of second-generation youths in these grades. This sample was

followed and re-interviewed in 1995–96, approximately by the time of high school graduation for most respondents. A random sample of 50 percent of parents was also interviewed at the same time. The final follow-up survey took place in 2002–03, when respondents had reached young adulthood. Approximately 70 percent of the original sample was contacted and re-interviewed. By following the youths through these vital years in personal development, Portes and Rumbaut were able to define predictors of their key social and economic outcomes later in life.

Three forces—the co-ethnic community, government policy toward these groups, and the groups' race and ethnicity—can work either to raise or to lower the barriers to successful assimilation.

According to the segmented-assimilation approach, the life trajectories of the second generation are predicted by the racial, labor, and socioeconomic sectors of the host society into which their parents were incorporated and by the resources at their parents' disposal to aid their offspring.[18] Each child must negotiate the advantages and disadvantages of his specific family background. Racial discrimination can severely diminish the life chances of second-generation youths who are identified by the host society as belonging to a disadvantaged minority. The sector of the labor market to which these youths gain access can also affect their lifetime economic well-being, especially because the U.S. labor market has become increasingly divided, with highly technical and well-paid occupations at the top, low-paid menial occupations at the bottom, and few opportunities in between. A youth's access to quality education will determine his ability to gain well-paid future employment at the top of this "hourglass" labor market.

Because of the importance of parental resources and the community context into which new immigrants are received, families of migrants entering the labor force at the bottom of the occupational hourglass can expect minimal upward mobility. But poorly endowed immigrant families can overcome their situation through "selective acculturation." Their children can learn the language and culture of the host society while preserving their home country language, values, and customs—simultaneously gaining a solid foothold in the host society and maintaining a bond with their parents' culture.[19] These children are thus in a better position to overcome the disadvantages suffered by their parents because they are protected from the negative effects of discrimination and the lure of gangs and street life.

Selective acculturation is distinct from second-generation advantage in that it is a strategy employed by parents and the immigrant community rather than by children themselves and is not common to all members of the second generation. Whereas the benefits of second-generation advantage depend on how well children situated between cultures can make use of community networks, the benefits of selective acculturation depend on the extent to which parents and a cohesive co-ethnic community prevent children from assimilating to the disadvantaged segments of the host society and induce them to retain key aspects of their home culture. Policy makers evaluating children of immigrants from

a segmented-assimilation perspective would recognize that assimilation does not necessarily bring about positive social or economic outcomes and that preserving elements of the parental culture and resisting uncritical acceptance of all features of the host nation can produce the best payoffs.

An emerging perspective that can also be classified within the structuralist camp emphasizes how birthplace and age at migration can shape subsequent educational and occupational outcomes. Rubén Rumbaut gave impetus to this view with his analysis of outcome differences among children born abroad and brought to the United States at different ages and native-born children of foreign or mixed parentage (the second and "2.5" generations).[20] Dowell Myers and his colleagues later built on the idea by finding a "gradient of socioeconomic outcomes" for Mexican immigrant women who arrived in the United States at different ages. Predictably, those who arrived as young girls became more proficient in English than did those who came as adolescents. Early arrivals also had significantly higher rates of high school graduation, though their advantage declined in terms of college graduation rates or access to white-collar occupations.

Similarly, Barry Chiswick and Noyna Deb-Burman concluded that youth who immigrated as teenagers had worse educational outcomes than did native-born youths of foreign parentage and native-parentage youths.[21] In terms of policy, the age-of-migration perspective points to the importance of programs targeted on adolescent immigrants, especially those from poor socioeconomic backgrounds. The linguistic and educational disadvantages of such youths can become insurmountable barriers to mobility without strong and sustained external assistance.[22]

Empirical Analysis of Adolescent Outcomes

In this section, we review certain key outcomes of the migrant adaptation process during adolescence. For reasons of space, we limit the review to those outcomes for which a substantial research literature has accumulated, leading to significant findings for both theory and policy.

Aspirations, Expectations, and Academic Performance

Much of the empirical work on immigrant adolescent adaptation focuses on the shaping power of aspirations and expectations—and for good reason. Sociologists and psychologists have provided consistent evidence of the influence of aspirations and expectations on adolescent outcomes. The underlying rationale is straightforward: adolescents who aspire to a university education may or may not fulfill their aspirations; but those who do not so aspire will not get that education. In this sense, adolescent aspirations are a necessary condition for subsequent achievement.

Empirical work on migrant children's aspirations is based primarily on databases such as the National Education Longitudinal Study (NELS); the National Longitudinal Study of Adolescent Health (Add Health); the Panel Study of Income Dynamics; and the census Integrated Public Use Microdata Series (IPUMS). Some studies draw on the publicly available CILS, while many others make use of ad hoc samples. The literature features a bewildering variety of definitions of outcomes and of units of analysis. Some studies differentiate between aspirations as symbolically ideal goals and expectations as realistic ones. Others lump the two as joint

indicators of general ambition. Some studies focus on parental expectations, others on those of migrant youths. Samples may be partitioned across generations—from the first to the second and even the 2.5 generation—and across individual nationalities, races, and pan-ethnicities.

Aspirations and Expectations: Areas of Agreement. Rather than review individual studies, we focus on general areas of agreement and cite sources. In general, studies in this area converge on five key points. First, immigrant children and children of immigrants (that is, the first and second generations) tend to have higher ambition (aspirations or expectations, or both) than their third-generation and higher counterparts and have generally superior academic performance.[23] The research supports Grace Kao and Marta Tienda's concept of "immigrant optimism" and Portes and Rumbaut's "immigrant drive." Generally speaking, studies agree with the hypothesis of second-generation advantage.[24] Second, immigrants of different national origins vary significantly in both ambition and performance. Asian-origin groups tend to have higher and more stable expectations and to perform better in school; Mexican and other Latin-origin groups and those from the black Caribbean scatter toward the opposite end of the spectrum.

These differences are partly attributable to parental socioeconomic status, but they do not entirely disappear after family status controls are introduced—that is, when the comparison is between groups with similar status.[25] These findings support segmented assimilation and, more broadly, the generations-of-exclusion perspective taken by Telles and Ortiz. Third, parents and peers powerfully influence the ambitions of both immigrant and native-parentage children, though that influence differs significantly by racial and ethnic group and immigrant national origin.[26] Fourth, girls consistently have higher ambition and perform better than boys, while older youngsters have lower aspirations and worse grades than their grade-school counterparts.[27] Finally, aspirations and academic performance are strongly correlated, although it is hard to say which causes which. The most plausible interpretation is a causal loop where these outcomes reinforce each other.[28]

Aspirations and Expectations: Novel Findings. Specific studies advance novel findings that point toward other important trends. Cynthia Feliciano, for example, emphasizes that parental status before migration has distinct effects on ambition and performance.[29] Ambition and performance thus depend less on absolute socioeconomic status than on status relative to the average in the country of origin. Krista Perreira and her colleagues and Patricia Fernández-Kelly highlight the importance of cultural capital brought from the country of origin. Although material capital may be higher among natives in the home country, cultural capital tends to be stronger among immigrants and their children, and it leads to a sustained upward drive. Perreira and her colleagues find, however—in support of the Telles and Ortiz generations-of-exclusion hypothesis—that cultural capital dissipates by the third generation.[30]

Kao and Tienda find that minority youths' aspirations are uniformly high in the early secondary grades, but that black and Hispanic students tend to lower their aspirations, while the ambition of whites and Asians remains stable through the high school years.[31] This conclusion confirms earlier findings that very high aspirations voiced by minority youths early in life may not be realistic.

In one intriguing study, Vivian Louie reports that Dominican-origin adolescents are more optimistic about their long-term prospects than are their Chinese-origin counterparts, despite their objectively lower academic performance. Louie attributes these differences to the specific frames of reference used by both groups. Dominican-origin youths tend to compare themselves with their counterparts in the island, leading them to assess their future optimistically; the Chinese, by contrast, compare themselves with their high-achieving co-ethnic peers and thus have more pessimistic expectations of their own chances.[32]

Self-Identification and Self-Esteem

Along with their aspirations and expectations, the self-identities and self-esteem of children of immigrants are key to their assimilation. Self-identities are the topic of a burgeoning literature that has produced a vast array of findings. Researchers' fascination with this topic is noteworthy because, as their work shows, identities are highly malleable, shifting significantly over time and across social contexts.[33] The question is how such a mutable and "soft" variable could have awakened so much interest. Part of the answer is that shifting self-identities lie at the core of the challenges faced by adolescents caught between different cultural worlds. For the most part, parents want their adolescent children to preserve at least some elements of their own identity and culture, while the host society, particularly schools, pulls in the opposite direction. Second-generation youths have been described as "translation artists" as they struggle with and eventually learn to meet these disparate expectations.[34]

Self-identities are also important because, under certain circumstances, they can trigger collective mobilizations in opposition to the existing sociopolitical order. The massive and violent protests in the suburbs of French cities in 2005 were largely triggered by disaffected second-generation youths who mobilized against what they saw as their permanently subordinate position in French society. Contrary to the "republican" ideology of the French state that sees its residents either as citizens or as immigrants and refuses to recognize any domestic ethnicities, these French-born youths often refuse to call themselves French.[35] Similarly, in California in 1994, American-born youths of Mexican origin mobilized in vast numbers against Proposition 187, the ballot initiative that prohibited illegal immigrants from using state social services, which they saw as a direct threat to their and their parents' identity.[36]

Self-Identity: Areas of Agreement. Research on self-identity too yields convergent empirical findings. We summarize five such findings and cite specific studies. First, place of birth and length of residence in the host society are powerful determinants of self-identity. The native-born second generation is significantly more likely to identify itself with the United States than are youths born abroad and brought to the United States in infancy. Other things being equal, the effect of length of residence for youths born abroad but brought to the new home country at an early age (the 1.5 generation) runs in the same direction. These trends are supported by both U.S.-based research and studies conducted in various European countries.[37]

Second, parental effects on self-identities are inconsistent. Higher parental status facilitates identification with the host society, while having a two-parent family in which both parents were born abroad slows it. High parental education commonly facilitates selective acculturation, which is reflected in the use of hyphenated self-identities. Poorly

educated parents who adhere closely to their culture of origin, in part by adopting an authoritarian style of parenting, can cause their adolescent children to reject the parental culture and national identity—what social scientists call "dissonant acculturation."[38] Third, education promotes a dual or "transnational" identity. Educated second-generation youths are generally tolerant of ambiguity and capable of incorporating diverse elements from different cultures. Instead of a pan-ethnic label, such as "Hispanic" or "Asian," they usually adopt a hyphenated American identity, such as Cuban American or Chinese American.[39]

Fourth, repeated incidents of discrimination by the receiving society lower self-esteem and trigger a reactive ethnicity among migrant youths. That experience often leads them to adopt a nonhyphenated national label, such as "Mexican," or to move from an American self-designation (hyphenated or not) to a pan-ethnic one.[40] Finally, immigrant youths of color such as blacks, mulattoes, mestizos, and Asians are more likely to experience discrimination and, hence, to develop a reactive ethnicity and adopt ethnic labels that they usually regard as very important. In contrast, children of white immigrants who adopt the nonhyphenated identity of the host society (that is, "American") tend to regard their self-designation as less salient.[41]

Self-Image: Other Findings

The American racial hierarchy has resulted in a plurality of self-designations among children of immigrants. The specialized literature distinguishes four basic categories: nonhyphenated Americans, hyphenated Americans, pan-ethnics, and nonhyphenated foreign nationals.[42] Contrary to optimistic views, not everyone joins the mainstream. Indeed, if joining the mainstream means adopting a nonhyphenated American identity, only a minority of second-generation youths do so. Most adopt other labels, not randomly but along patterned lines. As noted, hyphenated American identities are more common among more educated immigrant families, which adopt a path of selective acculturation.

Nonhyphenated foreign identities, such as "Mexican" and "Cambodian," are found among recent members of the 1.5 generation and also among those reeling from experiences of discrimination toward reactive ethnicity.[43] Pan-ethnic categories, such as Hispanic, are adopted by children disaffected with authoritarian parents and undergoing dissonant acculturation and by formerly "American" youths as a form of reactive ethnicity. It can also be used as a sign of conformity with the American ethnic hierarchy and the place a person occupies in it.[44]

Once adopted, for whatever reason, these pan-ethnic labels become stable and powerful. Among children of Latino immigrants, in particular, the pan-ethnic label "Hispanic" or "Latino" often ceases to be a purely ethnic category to become a "race." Table 2 reproduces data from CILS showing that although first-generation parents from Latin America seldom confuse their ethnicity with their race, their offspring do so commonly. For instance, although 93 percent of Cuban parents considered themselves "white," only 41 percent of their children agreed; the rest had mostly migrated to the pan-ethnic Hispanic as their "race." The same pattern is observable among second-generation Nicaraguans and other Latinos. Mexican American youths split between the pan-ethnic label Hispanic (25.5 percent) and their national origin label Mexican (56.2 percent) as their race.

