

# U.S. Occupational Mobility of Children of Immigrants Based on Parents' Origin-Country Occupation

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**ABSTRACT** This study provides a national-level assessment of occupational mobility and early-career attainment of children of immigrants based on parents' origin-country occupation. Exploiting unique aspects of the Educational Longitudinal Study, we examine how parent-child U.S. intergenerational occupational mobility patterns and child occupational attainment differ based on parental premigration occupational status (i.e., low- vs. high-skilled) and parental postmigration occupational mobility (i.e., upward, same, or downward). Our results suggest misestimation in intergenerational mobility research if parents' origin-country occupation is excluded. Including parents' origin-country occupation, we find that the children of immigrants are recovering from instances of parental occupational downgrading, building on parental advances, and advancing where parents could not. Furthermore, most children of immigrants do as well or better occupationally than children of non-Hispanic White natives. Strong educational investments help explain this advantage, particularly for children of high-skilled immigrants. However, results indicate that all children of immigrants would attain even more if they faced fewer postmigration barriers, especially children of low-skilled immigrants. These results advance immigrant selection and assimilation theories by demonstrating how pre- and postmigration factors influence occupational attainment of children of immigrants.

**KEYWORDS** Children of immigrants • Occupational mobility • Intergenerational mobility • Assimilation • Immigrant selection

## Introduction

The integration of children of immigrants into U.S. labor markets is a primary focus of migration research. Although producing mixed results, existing research on immigrant intergenerational mobility has found modest levels of upward mobility between immigrant parents and their children but that some children of immigrants, particularly Latinos, continue to attain less occupationally than natives (Alba and Nee 2003; Waters and Pineau 2016); recent findings suggest that ethnic attrition may contribute to this lower attainment (Duncan et al. 2020). Past work, however, has rarely captured the true occupational origins of immi-

grant parents who worked prior to U.S. migration. That is, most research has assessed mobility based on immigrant parents' occupational status after entering the United States, not in the origin country, which has the potential to misstate the true extent of mobility for children of immigrants (e.g., Hermansen 2016; Luthra and Soehl 2015; Park and Myers 2010).

This is important given the well-known patterns of occupational upgrading and downgrading among high- and low-skilled immigrants, who do not perfectly integrate into the bifurcated occupational structure of the United States (Akresh 2006, 2008). Instead, there are well-known patterns of occupational mismatch whereby, for example, an immigrant taxi driver in the United States could have been a physician in the country of origin but is unable to practice medicine in the United States because of licensing, language, discrimination, and legal status barriers. Conversely, this same taxi driver could have been a coffee bean picker in the country of origin but is able to move up the economic ladder by leveraging new U.S. opportunities. This equalizing effect among immigrants may mask important premigration resources that parents can use to invest in children's education and occupational mobility (Pong and Landale 2012). Consequently, intergenerational mobility studies that focus on parent's U.S. occupation are likely to misestimate the true occupational mobility of children of immigrants.

The challenge in assessing the influence of immigrant parent's pre- and postmigration occupational status has largely been a data issue. Premigration occupational data is rare and typically available only in studies of immigrant adults, not their children (Akresh 2006, 2008; Duncan and Trejo 2015). The Educational Longitudinal Study (ELS), a national-level, longitudinal survey of U.S. 10th graders (2002) through early adulthood (2012) (Ingels et al. 2014), overcomes this challenge by providing detailed information on parents' last occupation in their origin country, parents' U.S. occupation, and child's occupational attainment.<sup>1</sup> Consequently, ELS can be used to trace intergenerational occupational mobility based on immigrant parents' pre- and postmigration occupation and to evaluate schooling mechanisms (secondary and postsecondary) that influence this mobility.

Accordingly, we focus on the children of immigrants whose parents worked premigration to provide a national-level assessment of the occupational mobility and early-career attainment of children of immigrants based on parents' origin-country occupation and postmigration occupational mobility patterns. Thus, we can assess whether children of immigrants are able to recover from parental occupational downgrading, maintain parents' occupational position, or advance where parents could not. A caveat is that because parents and children are observed at different career stages in ELS—mid-career (at about age 45) versus early career (at about age 26), respectively—intergenerational mobility patterns are negatively biased. Thus, we use a comparison group to minimize this bias and to assess whether children of immigrants with differing parental pre- and postmigration occupational mobility are catching up to the “mainstream”—that is, achieving the same occupational status of children of non-Hispanic White natives. In doing so, we examine how differences in educational investments (i.e., aspirations, achievement, and attainment) and postmigration barriers (i.e., poorly

<sup>1</sup> These data are not available in earlier or more recent Department of Education data sets (e.g., 1988 National Educational Longitudinal Study or 2009 High School Longitudinal Study). The New Immigrant Survey includes parents' pre-migration socioeconomic status but not children's occupational attainment.

resourced schools and racial/ethnic disparities) shape occupational attainment. The results advance immigrant intergenerational occupational research by demonstrating the need to account for immigrant parents' origin-country occupation; immigrant selection and class-reproduction theories by extending evidence on the influence of parental premigration socioeconomic status beyond educational outcomes; assimilation literature by demonstrating the continued occupational relevance of postmigration factors.