Studies of specific national groups have yielded original and interesting findings.

Table 2. Racial Self-Identifications of Latin American Immigrants and Their Children, by Percent

National origin	Respondent	White	Black	Asian	Multiracial	Hispanic, Latino	National origin (Cuban, Mexican, etc.)	Other
Cuba	Parent	93.1	1.1	0.3	2.5	1.1	0.5	1.4
	Child	41.2	0.8	—	11.5	36.0	5.5	4.9
Mexico	Parent	5.7	—	2.1	21.6	15.9	26.1	28.5
	Child	1.5	0.3	—	12.0	25.5	56.2	4.5
Nicaragua	Parent	67.7	0.5	1.6	22.0	5.4	0.5	2.2
	Child	19.4	—	—	9.7	61.8	2.7	6.5
Other Latin countries	Parent	69.5	4.6	0.8	17.8	2.3	1.9	3.1
	Child	22.8	1.9	—	14.7	52.9	4.6	3.1

Source: Children of Immigrants Longitudinal Study parental and first follow-up survey. Reported in Alejandro Portes and Rubén G. Rumbaut, *Legacies* (University of California Press and Russell Sage Foundation, 2001), table 7–7.

Mary Waters, for example, found that self-identifications of second-generation West Indians split between a black American identity, an ethnic or hyphenated identity, and an immigrant identity. Youngsters who identify as black Americans tend to perceive more discrimination and lack of opportunities in the United States and therefore adopt a reactive self-designation. Those who identify as ethnic West Indians, hyphenated or not, perceive more opportunities in the United States and try hard to retain basic elements of their home culture as a means to achieve those opportunities. This effort, along with the solidarity shown to their parents, reflects a pattern of selective acculturation.[45] Similarly, Benjamin Bailey's study among Dominican Americans in Providence, Rhode Island, highlights their use of Spanish as a means to defend their "right" to a Hispanic identity, fending off the black designation foisted on them by the host society.[46] Further, Vivian Louie reports that the use of Spanish, plus frequent trips to the Dominican Republic, facilitates the adoption of a more cosmopolitan "transnational" identity among Dominican youngsters seeking to combine elements of both cultures.[47]

Self-Esteem: Convergent Findings. Self-esteem has been the topic of many sociological and social psychological studies of the second generation. Rosenberg's Self-Esteem Scale, developed by sociologist Morris Rosenberg almost fifty years ago, has been the instrument of choice in this research. Not surprisingly, repeated incidents of discrimination are found to lower adolescent self-esteem, as does a history of conflict with parents reflecting dissonant acculturation. Both Latino and Asian immigrants have reported these negative patterns.[48] High self-esteem is associated with both higher educational aspirations and higher academic performance, although the causal direction of these links has not been clearly established.[49]

Interestingly, self-esteem does not appear to vary significantly among adolescents who adopt different ethnic identifiers. One possible reason is that selecting an ethnic label is a way to protect self-esteem, both among youths undergoing selective acculturation and among those adopting a more critical reactive stance. Lisa Edwards and Andrea Romero found, for example, that Mexican-descent youths make use of vigorous coping

strategies, such as engaging with co-ethnics and adopting a pan-ethnic or nonhyphenated national identity, to protect their self-esteem from the stress of discrimination.[50]

Making use of the longitudinal data in the CILS, Portes and Rumbaut developed a predictive model of self-esteem by selecting determinants at average age fourteen and applying the Rosenberg Self-Esteem Scale to the same sample three years later. They found gender to be significant, with girls displaying lower average self-esteem despite their higher aspirations. Dissonant acculturation, as reflected in heavy parent-child conflict in early adolescence, significantly lowered self-esteem later in life. Conversely, selective acculturation, as indexed by fluent bilingualism, increased it. With all other predictors controlled, Southeast Asian–origin youths (Cambodian, Laotian, and Vietnamese) displayed the lowest self-esteem of all national origin groups.[51]

Other studies among Latin-origin youths, such as those by Stephanie Bohon and her colleagues, indicate that Cuban Americans tend to have significantly higher self-esteem than their Latin-origin counterparts.[52] The CILS data confirm this finding, especially when Cuban Americans are compared with Mexican Americans: self-esteem scores of the former exceed those of the latter by 25 percentage points. Such differences disappear, however, in multivariate regressions, indicating that they are primarily caused by factors such as parental status, length of U.S. residence, and fluent bilingualism.[53]

Linguistic Adaptation

Learning the language of the host society is indisputably a major precondition for moving ahead in it. More contested is the value and role of retaining parental languages. In a largely monolingual country such as the United States, nativist critics have repeatedly denounced the existence of linguistic enclaves, extolling the value of "English immersion" programs as a means to fully integrate foreigners into the American mainstream.[54] In a more academic vein, Hyoung-jin Shin and Richard Alba in the United States and Hermut Esser in Germany have argued that preserving the use of foreign languages yields little in the way of economic returns to the second generation and that the key priority is to acquire fluency in the host-country tongue.[55]

Linguistic Adaptation: Areas of Agreement. Research in linguistics, educational psychology, and sociology takes a more positive view of preserving foreign language use and converges in the following three points. First, fluent bilingualism is associated with higher cognitive development. Second, fluent bilingualism is associated with higher academic performance and higher self-esteem in adolescence.[56] Third, fluency in the language of the host society is almost universal among second-generation youths; fluency in the parental languages is much less common.[57]

Linguistic Adaptation: Other Findings. The direction of causal influence between bilingualism and cognitive development and between bilingualism and academic performance has not been clearly established. In a pioneering longitudinal study of Spanish-speaking Puerto Rican students, Kenji Hakuta and Rafael Diaz found that fluent bilingualism was a positive and significant influence on subsequent academic performance.[58] Data from CILS confirm this association, but not its causal direction. Nevertheless, recent studies consistently report that students coming from a bilingual and bicultural background have higher test scores, higher

probability of high school graduation, and a higher probability of attending college.[59] In all likelihood, the relationship between cognitive development and bilingualism is mutually reinforcing. For linguist J. Cummins, the cognitive advantage of bilinguals lies in their ability to look at language rather than through it to the intended meaning, thus escaping the "tyranny of words."[60]

In addition to its positive link with cognitive development, fluent bilingualism also keeps open the channels of communication with parents and allows second-generation youths to acknowledge and value aspects of the parental culture, thus promoting selective acculturation. By contrast, in the United States, English monolingualism among children combined with foreign monolingualism among parents has been found to produce dissonant acculturation in adolescence.[61] Ted Mouw and Yu Xie report that fluent bilingualism improves school performance when parents are foreign monolinguals, but that the effect ceases to be significant when parents become fluent in English. They attribute this difference to the influence of parental aspirations on children's performance and the differential capacity of parents to communicate these goals to their offspring.[62] In other words, parents who are foreign monolinguals are able to convey and explain their aspirations to children who are fluently bilingual in a way that they could not if the children had lost the parental language. Once these parents have acquired fluency in English, they can convey their views and aspirations even if their children have become English monolinguals. This pattern —with both parents and children learning the language of the host society—is defined as "consonant acculturation."

Mexican American novelist Richard Rodriguez put the consequences of English monolingualism and subsequent dissonant acculturation in a more poignant personal vein: "I knew that I had turned to English only with angry reluctance. . . .I felt that I shattered the intimate bond that once held the family close. . . .I was not proud of my mother and father. I was embarrassed by their lack of education. . . .Simply what mattered to me was that they were not like my teachers."[63]

Determinants of bilingual fluency in the second generation include, predictably, two-parent families where both parents were born in a foreign country and the use of a foreign language at home. Another predictor is parental status, with higher-status parents having greater resources for sustaining dual-language fluency in their children. Gender is also important, with females more likely than males to be bilingual—a characteristic attributed to the greater tendency of girls to remain at home and, hence, be more susceptible to parental cultural influences.[64]

Portes and Rumbaut report that, by age seventeen, only 28.5 percent of the CILS sample could be classified as fluent bilinguals. Among Asian-origin youths, the figure was lower than 10 percent; among Latinos, it hovered around 40 percent. The difference is attributable to the lack of a common language among Asian immigrants and to greater resources for linguistic preservation among Latin Americans. Interestingly, differences in bilingual fluency among the Asian and Latino second generation correlate with differences in self-esteem favoring the latter, despite their lower average family status.[65]

Adult Outcomes

The empirical literature addressing adulthood, when decisions and events of childhood and adolescence crystalize into durable outcomes, is marred by several shortcomings.

First, there is a strong tendency among researchers to lump data into pan-ethnic categories, which obscure more than they reveal.[66] The label "Hispanic," for example, combines multiple national origin groups and multiple generations, concealing the considerable differences among them. The label "Asian" is still more egregious, because the groups so labeled do not even share a common language. Second, studies of the second generation in adulthood have been mostly cross-sectional "snapshots in time," relying on retroactive reports—survey questions asking respondents to recall and report events that took place in the past, often many years earlier—to measure events occurring in earlier life stages. Such designs suffer two major flaws. First, they cannot establish a reliable causal order among variables, because retroactive reports about earlier "causes" are easily colored by subsequent events. Even more important, adult samples—even those drawn randomly—exclude members of the relevant population who have for various specific reasons fallen off the universe used for sampling. In the case of the second generation, key outcomes indicative of a downward assimilation path, such as being imprisoned for a felony, being deported (in the case of the 1.5-generation youths), or leaving the country for various reasons, remove those individuals from the population normally used as a sampling frame. Ensuing findings inevitably yield an over-optimistic account of the assimilation process.

Two main data sources for the evaluation of adult outcomes remain. The first is analysis based on a combination of decennial census and quarterly Current Population Survey (CPS) data. The second source is one of the few longitudinal studies conducted so far on the second and higher generations.

One of the pivotal studies based on publicly available census data was conducted by Rumbaut, who used 2000 census data for the foreign-born population and adjusted results on the basis of combined 1998–2002 CPS data to yield estimates for the second generation. Thus defined, the foreign-born population of the United States in 2000 numbered 33.1 million and the second generation 27.7 million. Some 40 percent of the foreign-born arrived in the United States as children under eighteen.[67] Table 3 summarizes the extensive tables constructed by Rumbaut on the basis of these data for the foreign-born who arrived as children (under eighteen) and the native-born of foreign parentage—the second generation "proper." The table includes data for three major Latin American national origin groups, including Mexicans; three Asian groups; and, for purposes of comparison, native-parentage whites and blacks of the same age cohort.

Results of the Rumbaut study can be summarized as follows. First, all national origin groups make significant progress from the first to the second generation in educational attainment, with second-generation outcomes approaching average outcomes for native whites. Second, although all national origin groups make educational progress, second-generation Mexicans and Central Americans fall significantly behind native whites in rates of high school completion and college graduation. Second-generation Cubans are even with whites, and all Asian national origin groups exceed native-white educational averages in both the first and second generations. Third, male incarceration rates increase for all national origin groups between the first and second generations. Mexican incarceration rates increase the most, and all Latin American second-generation rates significantly exceed the native-white figure. By

Table 3. Assimilation Outcomes across Generations, by Percent, ca. 2000

National origin	Foreign-born*		Native-born**		Foreign-born*	Native-born**	Foreign-born*		Native-born**	
	Education						Female fertility rate**** Ages:			
	High school dropout	College graduate	High school dropout	College graduate	Male incarceration rate***		15–19	20–24	15–19	20–24
All children of immigrants	31.4	23.2	11.6	27.3	1.25	3.50	3.3	19.7	2.6	17.4
Latin American origin										
Cuban	16.9	22.9	9.1	36.7	2.79	4.20	2.3	18.1	1.8	11.4
Guatemalan/ Salvadoran	53.1	6.4	22.5	23.8	0.75	3.04	4.5	22.9	3.0	16.5
Mexican	61.4	4.3	24.1	13.0	0.95	5.80	5.5	30.2	5.0	25.2
Asian origin										
Chinese	9.0	58.0	3.6	72.5	0.30	0.65	0.3	1.9	0.4	0.9
Indian	6.7	59.4	5.9	72.0	0.29	0.99	0.7	4.3	0.36	1.6
Korean	3.2	59.6	3.2	69.4	0.38	0.94	0.5	3.9	0.2	2.8
Native parentage										
White	—	—	9.1	30.7	—	1.71	—	—	1.9	15.6
Black	—	—	19.3	14.1	—	11.61	—	—	4.5	22.5

Source: Rubén G. Rumbaut, "Turning Points in the Transition to Adulthood," *Ethnic and Racial Studies* 28 (November 2005): tables 2–4.
*Adults aged 25–39, restricted to those who arrived in the United States as children under 18.
**Adults aged 25–39. Data are for individuals with at least one foreign-born parent.
***Adult males, aged 18–39, in correctional institutions at the time of the 2000 census.
****Females of the indicated ages who had one or more children at the time of the 2000 census.

contrast, Asian incarceration rates are very low in both the first and second generations. Fourth, female fertility rates in adolescence and early adulthood decline across generations for all Latin national origin groups, but they decline least among Mexican Americans. Mexican fertility rates far exceed those of native-white females and are even higher than the native-black figures, which are the next highest. Fifth, Asian fertility rates are extremely low and decline further between generations. Both rates represent but a fraction of the native-white figures.

As a whole, these findings from the Rumbaut study are congruent with the segmented-assimilation hypothesis. They also provide support for the new melting-pot perspective advanced by Alba and Nee, with its vision of an inclusive mainstream, by showing significant average educational progress and declines in fertility rates from the first to the second generations.

The first source of longitudinal data for evaluating adult outcomes is CILS, described previously. Because CILS is the empirical basis for the segmented-assimilation model, it is not surprising that its results support this perspective. Although the CILS study suffers from several limitations, including an original sample restricted to two metropolitan areas and significant attrition by the final survey, its main strength is that it is longitudinal, repeatedly observing the same sample of people over time, thus preventing the censoring of negative assimilation outcomes. It also establishes a clear time order among variables. Table 4 and figures 1, 2, and 3 present a summary of results from the final CILS survey, when

Table 4. Adaptation Outcomes of Children of Immigrants in Early Adulthood, 2002–03, by Percent unless otherwise specified

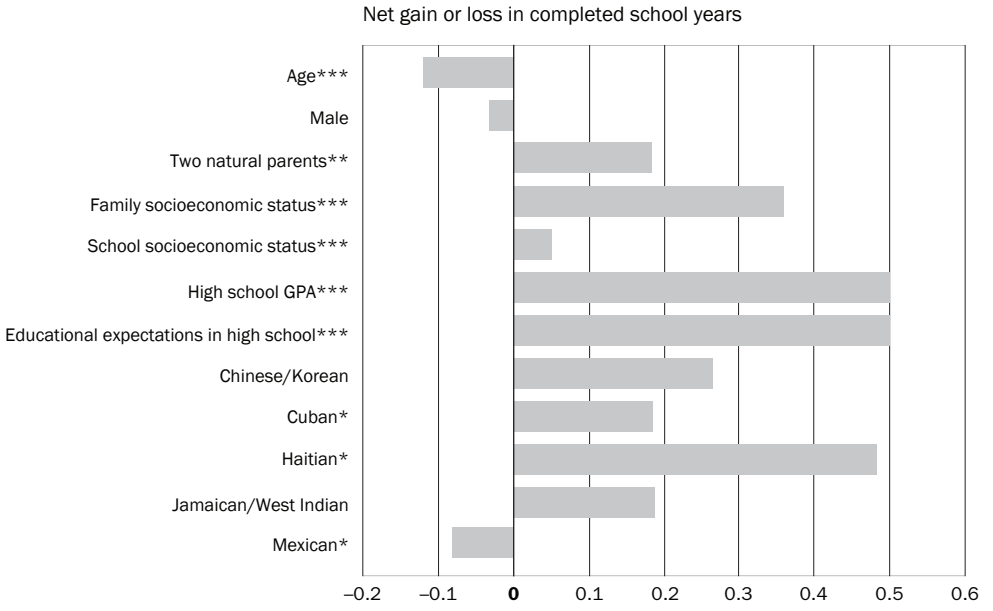
National origin	Outcome									
	Education		Family income*		Unemployed**	Had at least one child		Incarcerated***		
	Mean years	**Percent high school only or less**	**Mean ($)**	**Median ($)**		**Total**	**Females**	**Total**	**Males**	**Number**
Cambodian/ Laotian	13.4	46.7	36,504	24,643	15.5	22.9	31.1	4.6	10.5	158
Haitian	14.4	15.3	33,471	26,000	18.8	24.7	30.8	7.7	14.7	97
Jamaican/ West Indian	14.6	17.6	39,565	29,423	9.5	24.5	25.4	6.0	18.2	159
Mexican	13.4	37.9	39,589	32,828	9.2	40.8	48.0	9.3	17.0	424
Chinese/ Korean	15.5	6.8	47,723	31,136	14.8	6.5	0.0	0.0	0.0	62
Cuban****	15.3	8.1	103,992	69,737	3.0	3.0	0.0	3.2	3.7	135
Filipino	14.5	15.9	64,986	55,167	9.5	19.7	24.8	3.8	5.8	593
Total*****	14.3	22.5	55,624	41,668	8.5	20.3	24.9	5.1	9.2	3,249

Sources: Children of Immigrants Longitudinal final survey, 2002–03; William Haller, Alejandro Portes, and Scott M. Lynch, "Dreams Fulfilled, Dreams Shattered," *Social Forces* (forthcoming, 2011); and Alejandro Portes, Patricia Fernández-Kelly, and William Haller, "The Adaptation of the Immigrant Second Generation in America," *Journal of Ethnic and Migration Studies* 35, no. 7 (2009): 1077–104.
*Respondent's family income, whether living with parents or spouse/partner.
**Respondents without jobs, whether looking or not looking for one, except full-time students.
***Self-reports supplemented by searches of publicly available information on incarcerated persons in the Web pages of the California and Florida corrections departments.
****Sample limited to respondents who attended private bilingual schools in Miami during the first survey, 1992–93.
*****The average age of the final follow-up sample was twenty-four. Results uncorrected for sample attrition. See text for explanation.

respondents had reached an average age of twenty-four. Table 4 presents the data broken down by major national origin groups; figures 1, 2, and 3 summarize results of a series of multivariate models predicting educational and occupational achievement in adulthood, as well as events indicative of downward assimilation.[68]

Findings from table 4 and figures 1–3 can be summarized in four main points. First, significant and nonrandom differences across second-generation national origin groups generally correspond with the known profile of the first generation in terms of human capital and also in the way they were received in the United States. Early school dropout, for example, ranges from a low of 6.8 percent among Chinese and Koreans to a high of 47 percent among Cambodians and Laotians. Similarly, teenage child-bearing rates among females range from 0 percent for second-generation Chinese, Koreans, and Cubans to a remarkable 48 percent among Mexican females. Second, good early school grades and positive early educational expectations significantly increase educational attainment and occupational status while preventing downward assimilation. Third, having higher-status parents and being raised by both natural parents also raise educational levels and powerfully inhibit downward assimilation. Fourth, even after controlling for parental variables and early school context and outcomes, there are still differences among national origin groups, especially those associated with a disadvantaged upbringing. Mexican American youths, for example, have a net 19 percent greater chance of experiencing events associated with downward assimilation; the figure rises to 33 percent among

Figure 1. Determinants of Educational Attainment of Children of Immigrants in Early Adulthood, 2002–03



Sources: William Haller, Alejandro Portes, and Scott M. Lynch, "Dreams Fulfilled, Dreams Shattered," *Social Forces* (forthcoming, 2011); Alejandro Portes, Patricia Fernández-Kelly, and William Haller, "The Adaptation of the Immigrant Second Generation in America," *Journal of Ethnic and Migration Studies* 35, no. 7 (2009): 1077–104.
Note: Bars represent net effects in completed school years with other variables controlled. Statistical significance is signaled by asterisks as follows: probability of a chance effect is less than 5 in 100 = *; less than 1 in 100 = **; less than 1 in 1,000 = ***.

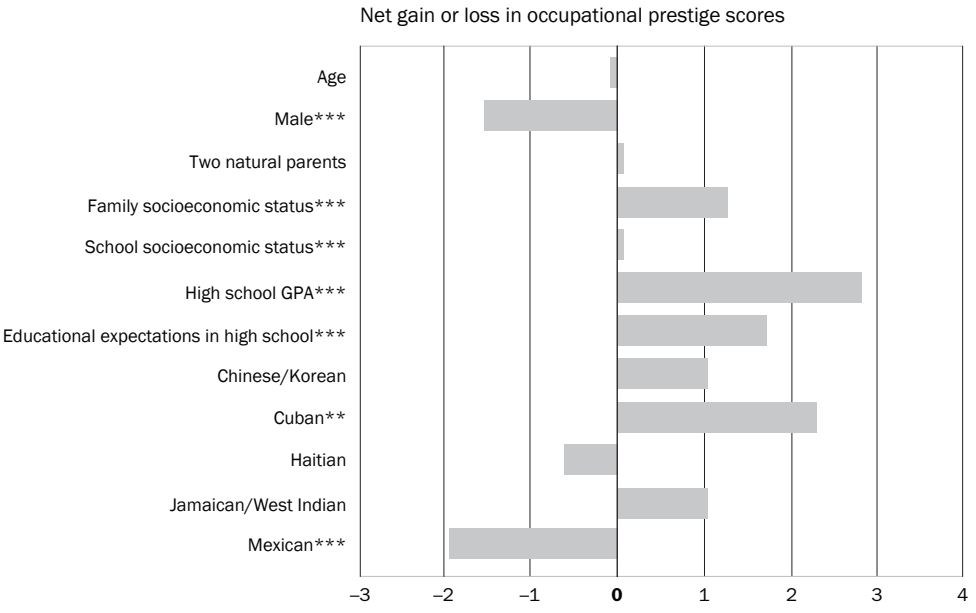
second-generation Haitians and to 46 percent among Jamaicans and other West Indians.

Findings in table 4 and figures 1–3 are uncorrected for attrition. Separate analyses showed that mortality for the sample in the final CILS survey was predicted mainly by low family socioeconomic status and single-parent families—the same two factors that also lower achievement and raise the incidence of downward assimilation. Correcting for sample attrition, therefore, would simply inflate the follow-up sample and further increase observed inequalities among youths from different family backgrounds.

The second source of longitudinal data in this field is the survey of Mexican Americans by Telles and Ortiz, which furnished the empirical basis for the generations-of-exclusion thesis. Although findings are limited to a single national origin group, they go beyond earlier studies in tracing how the assimilation process unfolds after the second generation. The fundamental, and disturbing, finding of the study is that although there is educational progress between the first and second generations, subsequent generations stagnate educationally and occupationally. They never catch up with the native-white averages.

For instance, the odds that the Mexican high school graduation rate will equal the white high school graduation rate rise from only .06 among first-generation immigrants to .58 among their second-generation children, but then decline to .30 among members of the fourth and fifth generations. (Odds less than 1

Figure 2. Determinants of Occupational Attainment of Children of Immigrants in Early Adulthood, 2002–03



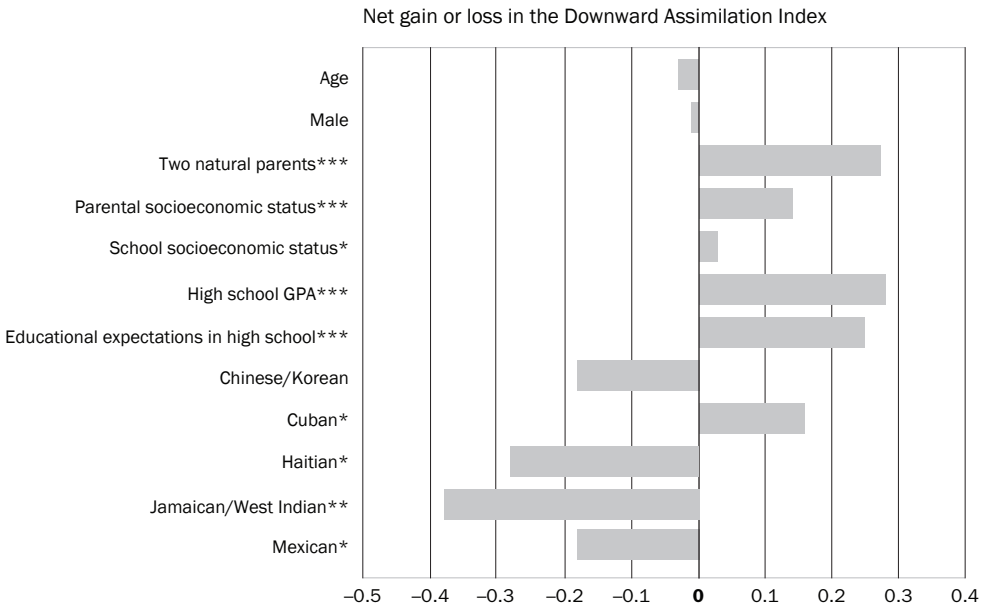
Sources: William Haller, Alejandro Portes, and Scott M. Lynch, "Dreams Fulfilled, Dreams Shattered," *Social Forces* (forthcoming, 2011); Alejandro Portes, Patricia Fernández-Kelly, and William Haller, "The Adaptation of the Immigrant Second Generation in America," *Journal of Ethnic and Migration Studies* 35, no. 7 (2009): 1077–104.
Note: Bars represent net effects in Treiman occupational prestige scores with other variables controlled. Statistical significance is indicated by asterisks as defined in figure 1.

indicate a lower probability than whites; .58 indicates that second-generation Mexicans are .58–to–1 as likely to graduate from high school as whites.) The odds of achieving a college degree follow a similar course—from .12 in the immigrant generation to .28 in the second, declining again to .12 in the fourth and higher generations.[69]

After examining a number of possible determinants of this persistent handicap, Telles and Ortiz pin primary responsibility on the "racialization" of Mexican American children, who are stereotyped by teachers and school authorities as inferior to white and Asian students and treated accordingly. This treatment becomes a self-fulfilling prophecy, as Mexican-origin youths close ranks to defend themselves against discrimination, abandoning aspirations for high academic achievement and coming to reject members of their own group who retain such aspirations.[70] Telles and Ortiz summarize the experience as follows: "The signals and racial stereotypes that educators and society send to students affect the extent to which they will engage and persist in school. Racial stereotypes produce a positive self-identity for white and Asian students but a negative one for blacks and Latinos, which affect school success. . . .Racialized self-perceptions among Mexican American students generally endure into the third and fourth generations."[71]

These conclusions contradict optimistic accounts of the assimilation process across generations, as well as the notion of an

Figure 3. Determinants of Upward Assimilation among Children of Immigrants in Early Adulthood, 2002–03



Sources: William Haller, Alejandro Portes, and Scott M. Lynch, "Dreams Fulfilled, Dreams Shattered," *Social Forces* (forthcoming, 2011); Alejandro Portes, Patricia Fernández-Kelly, and William Haller, "The Adaptation of the Immigrant Second Generation in America," *Journal of Ethnic and Migration Studies* 35, no. 7 (2009): 1077–104.
Note: Bars represent net effects in the Downward Assimilation Index with other variables controlled. Effects have been reflected so that positive scores indicate upward assimilation. Statistical significance is indicated by asterisks, as defined in figure 1.

all-inclusive mainstream. They confirm the segmented-assimilation hypothesis on two points. First, immigrants' reception by the host community plays a decisive role in assimilation outcomes. Second, the achievement drive that first-generation immigrants seek to transmit to their offspring dissipates with increasing acculturation.