## **Evidence and Theoretical Debates on Immigrant Intergenerational Mobility**

Research on parent-child intergenerational mobility has generally found a pattern of class reproduction (Blau and Duncan 1967; Haller and Portes 1973): children's educational, occupational, and economic fates are largely determined by that of their parents, particularly for those from the most and least advantaged class backgrounds (Beller and Hout 2006). This class reproduction is thought to occur because parents transmit psychological (e.g., class aspirations), social (e.g., networks), and economic resources that shape children's own achievements (Haller and Portes 1973; Jonsson et al. 2009).

For immigrants, however, the evidence on intergenerational mobility is mixed. Some studies have found evidence of upward class mobility: children of immigrants fare substantially better educationally, occupationally, and economically than their parents (Farley and Alba 2002; Glick and Park 2016; Waldinger and Feliciano 2004; Waters and Pineau 2016; White and Glick 2009) and often exceed the attainment of natives (Crosnoe and Turley 2011; Hermansen 2016; Kao and Tienda 1995; Perreira et al. 2006; Waldinger and Feliciano 2004; White and Glick 2009). This seeming upward mobility among children of immigrants is a puzzle, often framed as a paradox, because it does not follow the same class reproduction pattern found among those with native-born parents. Other studies, however, have suggested that these gains are unique to exceptional cases and that low-income and minority children of immigrants are on paths of intergenerational decline (Haller et al. 2011; Portes and Rumbaut 2001).

A key challenge with immigrant intergenerational mobility research is that studies have almost exclusively measured mobility based on data about immigrants in the destination country, which excludes vital premigration information (Duncan and Trejo 2015; Park and Myers 2010). Information on premigration socioeconomic status is needed to account for the selective nature of immigration and the underlying resources of immigrant parents (Duncan and Trejo 2015; Feliciano 2005; Zuccotti et al. 2017) because immigrants are inherently positively selective, consisting of ambitious groups from different segments of their origin country (Villareal 2016). This selectivity is often what enables immigrants to overcome postmigration challenges and barriers (e.g., poverty, discrimination, legal status barriers) to produce exceptional education and employment outcomes among their children (Fernández-Kelly 2008; Heath et al. 2008; Lee and Zhou 2015).

In fact, growing evidence has found that immigrant parents' premigration rather than postmigration socioeconomic status is a stronger predictor of children's U.S. academic success (Feliciano and Lanuza 2017; Ichou 2014; Pong and Landale 2012). Moreover, studies that used only parents' postmigration socioeconomic status are

likely to have overestimated the upward mobility of children of immigrants. For instance, Feliciano and Lanuza (2017) showed that the large, paradoxical educational advancements commonly found among disadvantaged children of immigrants (Crosnoe and Turley 2011; Kao and Tienda 1995) are largely replications of their parents' unobserved higher origin-country class status. In other words, children of immigrants follow the same educational pattern of class reproduction commonly found in intergenerational mobility research (Blau and Duncan 1967; Haller and Portes 1973).

Research, however, has yet to examine how premigration factors influence post-educational labor market outcomes. Finding a high-quality job is arguably the main end goal of children of immigrants and why parents invest heavily in their education. Immigrant parents, however, may be less effective at ensuring children's occupational class reproduction. Although immigrant parents and their children may benefit from positive selection dynamics, they must contend with postmigration market constraints (e.g., discrimination, limited networks) that hinder occupational advancements (Heath et al. 2008). In fact, understanding the influence of these postmigration experiences has been the main focus of assimilation research (Alba and Nee 2003; Portes and Rumbaut 2001).

## Immigrant Parents' Pre- and Postmigration Occupational Mobility

Taking the pre- and postmigration occupational status of immigrant parents into consideration is particularly important for assessing intergenerational occupational mobility among children of immigrants because upon arrival to their new land, immigrant parents experience distinct pathways of occupational achievement. In fact, migration is often viewed as a means toward facilitating long-term social mobility at the expense of short-term sacrifices (Dreby 2010; Gans 2009; Heath et al. 2008).