Policy Implications

From this review, it is evident that the assimilation of immigrants and their children to the host societies is not simple, homogeneous, or problem-free. Empirical work shows that, on the positive side, much progress is made, on average, from the first to the second generation, both culturally and socioeconomically. On the less rosy side, many individuals and entire groups confront significant barriers to advancement, either because they lack economic resources and skills or because they are received unfavorably by the host community.

The varied theoretical perspectives differ widely in the specific assimilation outcomes they regard as being most important. For researchers of the culturalist school, it is most important for immigrants and their children to acculturate, shedding their old ways and language and becoming undifferentiated from the rest of the American population. Whether they move upward is less important than that they cease to be "foreign." Huntington's Hispanic-challenge view is that immigrants in general and Hispanics in particular do not want to join the mainstream. Although Alba and Nee's new melting-pot perspective provides a more nuanced account, with attention to socioeconomic outcomes, their overall

emphasis is still on children of immigrants' joining the mainstream and losing their ethnic distinctiveness in the process.

Structuralist writers are much more concerned with socioeconomic outcomes. While the second-generation-advantage thesis of Kasinitz and his colleagues fits within this school, its optimistic conclusions are largely predicated on second-generation youths in New York City becoming "true" New Yorkers; it does not seem to matter much if, in the end, they attain only rather mediocre jobs. The remaining perspectives are more mindful that immigrants and their descendants can fully acculturate and still neither move upward occupationally and economically, nor be accepted into native middle-class circles. The aspirations of immigrant parents clearly line up more closely with the structural than the cultural viewpoint: the parents generally care much less that their offspring join an undifferentiated mainstream than that they move ahead educationally and economically.

If upward mobility is the goal, the data at hand indicate that many migrant children are not making it. The overall advancement of this population is largely driven by the good performance and outcomes of youths from professional immigrant families, positively received in America, or of middle-class refugees who have benefited from extensive governmental resettlement assistance[72] and, sometimes, from strong co-ethnic communities. For immigrants at the other end of the spectrum, average socioeconomic outcomes are driven down by the poorer educational and economic performance of children from unskilled migrant families who are often handicapped further by an unauthorized or insecure legal status. From a policy viewpoint, these children must be the population of greatest concern.

A first urgent policy measure is the legalization of 1.5-generation youths who are unauthorized migrants. These children, brought involuntarily into the United States by their parents, find themselves blocked, through no fault of their own, from access to higher education and many other everyday needs, such as driver's licenses, because of their status. This is not an insignificant population. In 2008, it was estimated to number 6 million and included almost half of immigrant youths aged eighteen to thirty-four.[73] As Rumbaut and Golnaz Komaie put it: "For foreign-born young adults, an undocumented status blocks access to the opportunity structure and paths to social mobility. It has become all the more consequential since the passage of draconian federal laws in 1996… and the failure of Congress to pass comprehensive immigration reform."[74]

"DREAM Acts" repeatedly introduced in the U.S. Congress to regularize this population and grant them access to opportunities open to others have stalled. Passage of such legislation is urgently needed lest the situation of this large 1.5-generation population devolve into a self-fulfilling prophecy in which youths barred from conventional mobility channels turn to gangs and other unorthodox means of self-affirmation and survival.

The limited longitudinal data available on the adaptation of migrant children point to the importance of volunteer programs and other forms of outside assistance to guide the most disadvantaged members of this population and help them stay in school. A recent study based on the final CILS survey found that respondents who had managed to succeed educationally despite having poor and undocumented parents and an otherwise handicapped upbringing had consistently been supported by volunteers who came to their schools and

exposed them to a different social world.[75] The same study found that cultural capital brought from the parents' home country provided a significant boon because it anchored adolescent self-identities and strengthened their aspirations. These cultural memories helped fend off discrimination and maintain a disciplined stance toward schoolwork.

Cultural capital from the home country sustains and is sustained by selective acculturation. By contrast, dissonant acculturation across generations deprives youths of cultural capital. As they lose contact with or even reject the language and culture of parents, whatever resources are embodied in that culture effectively dissipate. Rejecting parental cultures may facilitate joining an amorphous mainstream, but often at the cost of abandoning those social and social psychological resources that assist structural mobility. The available evidence supports the paradox that preserving the linguistic and cultural heritage of the home countries often helps migrant children move ahead in America.

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Poverty and Program Participation among Immigrant Children

George J. Borjas

Summary

Researchers have long known that poverty in childhood is linked with a range of negative adult socioeconomic outcomes, from lower educational achievement and behavioral problems to lower earnings in the labor market. But few researchers have explored whether exposure to a disadvantaged background affects immigrant children and native children differently. George Borjas uses Current Population Survey (CPS) data on two specific indicators of poverty—the poverty rate and the rate of participation in public assistance programs—to begin answering that question.

He finds that immigrant children have significantly higher rates both of poverty and of program participation than do native children. Nearly half of immigrant children are being raised in households that receive some type of public assistance, compared with roughly one-third of native children. Although the shares of immigrant and native children living in poverty are lower, the rate for immigrant children is nonetheless about 15 percentage points higher than that for native children—about the same as the gap in public assistance. Poverty and program participation rates among different groups of immigrant children also vary widely, depending in part on place of birth (foreign- or U.S.-born), parents (immigrant or native), and national origin.

According to the CPS data, these native-immigrant differences persist into young adulthood. In particular, the program participation and poverty status of immigrant children is strongly correlated with their program participation and poverty status when they become young adults. But it is not possible, says Borjas, to tell whether the link results from a set of permanent factors associated with specific individuals or groups that tends to lead to "good" or "bad" outcomes systematically over time or from exposure during childhood to adverse socioeconomic outcomes, such as poverty or welfare dependency. Future research must explore the causal impact of childhood poverty on immigrant adult outcomes and why it might differ between immigrant and native families. Developing successful policies to address problems caused by the intergenerational breeding of poverty and program participation in the immigrant population depends on understanding this causal mechanism.

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Poverty in childhood has long been recognized as a determinant of a wide range of negative socioeconomic outcomes from lower educational achievement and behavioral problems to lower earnings in the labor market. But few researchers have explored whether childhood poverty affects native and immigrant children differently. In this article, I use data on two specific indicators of poverty—the poverty rate and the rate of participation in public assistance programs—to begin answering that question. The data suggest that the program participation rate is significantly higher for immigrant children than for native children. Nearly half of immigrant children—a remarkably large fraction—are being raised in households that receive some type of public assistance, compared with roughly one-third of native children. Although the shares of immigrant and native children living in poverty are lower, the rate for immigrant children is nonetheless about 15 percentage points higher than that for native children—the same as the gap for public assistance. The evidence also suggests that these native-immigrant differences persist into young adulthood. In particular, the program participation and poverty status of immigrant children is strongly correlated with their program participation and poverty status a decade later when they become young adults. It is not possible, however, to tell whether this link results from a long-term persistence in socioeconomic outcomes or is a causal effect of the adverse exposure that occurs during the childhood years.

The exact implications of these findings are not yet completely understood, but they have potentially significant policy and social ramifications. Over the past four decades, the foreign-born share of the U.S. population grew from 4.7 percent to 12.9 percent—an increase that presages rapid growth in the next few decades in the number of children born in the United States with at least one foreign-born parent.[1] In an important sense, the close link between the skills of parents and those of their children suggests that current immigration policy has already determined the skill endowment of the workforce for the next two or three generations. Therefore, understanding both the impact of immigration and the likely future trends in socioeconomic conditions for a large and growing segment of our population requires a careful study of "the coming of age" of immigrant children.

Filling a Gap in the Research

Much of the immigration literature in the social sciences, however, focuses on trends in the relative skills of immigrants or determining how immigration alters the economic opportunities available to the native-born population. Some immigration studies examine the social mobility of immigrant households.[2] The notion that social, cultural, and economic differences between immigrants and natives fade over the course of a few generations is the essence of the melting-pot hypothesis. Over time, the children and grandchildren of immigrants tend to move out of ethnic enclaves, discard their social and cultural background, and become indistinguishable from the native population. Estimates of the rate of intergenerational convergence across the many national origin groups suggests that although the melting pot operates, the economic differences observed among the various groups may not dissolve for at least two or three generations.

Although this long-run perspective is insightful, the examination of the well-being of immigrant children changes the focus of

analysis from the rate of intergenerational social mobility to a host of short-run concerns that can increase our understanding of the experiences of immigrant households. For example, how does the background of immigrant families influence the socioeconomic outcomes for immigrant children? Do these background characteristics explain a significant part of the observed differences between native and immigrant children and among the various national origin groups within the immigrant population?

One such background characteristic is poverty. A large literature has isolated the incidence and timing of poverty during childhood as a crucial determinant of a wide array of socioeconomic outcomes both in the short and long run.[3] For example, evidence shows that growing up in a poor household can adversely affect a child's academic achievement. Similarly, poverty correlates strongly and negatively to the probability that a child graduates from high school. Some studies attempting to uncover the root causes of these adverse outcomes have found evidence suggesting that poverty affects social and emotional development, with children raised in poverty having a higher incidence of behavioral problems that are likely to mar the school experience and lead to poorer academic outcomes.[4]

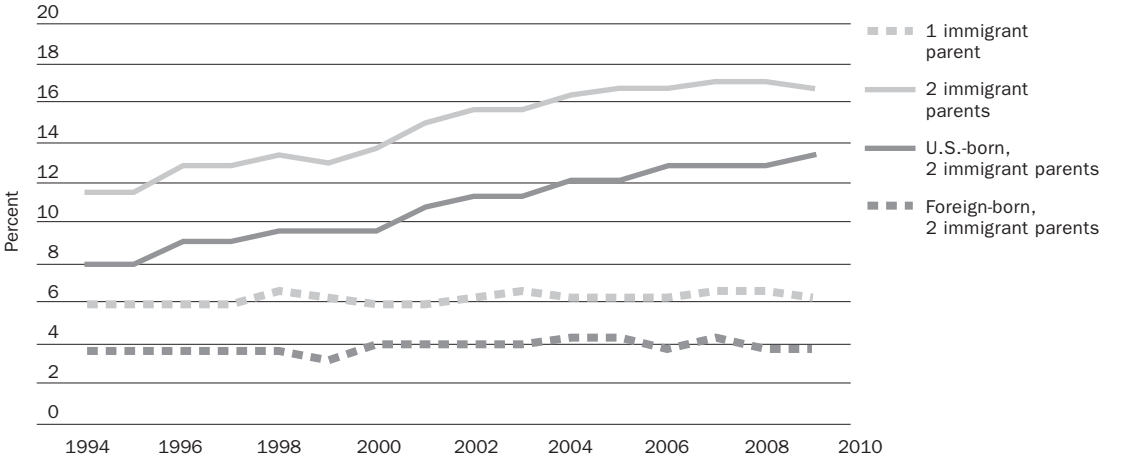
That the negative impact of childhood poverty extends well beyond academic achievement is also well known. Poor children, for instance, experience less favorable health outcomes, including a higher propensity for low birth weight and a higher mortality rate in the first month of life.[5] The health-related consequences continue into adolescence. Poorer children have a greater risk of experiencing accidents and injuries and a higher probability of teen childbearing. Finally, the literature shows that the impact of childhood poverty persists into adulthood.[6] A poverty spell during childhood increases the probability that the adult will have lower earnings and greatly increases the probability that the adult will also experience a poverty spell. In other words, childhood poverty breeds adult poverty.

Much of the literature examining the incidence of childhood poverty and the link between childhood poverty and other socioeconomic outcomes ignores the potential differences that may exist between immigrant and native children. The frequency and the length of poverty spells likely differ between immigrant and native children (as well as among the national origin groups that make up the immigrant population). Moreover, child poverty could potentially have different consequences for immigrant and native children. Put differently, exposure to a disadvantaged background may imply different things for different groups of children, particularly because the immigrant experience introduces distinct factors that native children avoid (such as a temporary family separation resulting from the vagaries of immigration law).

The Population of Immigrant Children: A Descriptive Analysis

The U.S. Census Bureau began to collect information on the birthplace of participants and their parents in the Current Population Survey (CPS) in 1994. The Annual Demographic Files of the CPS (also known as the March Supplements) provide detailed information about whether a family's total income is below the poverty threshold and whether the household participated in various types of social assistance programs during the calendar year before the survey. The evidence summarized below for immigrant and native households over the past fifteen years is

Figure 1. Trends in the Share of Immigrant Children, 1994–2009



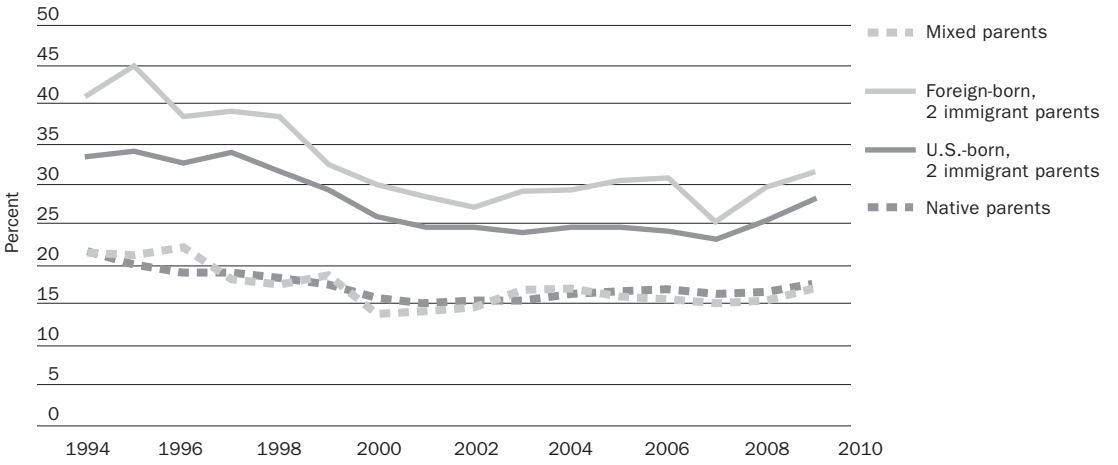
Source: Author's calculations from the 1994–2009 March Current Population Surveys.
Note: The population of children includes all persons aged seventeen or less.

drawn from those data in the 1994–2009 CPS March Supplements. The observed trends during this period reflect the combined impact of the enactment of welfare reform legislation in 1996, the continuation of a high volume of legal and illegal immigration into the United States, and a lengthy economic boom followed abruptly by a deep recession.

A crucial first step is the definition of "immigrant children." The definition used in most of the other articles in this volume defines immigrant children as those who are foreign-born and migrate to the United States with their foreign-born parents and those who are U.S.-born to one or two immigrant (foreign-born) parents. I place immigrant children into three groups: children who have one immigrant parent (here called "mixed parents");[7] foreign-born children who have two immigrant parents; and U.S.-born children who have two immigrant parents. The differences in socioeconomic outcomes between these three groups of immigrant children are important, so they will be differentiated throughout the analysis. Finally, the residual group is composed of "native" children—U.S.-born children whose parents also were born in the United States. Figure 1 summarizes the trend since 1994 in the relative size of the various groups of immigrant children aged seventeen or younger, classified according to the birthplace of the parents and of the children.[8]

The fraction of children who have at least one immigrant parent has increased substantially, from 17.5 percent of all children in 1994 to 23.2 percent in 2009. The fraction of mixed-parent children in the population hovered around 6 percent throughout the entire sample period, while the fraction of children with two immigrant parents rose from 11.6 to 16.9 percent. The rate of increase in the share of immigrant children is much higher than the corresponding increase in the share of foreign-born persons in the total population. In 1994, 9.6 percent of the total U.S. population was foreign-born; by 2009, the foreign-born share had increased to 12.9 percent.

Figure 2. Trends in the Poverty Rate of Children, 1994–2009



Source: Author's calculations from the 1994–2009 March Current Population Surveys.
Note: The poverty rate gives the fraction of households with incomes below the poverty threshold.

The vast majority of immigrant children—around 80 percent—are, in fact, born in the United States.[9] While the fraction of immigrant children born abroad has remained relatively constant (around 4 percent of all children throughout the period), the fraction of immigrant children born in the United States rose dramatically, from under 12 percent of all children in 1994 to almost 17 percent by 2009.

Poverty and Program Participation Rates

The socioeconomic background of the households where immigrant children are raised is likely to have lasting influence on a wide array of outcomes as these children grow up, complete their education, and enter the labor market. As noted, a crucial variable that may have long-term detriments is the likelihood that the immigrant child grows up in a poor household. Although a large literature documents the consequences of childhood poverty on a wide array of socioeconomic outcomes, the existing studies do not typically examine the poverty or public assistance participation rates of immigrant children, much less study the long-term consequences of a disadvantaged childhood in an immigrant household. Researchers and policy makers can thus view this article as a first attempt to document issues related to poverty and program participation among immigrant households in the past decade and to reveal the trends that may become important determinants of future outcomes in this population.

The poverty rate is defined as the fraction of children in a particular group that is being raised in households where family income is below the poverty threshold. Figure 2 illustrates the trends in poverty rates among the various groups of children being examined. Note, for example, that neither the level nor the trend in poverty rates differs much between native and mixed-parent children. In 2009, about 17 percent of children in both of these groups were being raised in households where income fell below the poverty threshold.

In contrast, the poverty rate of children with two immigrant parents is higher, particularly for immigrant children born abroad. In 2009, the poverty rate of U.S.-born children with two immigrant parents was 28.5 percent, while that for foreign-born children was 31.6 percent. The figure also reveals a noticeable relative *decline* in the poverty rate of these two groups of children between 1996 and 2000 (which may reflect the economic boom of the late 1990s or be related to the timing of the welfare reform legislation). Finally, the figure shows that the poverty rate of these children has increased rapidly in the past few years, relative to those of children with native or mixed parents, perhaps reflecting the worsening economic conditions after 2007. For instance, between 2007 and 2009 the poverty rate barely rose for native children but increased by around 5 percentage points for U.S.-born children with two immigrant parents and by 6 percentage points for foreign-born children with two immigrant parents.

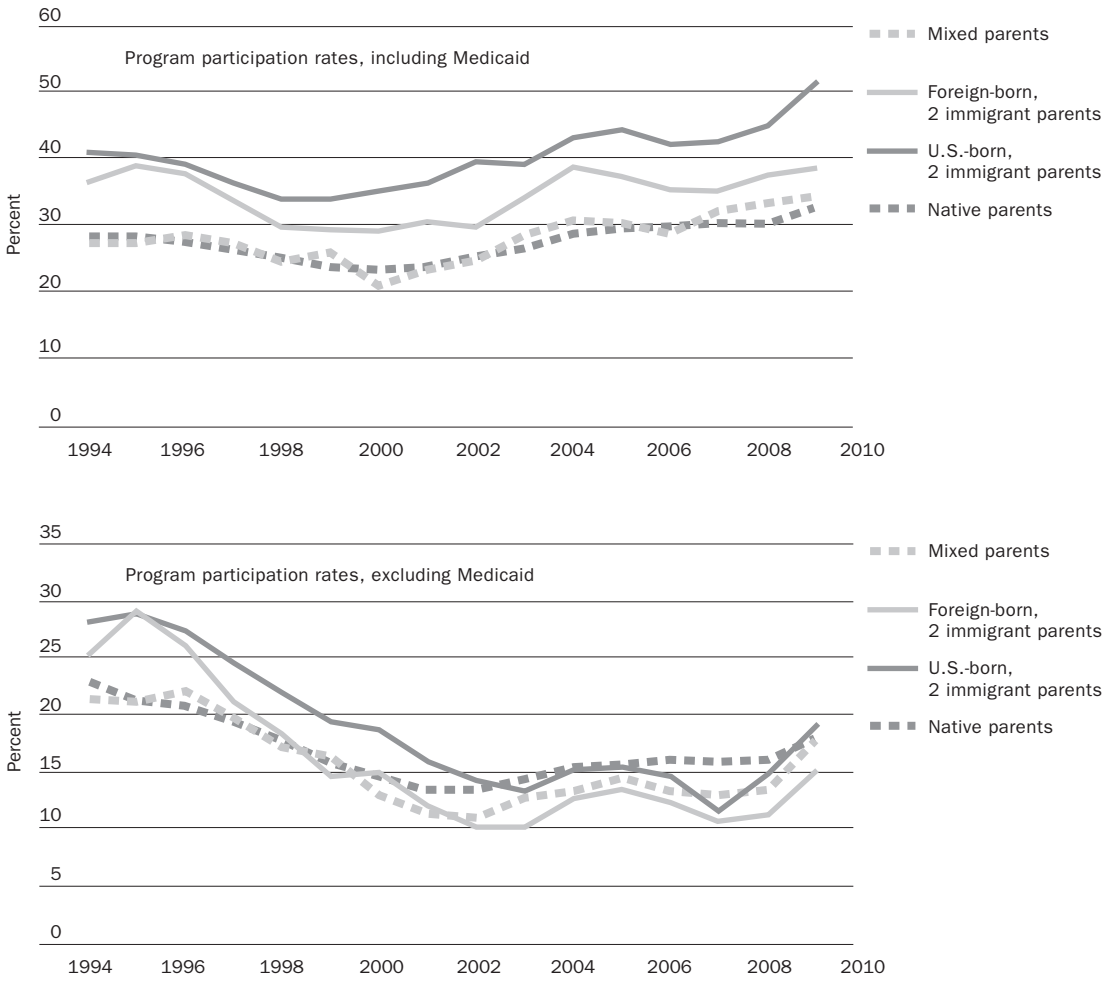
To what extent do immigrant children live in households that receive public assistance? That question is interesting for two reasons. First, some of this assistance presumably helps to lower the measured poverty rate in immigrant households.[10] Second, exposure to the public assistance infrastructure during childhood may itself have long-term consequences, some harmful and some beneficial. It may, for example, introduce the seeds of a culture of dependency that may persist into adulthood. Or it may, in some forms, such as Medicaid, serve as a form of human capital investment, leading to healthier and more favorable health and economic outcomes as the children grow up.[11]

To document the extent to which immigrant children are exposed to welfare programs during their childhood, I turn again to the CPS data, which report whether anyone in the household received cash benefits or food stamps (now known as the Supplemental Nutrition Assistance Program, or SNAP) or was enrolled in the Medicaid program. The summary definition of program participation that I initially use in the analysis indicates whether anyone in the household received assistance from any of these three programs. The top panel of figure 3 illustrates the trend in this measure of the program participation rate during the sample period for the four groups of children in the data: native children, mixed-parent children, U.S.-born children with two immigrant parents, and foreign-born children with two immigrant parents.

Figure 3 reveals a number of interesting results. First, as with the poverty rate, program participation rates differ little between native children and children of mixed parentage. Both the level and trend of participation rates in these groups are remarkably similar during 1994–2009. In contrast, whether they were U.S.-born or foreign-born, children with two immigrant parents live in households that overall have higher rates of program participation. In 2009, the program participation rate was 51.5 percent for the U.S.-born children and 38.6 percent for the foreign-born children. In other words, slightly over *half* of all U.S.-born children with immigrant parents lived in a household where someone received some type of assistance. In contrast, the participation rate for native or mixed-parent children was around 33 percent.

The data show that foreign-born children have the highest measured poverty rate but that U.S.-born children with immigrant parents have the highest program participation rate. The latter finding is not surprising: it is the *citizen* children in these households who

Figure 3. Trends in Program Participation of Children, 1994–2009

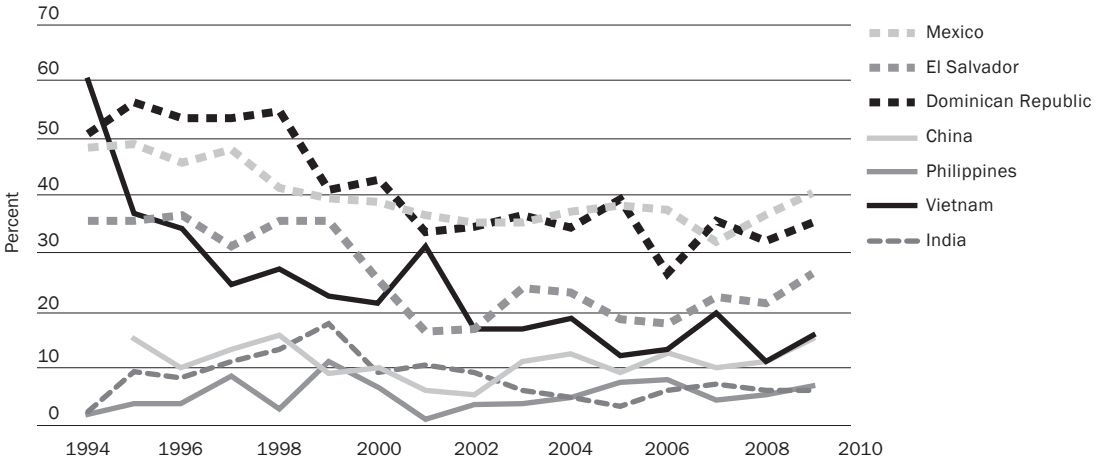


Source: Author's calculations from the 1994–2009 March Current Population Surveys.
Note: The program participation rate gives the fraction of children living in households that received cash assistance, SNAP benefits, or Medicaid (in the top panel), or cash assistance and SNAP benefits (in the bottom panel).

qualify for various types of public assistance. But the differential outcomes in program participation and poverty between these two groups of children hint at the possibility that some of the public assistance restrictions imposed on children born abroad have important consequences on the socioeconomic status of the households in which they grow up.

The top panel of figure 3 reveals another interesting difference in the program participation trends, this one between children with two immigrant parents and other children. Even though children with two immigrant parents have a higher participation rate throughout the entire fifteen-year period, that rate declines dramatically immediately after enactment of welfare reform legislation in 1996 (and this decline is noticeably steeper for the foreign-born children). The Personal Responsibility and Work Opportunity Reconciliation Act, or

Figure 4. Differences in Poverty Rates by National Origin of Immigrant Children, 1994–2009



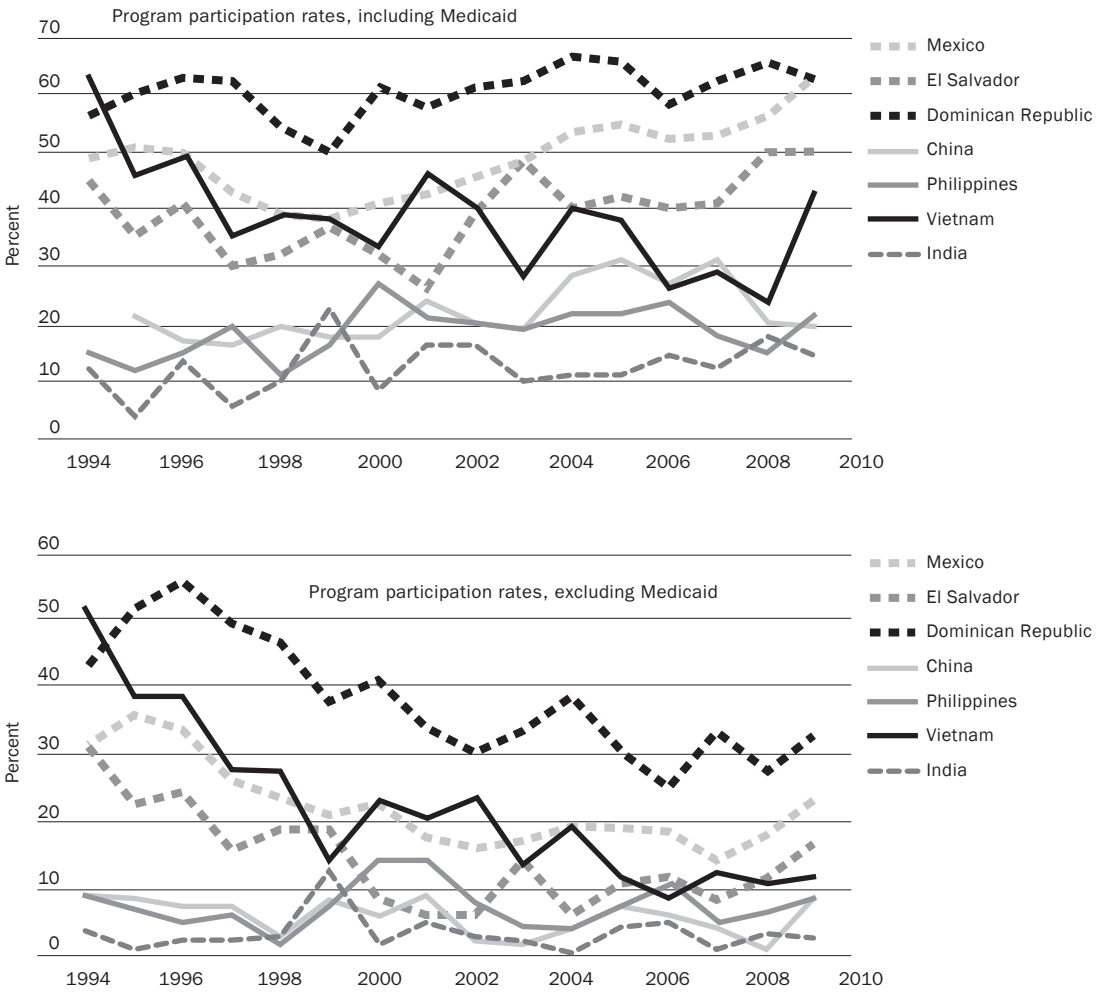
Source: Author's calculations from the 1994–2009 March Current Population Surveys.
Note: The population of immigrant children includes all persons aged seventeen or less whose parents were born outside the United States or its possessions.

PRWORA, led to a relatively steeper drop in immigrant participation in welfare programs, perhaps because of the "chilling effect" of several provisions in the statute that restricted noncitizen eligibility for these programs.[12] The trends illustrated in the figure suggest the presence of this chilling effect in the families of children with two immigrant parents, particularly in the families of foreign-born children (children who are not U.S. citizens and therefore do not qualify for many types of assistance in the post-PRWORA period). Note further the growing divergence in recent years between U.S.-born children with two immigrant parents, who have experienced a very rapid rise in participation rates, and all other groups of children. In fact, the figure clearly indicates that this group of children has the fastest-rising rate of program participation among the various groups in the analysis.

Many of the trends revealed in the top panel of figure 3 are driven by the inclusion of Medicaid in the definition of whether the household receives some type of public assistance. After Congress enacted welfare reform, it substantially expanded the State Children's Health Insurance Program (SCHIP), which covers children who lack health insurance but whose family income is too high to make them eligible for Medicaid. Because the CPS information on whether a household receives Medicaid assistance includes information on whether the household participates in the SCHIP program, many of the trends in Medicaid participation revealed by the CPS could reflect the creation and rapid growth of the SCHIP program after welfare reform.

In fact, as the bottom panel of figure 3 shows, the trends in program participation rates across the various types of households are quite different when the definition of program participation focuses only on whether the household receives cash or SNAP benefits. At the beginning of the period, both groups of immigrant children had higher participation rates than either native or mixed-parentage

Figure 5. Differences in Program Participation by National Origin of Immigrant Children, 1994–2009



Source: Author's calculations from the 1994–2009 March Current Population Surveys.
Note: The population of immigrant children includes all persons aged seventeen or less whose parents were born outside the United States or its possessions.

children. The enactment of PRWORA led to a very rapid decline in the participation rate of children with two immigrant parents, particularly that of foreign-born children. By the end of the period, foreign-born children have the *lowest* rate of program participation among the four groups examined, while the participation rate of U.S.-born children with immigrant parents is essentially the same as that of native and mixed-parentage children (though rising very rapidly).

The immigration literature has documented substantial differences in a wide array of socioeconomic outcomes across the various national origin groups that compose the entire immigrant population; these outcomes include educational attainment, wages, labor supply, and participation in public assistance programs. Not surprisingly, poverty rates and program participation rates also differ substantially by national origin groups among children with two immigrant parents.[13]

Because the sample size for many national origin groups is so small when foreign-born children are examined separately from those born in the United States, the analysis pools together all children with two immigrant parents into a single group. The national origin of the foreign-born children is, of course, determined by the child's birthplace. That of the U.S.-born children is determined by parental birthplace as follows. About 90 percent of these children are being raised in households where the birthplace of the father and mother are the same. For the remaining 10 percent of the children, the immigrant mother's birthplace determines the national origin of the child.[14]

As figure 4 illustrates, some of the differences in the poverty rates among some of the largest national origin groups in the data are remarkably large. In 2009, only about 6 or 7 percent of the immigrant children from India or the Philippines lived in households that were below the poverty level, compared with nearly 40 percent of children in households from Mexico or the Dominican Republic.

Figure 5 shows that, as with poverty rates, the disparity across national origin groups in the two alternative measures of program participation rates (including and excluding Medicaid) is also large. For example, in 2009, the participation rate (including Medicaid) of immigrant children from India was about 14.6 percent. In contrast, 21.5 percent of children in Filipino households and more than 60 percent of children from Mexico and the Dominican Republic received assistance. The disparity among national origin groups is equally large in the bottom panel of the figure, which excludes Medicaid from the definition of public assistance. In 2009, 2.5 percent of children from India, 11.5 percent of children from Vietnam, 23.2 percent of children from Mexico, and 32.6 percent of children from the Dominican Republic received either cash or SNAP benefits.[15]

The national origin groups with the largest measured poverty and program participation rates also tend to be the largest immigrant groups. In 2009, for example, 46.9 percent of all children with two immigrant parents were of Mexican origin. To the extent that poverty status and program participation among these children are indicators of a young population at risk, figures 4 and 5 suggest the potential for the creation of a large population of disadvantaged persons as these children grow into adulthood. In fact, as I show below, the data indicate the presence of persistent ethnic differences in program participation and poverty status as the children of immigrants transition into young adulthood.

Aging and Cohort Influences on Poverty and Participation Rates

Research on immigrant economic performance has provided two insights that now serve as "stylized facts" in the immigration debate. First, the typical immigrant worker in the United States suffers a sizable earnings disadvantage (relative to native-born workers) upon arrival, but some of this disadvantage disappears with time spent in the United States (an assimilation, or "aging," effect). Second, skills differ across immigrant cohorts, with more recent cohorts being relatively less skilled than earlier cohorts (a "cohort effect"). The question is whether aging and cohort effects serve to attenuate or exacerbate the differences in poverty rates in the sample of children of immigrants.

The top panel of table 1 "tracks" specific age cohorts of U.S.-born children of immigrants across CPS cross-sections to determine how the poverty rate changes for different

Table 1. Percentage Point Difference in Poverty Rates between Immigrant and Native Children by Place and Year of Birth

	Year of survey		
Place and year of birth	**1998–99**	**2003–04**	**2008–09**
Immigrant children, U.S.-born			
1994–97	11.3	8.7	8.8
1999–2002	...	8.5	10.2
2004–07	...	...	9.8
Immigrant children, foreign-born			
1994–97	12.1	15.5	15.2
1999–2002	...	6.3	13.1
2004–07	...	...	10.4

Source: Author's calculations from the 1994–2009 March Current Population Surveys.
Note: The population of children includes all persons aged seventeen or less. Immigrant children are those whose parents were born outside the United States or its possessions.

age cohorts. (The birth cohorts and CPS cross-sections are aggregated over a few years of data to increase the number of observations in the sample of specific birth cohorts. The cross-sections do not necessarily follow the same children from period to period.) Consider, for instance, the immigrant children born in the United States in 1994–97. When they were first observed in the 1998–99 pooled cross-section, their poverty rate was 11.3 percentage points higher than that of native children the same age (that is, native children also born in 1994–97). By 2003–04, the children were around nine years old, and the pooled CPS cross-section for this age group reveals that the poverty rate gap between the U.S.-born immigrant and native cohorts had narrowed to 8.7 percentage points. By 2008–09, when the children were around fourteen years old, the cross-section showed that the gap in poverty rates between immigrant and native children remained essentially unchanged at 8.8 percentage points. In short, the evidence indicates that the gap in poverty rates between immigrant children born in the United States and native children narrowed over time. In other words, some immigrant children lived in households that moved out of poverty.

In contrast, the bottom panel of the table suggests that the poverty rate of foreign-born immigrant children (relative to native children the same age) grew over the same time period. Consider again the sample of immigrant children born in 1994–97. When this age group was observed in the 1998–99 pooled cross-section, the poverty rate of foreign-born immigrant children was 12.1 percentage points higher than that of comparably aged native children. By 2003–04, that gap had widened to 15.5 percentage points, where it roughly remained for the rest of the period. In short, the data suggest that length of time in the country, at least in terms of its influence on the household's poverty rate, was not an effective mechanism for reducing the disadvantage of foreign-born immigrant children over the past two decades.[16]

Welfare Reform and Poverty

The data summarized in the previous section suggest different trends in public assistance program participation rates between immigrant children and other groups of children

Table 2. Difference in Poverty and Program Participation Rates between Immigrant and Native Children in States with Generous and Less Generous Welfare Benefits by Place of Birth and Type of Immigrant Family

	Period	
Measure, place of birth, type of immigrant family	**1997–2000**	**2001–09**
Immigrant children, U.S.-born		
Poverty rate	–1.0	–3.5
Program participation rate, including Medicaid	4.4	2.8
Program participation rate, excluding Medicaid	2.7	0.2
Immigrant children, foreign-born		
Poverty rate	–1.4	–3.7
Program participation rate, including Medicaid	1.3	7.0
Program participation rate, excluding Medicaid	–0.8	–1.0
Children of mixed parentage		
Poverty rate	1.7	2.5
Program participation rate, including Medicaid	–0.9	–0.2
Program participation rate, excluding Medicaid	1.2	0.7

Source: Author's calculations from the 1994–2009 March Current Population Surveys.
Note: Cell entries are percentage points. Program participation rates indicate whether the child lives in a household that receives either cash or SNAP benefits and either includes or excludes Medicaid. Table entries are percentage point differences between immigrant and native children.

immediately after 1996. In particular, program participation of immigrant children, particularly of those born abroad, declined at a faster rate in the last half of the 1990s. These differential trends between immigrants and natives are typically attributed to the enactment in 1996 of PRWORA, which set newly restrictive rules for determining the eligibility of foreign-born persons for practically all types of public assistance. In rough terms, PRWORA denies most types of federal means-tested assistance (such as TANF and Medicaid) to noncitizens who arrived after the legislation was signed and limits the eligibility of many noncitizens already living in the United States.

The legislation, however, gave states the option to offer TANF and Medicaid to some of these immigrants through state-funded programs, and some states opted to do so in the years immediately after the law was enacted. These state choices, designed to offset the federal cutbacks, obviously increase the degree of dispersion in "welfare opportunities" available to immigrants living in different states.

The Urban Institute has constructed an index of "welfare generosity" that classifies states into four categories according to the availability of the state-funded safety net.[17] The states where such aid was "most available" included California and Illinois; the states where the aid was "somewhat available" included New York and Florida; the states where the aid was "less available" included Arizona and Michigan; and the states were the aid was "least available" included Ohio and Texas. Many of the states that chose to offer above-average levels of state-funded assistance to immigrants in the aftermath of the PRWORA cutbacks were those with the largest immigrant populations.

Table 2 summarizes the results of a regression analysis designed to determine whether

the poverty rates and program participation rates of immigrant children who lived in a generous state (defined as a state where the state-funded assistance was either "most available" or "somewhat available") differed from those of the immigrant children who lived in the less generous states. By design, the impacts summarized in the table are relative to the changes observed among native children, so that they net out any state-specific factors that might affect the pre- and post-1996 trends.[18] Note that the table also reports the impact of PRWORA both in the short run (immediately after enactment, in 1997–2000) and in the long run (2001–09).

The data reveal that the state-level provisions of PRWORA significantly increased the fraction of immigrant children who receive public assistance in the more generous states, both in the short and in the long run. This increase, however, is evident only when the measure of program participation includes Medicaid. Hence it seems that states were able to attenuate the impact of the federal cutbacks through the provision of health services (either through the Medicaid program itself or the expansion of SCHIP to immigrant children). The impact of living in a "generous" state is numerically important. In particular, residing in a generous state permanently increased the program participation rate of U.S.-born immigrant children by about 2.8 percentage points and that of foreign-born immigrant children by about 7.0 percentage points above the rates for the two groups of immigrant children residing in the less generous states—even after netting out any state differences that would be reflected in the program participation rate of native children. The results are quite different for children of mixed parentage, however; the state-level provisions of PRWORA had no such impact on their program eligibility, and thus their participation rate did not change significantly.

Table 2 also summarizes the impact of the state-funding provisions in PRWORA on the poverty rate of the various groups of children. The evidence is striking. By providing additional assistance to immigrant children, especially through the Medicaid-SCHIP programs, the generous states were able to reduce the poverty rate of immigrant children, regardless of where they were born, by about 3.5 percentage points in the long run. It is unclear why the additional assistance provided through the Medicaid-SCHIP program reduced poverty rates, particularly since participation in these programs does not enter the calculation of the poverty threshold. Nevertheless, the additional resources provided to immigrant children are correlated with a significant improvement in the economic status of the immigrant families.

Source of Differences

The previous sections documented substantial differences between children with two immigrant parents and other groups of children in poverty and program participation rates. I now examine the extent to which differences in socioeconomic and human capital characteristics explain some of this dispersion.

By one major indicator, immigrant children appear to have an advantage over native children. The presence or absence of parents in the household is well known to be perhaps the most important determinant of children's program participation and poverty status.[19] The economic well-being of children is typically better in two-parent households, and immigrant children, regardless of where they were born, are far *more* likely to live in two-parent households than other children. If anything, the immigrant advantage

Table 3. Percentage Points by which Poverty and Program Participation Rates among Immigrant Children Exceed Those among Native Children by Place of Birth and Type of Immigrant Family

	Specification		
Measure, place of birth, type of immigrant family	**1**	**2**	**3**
Poverty rate			
Mixed-parent children	–0.1	1.4	0.4
Immigrant children, U.S.-born	10.3	11.6	4.5
Immigrant children, foreign-born	15.4	16.9	10.3
Program participation rate, including Medicaid			
Mixed-parent children	0.5	2.2	1.5
Immigrant children, U.S.-born	13.1	14.2	6.9
Immigrant children, foreign-born	7.1	8.7	2.4
Program participation rate, excluding Medicaid			
Mixed-parent children	–1.1	0.4	–0.3
Immigrant children, U.S.-born	1.8	3.1	–2.4
Immigrant children, foreign-born	–0.9	0.6	–4.3
Adjusts for			
Year of observation	Yes	Yes	Yes
Two-parent household, number of children, number of elderly persons, head's age, state of residence	No	Yes	Yes
Head's educational attainment	No	No	Yes

Source: Author's calculations from the 1994–2009 March Current Population Surveys.
Notes: The measure of the program participation rate indicates whether the child lives in a household that receives either cash or SNAP benefits. Columns further to the right include more controls for household characteristics. The last column represents the best estimate of the effect of immigrant status alone.

has increased over time. By 2009, nearly 65 percent of native children and 69 percent of mixed-parent children lived in two-parent households, while about 75 percent of children with two immigrant parents lived in two-parent households.

The evidence, instead, points to a very different source for the higher rates of poverty and program participation observed among immigrant children relative to native children. Table 3 reports the difference in poverty rates and program participation between children with one or two immigrant parents and native children, after adjusting for a host of socioeconomic background characteristics. The first column of the table, reports the raw differences among the groups after adjusting for period effects. For example, the typical foreign-born child with two immigrant parents has a poverty rate that is about 15.4 percentage points higher than that of native children, while the typical U.S.-born child of two immigrant parents has a poverty rate that is 10.3 percentage points higher than that of a native child.

The second column of the table reports the adjusted differential after controlling for differences in such characteristics as state of residence, household composition, and the age of the head of the household. If anything, adjusting for these differences *increases* the relative disadvantage of immigrant children. The poverty rate gap rises from 15.4 to 16.9 percentage points for the foreign-born children and from 10.3 to 11.6 percentage points for the U.S.-born children.

Finally, the third column presents the adjusted differential after controlling for differences in the educational attainment of the head of the household. Not surprisingly, this variable plays a crucial role in generating differences among the various types of children. In fact, it cuts by at least one-third to one-half the difference in poverty rates between immigrant children and native children. The remaining rows of the table show that the adjusted gap in participation rates, regardless of whether Medicaid is included, falls to near zero after adjusting for differences in educational attainment among parents. In short, the evidence clearly suggests that human capital differences in the households of immigrant and native children account for a large portion of the observed disadvantage experienced by immigrant children.

Does the Immigrant Disadvantage Persist into Young Adulthood?

The long-run importance of exposure to poverty and program participation during childhood depends on the extent to which that exposure affects outcomes of the children after they grow up and leave school. The available CPS data do not permit a direct analysis, because no longitudinal sample of a sufficiently large group of immigrant children exists that would allow the tracking of specific individuals over time and hence the precise measurement of such consequences.

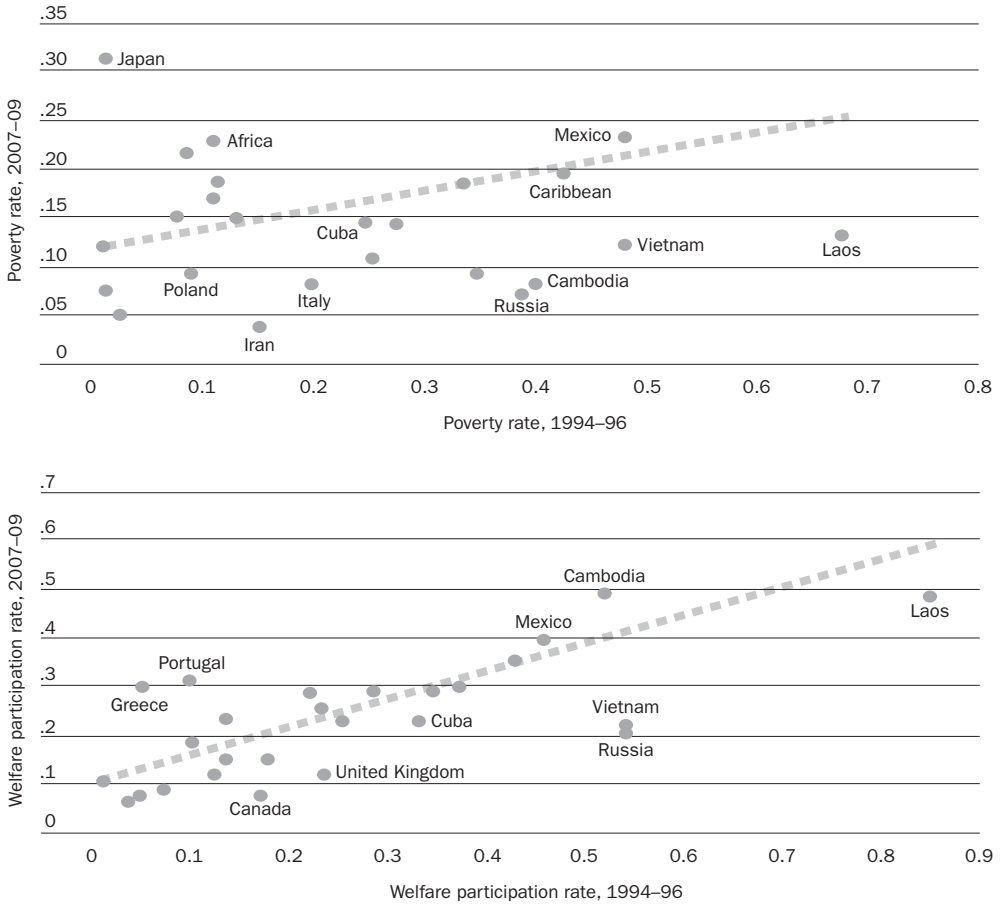
As I showed earlier, however, program participation and poverty rates vary a great deal among national origin groups in the population of immigrant children. The immigration literature has often exploited these national origin differences to measure the extent of social mobility across generations.[20] The CPS data can be used in a similar fashion to determine if some of the national origin differences observed among immigrant children persist a decade or two later in young adulthood.

In particular, the 1994–96 pooled CPS data can be used to calculate the poverty rate of children aged five to fifteen with two immigrant parents for each of a number of national origin groups.[21] Moving forward thirteen years, the 2007–09 pooled CPS can then be used to calculate the poverty rate for a cross-section of persons aged eighteen to twenty-eight, with two immigrant parents, in the same national origin groups. The top panel of figure 6 illustrates the nature of the correlation between the poverty rates experienced by children of different national origins and the poverty rates experienced by young adults of the same national origin groups thirteen years later.

The horizontal axis of the scatter diagram gives the poverty rates of immigrant children (aged five to fifteen) by national origin group in 1994–96, and the vertical axis gives the poverty rates thirteen years later for young immigrant adults aged eighteen to twenty-eight, the age range the immigrant children would now be. The data show a positive correlation: The national origin groups with children with the highest poverty rates become the groups with young adults with the highest poverty rates.

The upward-sloping regression line illustrated in figure 6 summarizes the statistical correlation that links the poverty rates of the young adults to their experience when they were children. The slope of this regression line measures the degree of persistence in the particular outcome over time as children exit childhood and become young adults. A relatively flat regression line would indicate little connection between the economic outcomes experienced at the time of childhood

Figure 6. Outcomes in Childhood and Young Adulthood for Immigrant Children, by Country of Origin



Source: Author's calculations from the 1994–2009 March Current Population Surveys.
Note: The figure provides information for twenty-four national origin groups. Each group satisfies the restriction that there were at least thirty observations in both the 1994–96 and 2007–09 pooled CPS cross-sections for the particular ethnic group. The population of immigrant children includes all persons aged seventeen or less whose parents were born outside the United States or its possessions. The program participation rates used in the bottom panel of the figure include participation in the Medicaid program. See text for explanation.

and as young adults. Put differently, all young adults would have relatively similar poverty rates regardless of the differences at the time they were children. A relatively steep regression line suggests a substantial link between poverty rates over time. In fact, the slope of the regression line in the top panel of figure 6 is 0.205 (with a standard error of 0.058).[22] In other words, about a fifth of the poverty gap between immigrant children in any two national origin groups in the figure persists as immigrant children become young adults and set up their own households. There is, therefore, some persistence in poverty rates in immigrant households. Note, moreover, that the vast majority of these children were born in the United States, so even among U.S.-born adults, ethnicity matters quite a bit.

The bottom panel of figure 6 illustrates a similar scatter diagram for program participation

rates (including Medicaid). Again, the correlation is noticeably positive between the participation status of the household where the children grew up and the participation status of the households of young adults thirteen years later. The slope of the regression line is 0.571 (with a standard error of 0.082), so participation status also tends to persist over time, and the link is even stronger than that observed in poverty rates.

The correlations illustrated in figure 6 can be interpreted in two distinct ways. It is likely, for instance, that specific individuals or groups may experience a great deal of long-term persistence in outcomes over time. In other words, a set of permanent factors may be associated with specific individuals or groups that tend to lead to "good" or "bad" outcomes systematically over time.[23] Alternatively, exposure to adverse socioeconomic outcomes in childhood (such as poverty or welfare dependency) may increase the likelihood of adverse economic outcomes in young adulthood. Although a disentangling of these two explanations would greatly increase the understanding of how childhood environmental factors affect the coming of age of immigrant children, the relative importance of the two factors cannot easily be isolated in the data.

Conclusions

Whether they are foreign-born or U.S.-born, children with two immigrant parents form the fastest-growing component of the population of persons under age eighteen in the United States. They are also much more likely to be exposed to poverty and public assistance than other children. In fact, the exposure rates are remarkably high. Nearly half of these children live in households that receive some type of public assistance, and about one-third live in poverty. Much of the relatively larger disadvantage experienced by immigrant children can be traced back to the relatively lower educational attainment of the parents in immigrant families. Moreover, these social and economic disadvantages persist into young adulthood. For instance, the national origin groups where immigrant children had the largest poverty and program participation rates are also the national origin groups where young adults (more than a decade later) also have the largest poverty and program participation rates.

The implications of these basic facts have not yet been examined, although they are sure to generate much future discussion regardless of how one perceives the costs and benefits of alternative social policies designed to address the problem. However, future research will need to determine the causal impact of childhood poverty on immigrant adult outcomes and delineate the reasons why this causal impact might differ between immigrant and native families. Successful policies for addressing the potential problems caused by the intergenerational breeding of poverty and program participation in the immigrant population can be developed only after the causal mechanism is well understood. Therefore, the study of the social and economic consequences of exposure to poverty and program participation in the fastest-growing segment of children in the U.S. population will inevitably receive a great deal of attention in the coming decades.

Endnotes

1. Barry Edmonston and Jeffrey S. Passel, "Immigration and Immigrant Generations in Population Projections," *International Journal of Forecasting* 8, no. 3 (1992): 459–76.

2. Classic expositions of the melting-pot hypothesis are given by Robert Park, *Race and Culture* (Glencoe, Ill.: Free Press, 1975); and Milton Gordon, *Assimilation and American Life* (Oxford University Press, 1964). Recent empirical studies include George J. Borjas, "Long-Run Convergence of Ethnic Skill Differentials: The Children and Grandchildren of the Great Migration," *Industrial and Labor Relations Review* 47, no. 4 (1993): 553–73; Richard D. Alba, Amy Lutz, and Elena Vesselinov, "How Enduring Were the Inequalities among European Immigrant Groups in the U.S.?" *Demography* 38, no. 3 (2001): 349–56; and Alejandro Portes and Min Zhou, "The New Second Generation: Segmented Assimilation and Its Variants," *Annals of the American Academy of Political and Social Science* 530 (1993): 74–96. Some of the conflicting evidence is surveyed by Min Zhou, "Segmented Assimilation: Issues, Controversies, and Recent Research on the New Second Generation," *International Migration Review* 31, no. 4 (1997): 825–58.

3. There are a number of excellent reviews of this literature. See, in particular, Jeanne Brooks-Gunn and Greg J. Duncan, "The Effects of Poverty on Children," *Future of Children* 7, no. 2 (1997): 55–71; Greg J. Duncan and others, "How Much Does Childhood Poverty Affect the Life Chances of Children?" *American Sociological Review* 63, no. 3 (1998): 406–23; and Robert Haveman and Barbara Wolfe, "The Determinants of Children's Attainments: A Review of Methods and Findings," *Journal of Economic Literature* 32, no. 4 (1995): 1829–78. A particularly useful overview of recent trends and implications for policy is given by Kristin Anderson Moore and others, "Children in Poverty: Trends, Consequences, and Policy Options," policy brief, Child Trends 2009–11 (Clearwater, Fla.: JWB Children's Services Council of Pinellas County, Florida, April 2009) (www.aboutpinellaskids.org/childpoverty/Child%20Poverty%20Brief.pdf).

4. Greg J. Duncan, and Jeanne Brooks-Gunn, "Income Effects across the Life Span: Integration and Interpretation," in *Consequences of Growing Up Poor,* edited by Greg J. Duncan and Jeanne Brooks-Gunn (New York: Russell Sage Foundation, 1997), pp. 596–610. There is a debate about whether it is poverty itself or other variables correlated with poverty (such as not having enough books in the household or inferior child care) that generates the correlation between poverty and a host of poor socioeconomic outcomes. See, for example, Susan B. Meyer, *What Money Can't Buy: Family Income and Children's Life Chances* (Harvard University Press, 1997).

5. See, for example, Lorraine V. Klerman, "The Health of Poor Children: Problems and Programs," in *Children and Poverty: Child Development and Public Policy,* edited by A. Huston (Cambridge University Press, 1991), pp. 136–57; and Sanders Korenman and Jane E. Miller, "Effects of Long-Term Poverty on Physical Health of Children in the National Longitudinal Survey of Youth," in *Consequences of Growing Up Poor,* edited by Duncan and Brooks-Gunn, pp. 70–99 (see note 4). A study that specifically examines whether the poverty status of immigrant children influences mental health, although in the Canadian context, is Morton Beiser and others, "Poverty, Family Process, and the Mental Health of Immigrant Children in Canada," *American Journal of Public Health* 92, no. 2 (2002): 220–27.

6. Mary E. Corcoran, and Ajay Chaudry, "The Dynamics of Childhood Poverty," *Future of Children* 7, no. 2 (1997): 40–54; Thomas P. Vartanian, "Adolescent Neighborhood Effects on Labor Market and

Economic Outcomes," *Social Service Review* 73, no. 2 (1999): 142–67; and Robert M. Hauser and Megan M. Sweeney, "Does Poverty in Adolescence Affect the Life Chances of High School Graduates?" in *Consequences of Growing Up Poor,* edited by Duncan and Brooks-Gunn, pp. 541–95 (see note 4).

7. A very small fraction of children with mixed parents were born outside the United States (3.3 percent in 2009). Because of the small sample size, the birthplace distinction within the population of mixed-parent children is ignored in the discussion that follows.

8. In addition to the age restriction, a "child" cannot be a household head or the spouse of a household head.

9. There is remarkably little intermarriage across national origin groups among parents of immigrant children: only about 10 percent of immigrant children have parents belonging to different national origin groups, and this fraction was very stable during the period. Specifically, the intermarriage rate among the parents of immigrant children was 10.5 in 1994 and 10.3 percent in 2009.

10. The income used to calculate the household's poverty status includes cash assistance but does not include the value of food stamps or Medicaid.

11. Evidence on the beneficial outcomes resulting from the expansion of Medicaid coverage of children is given by Janet Currie and Jonathan Gruber, "Health Insurance Eligibility, Utilization of Medical Care, and Child Health," *Quarterly Journal of Economics* 111, no. 2 (1996): 431–66.

12. See George J. Borjas, "Welfare Reform and Immigration," in *The New World of Welfare: An Agenda for Reauthorization and Beyond,* edited by Rebecca Blank and Ron Haskins (Washington: Brookings Institution Press, 2001), pp. 369–85; and Michael Fix and Jeffrey S. Passel, *Trends in Noncitizens' and Citizens' Use of Public Benefits following Welfare Reform: 1994–97* (Washington: Urban Institute, 1999).

13. Some differences in outcomes appear among mixed-parent children (assuming that the child is assigned to the ethnic group of the foreign-born parent), but these differences are much smaller than the ones observed existing among immigrant children.

14. Because the proportion of mixed-birthplace children is small, the results are not sensitive either to the alternative methodology of allocating national origin according to the birthplace of the father or to the simple elimination of these children from the analysis.

15. Eligibility rules for refugees differ dramatically from the rules that apply to other immigrants and could influence program participation rates for children from countries, such as Vietnam, with high numbers of refugees. In particular, the eligibility of refugees for public assistance is not affected by the citizenship status of the child or the parents. The different eligibility rules for refugees and nonrefugees are sure to play a much greater role in the post-PRWORA period.

16. The data reported in table 1 can also be used to determine the presence of "cohort effects," where the cohorts refer to different year-of-birth cohorts. (Note that this definition of cohorts differs from that traditionally used in the immigration literature, which defines immigrant cohorts by calendar year of migration rather than by calendar year of birth.) The evidence on the direction of these cohort effects is mixed, however. For example, the poverty rate is about 12.1 percentage points higher for immigrant children born abroad in 1994–97 than for comparably aged natives in 1998–99, when the children are around four years old. In contrast, the relative poverty rate for immigrant children born in 1999–2002 is 6.3 percent when they are four years old; for the cohort born in 2004–07 it is 10.4 percent when they are four years old.

17. Wendy Zimmermann and Karen C. Tumlin, "Patchwork Policies: State Assistance for Immigrants under Welfare Reform," Occasional Paper 24 (Washington: Urban Institute, 1999), table 18; and Karen C. Tumlin, Wendy Zimmermann, and Jason Ost, "State Snapshots of Public Benefits for Immigrants: A Supplemental Report to 'Patchwork Policies,'" Occasional Paper 24 supplemental report (Washington: Urban Institute, 1999).

18. In particular, the regression analysis relates the dependent variable to a set of linear fixed effects, including the time period under analysis, whether the child is a child of mixed-parentage or an immigrant child, and whether the state is a generous state. The regression analysis then includes all two-way interactions among these variables, and a three-way interaction between the immigration status of the child, the state generosity index, and the time period. The effects reported in table 2 give the estimated coefficient of the three-way interaction variable.

19. Excellent discussions of the consequences of growing up in single-parent households are given by Kathryn Edin and Laura Lein, *Making Ends Meet: How Single Mothers Survive Welfare and Low-Wage Work* (New York: Russell Sage Foundation, 1997); and Sara McLanahan and Gary D. Sandefur, *Growing Up with a Single Parent: What Hurts, What Helps* (Harvard University Press, 1994).

20. George J. Borjas, "The Intergenerational Mobility of Immigrants," *Journal of Labor Economics* 11, no. 1, part 1 (1993): 113–35.

21. The pooling of three different CPS cross-sections generates a larger sample size for each of the ethnic groups, allowing for a more precise measurement of the underlying correlation. In addition, the ethnic groups are defined by collapsing the five-digit coding provided by the original data into a three-digit coding. Further, all immigrant children, regardless of where they were born, are pooled into the same ethnic groups using the methodology outlined here.

22. The regression line weights each ethnic group by the number of observations used to calculate the mean outcome for the group in the pooled 2007–09 CPS data.

23. The correlation between the program participation rate of immigrant children and the participation rate observed thirteen years later when they become young adults persists even after one adjusts for differences in educational attainment across groups. The regression coefficient linking the welfare participation rate over time is 0.358 (with a standard error of 0.090) if the model adjusts for differences in the educational attainment of the ethnic groups (with the educational attainment measured as of 2007–09). It seems, therefore, as if exposure to public assistance programs during the childhood years has an independent effect on the program participation rate of young adults even after one adjusts for the intergenerational human capital transfers that inevitably take place. Note, however, that the educational attainment of the group is an imperfect measure of the human capital of the group, and hence this type of model cannot be used to differentiate conclusively between the two alternative hypotheses that can explain the persistence of the outcomes illustrated in figure 6.

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ISBN: 978-0-9814705-6-6

A COLLABORATION OF THE WOODROW WILSON SCHOOL OF PUBLIC AND INTERNATIONAL AFFAIRS AT
PRINCETON UNIVERSITY AND THE BROOKINGS INSTITUTION