As suggested by immigrant selection literature, we expect that children of immigrants will demonstrate patterns of occupational class reproduction (Feliciano and Lanuza 2017; Ichou 2014; Pong and Landale 2012). However, to observe this, we must develop a complete understanding of immigrant parents' pre- and postmigration occupation mobility and what these different occupational statuses in the origin country and the United States reflect. That is because occupational status may not capture the total human capital of immigrant parents, which includes both observable skills (e.g., schooling, host-country language skills) and unobservable skills (e.g., eagerness, learning capacity, interpersonal confidence; Hagan et al. 2015). This disconnect between occupational status and skill level is likely to occur for premigration high-skilled immigrants (i.e., those with presumably more observable skills) and for premigration low-skilled immigrants but in different ways depending on the occupation of reference, U.S. versus origin country occupation.

For premigration high-skilled immigrants (hereafter, *high-skilled immigrants*), this disconnect is most likely to occur with their U.S. occupation; thus, their origin-country occupation may better inform children's occupational mobility because many high-skilled immigrants experience U.S. occupational downgrading due to limited transferability of observable skills (Akresh 2006; Duleep and Regets 1997; Zeng and Xie 2004). These immigrants may work in a low-skilled occupation but

have high levels of human capital in the form of cognitive knowledge and practical skills (Becker 1964, 1994), and they may invest more in their child's cognitive development than would be expected of U.S.-born parents employed in the same occupation (Portes and Fernández-Kelly 2008). Additionally, these high-skilled immigrants may benefit from greater cultural capital (Bourdieu 1985). Having lived a middle- or upper-class life in their origin country, these parents have a clear sense of identity and know how to navigate challenges and opportunities in the parallel middle class sphere in the United States (Fernández-Kelly 2008). Moreover, their children understand that any familial status decline is merely transitory and thus seek to reach their middle class status (Louie 2012; Portes and Fernández-Kelly 2008).

*Hypothesis 1A:* Consistent with traditional status attainment models (Blau and Duncan 1967) and prior immigrant research (Feliciano and Lanuza 2017), we expect that children of high-skilled immigrants who experience U.S. occupational downgrading will be able to reach their parents' premigration occupational status.

*Hypothesis 1B:* Further, we expect that the children of high-skilled immigrants who are able to maintain their high-occupational status in the United States will similarly continue to maintain their parents' high status.

In contrast, for premigration low-skilled immigrants (hereafter, *low-skilled immigrants*), who often move to escape limited socioeconomic opportunities and achieve upward mobility in the United States, their U.S. rather than origin-country occupation may better capture their total human capital (i.e., observable and unobservable skills) (Hagan et al. 2015). In fact, Villarreal (2016) found that low-skilled immigrants are positively selected within their origin-country occupation; that is, within the same occupation, those who migrate have more education. In addition, research has consistently found that U.S. employers often praise and seek out low-skilled immigrants for their strong work ethic and motivation (Hermansen 2016; Mattoo et al. 2012; Pong and Landale 2012; Waldinger and Lichter 2003). In this way, because the United States provides greater occupational opportunities, low-skilled immigrants' post- versus premigration occupation may better reflect their total human capital:

*Hypothesis 1C:* We expect that the children of low-skilled immigrants who experience U.S. occupational upgrading will be able to maintain or build on this upward mobility because their parents' U.S. occupational advances likely capture underlying parental resources.

However, for many low-skilled immigrants, postmigration barriers (e.g., language challenges, discrimination, and legal status) preclude them from fully capitalizing on their skills, causing them to experience U.S. occupational stagnation or declines (Duncan and Trejo 2015; Portes and Rumbaut 2006). In these cases, neither their pre- nor postmigration occupational status is likely to accurately reflect the total human capital—particularly unobservable skills—that they have to invest in their children's upward mobility (Hagan et al. 2015). Their children, however, should benefit from these underlying parental resources and make upward occupational advances because

they themselves face fewer barriers (e.g., they are U.S.-educated, have fewer language challenges, or have citizenship) (Borjas 2006).

*Hypothesis 1D:* We expect that the children of low-skilled immigrants who experience U.S. occupational stagnation or downgrading will be able to achieve upward occupational mobility.

## **Children of Immigrants' Occupational Attainment: Educational Pathways and Barriers**

These positive patterns of occupational class reproduction and mobility, however, may not be sufficient to ensure that children of immigrants reach occupational parity with children of non-Hispanic White natives (Alba and Nee 2003; Portes and Rumbaut 2001) because the immigrant experience has a duality: immigrants may be select and highly motivated (i.e., immigrant optimism), but they must also contend with postmigration institutional and racial/ethnic barriers (i.e., immigrant pessimism; Louie 2012). To better understand how immigrant parents' pre- and postmigration occupational status shapes their children's incorporation into the U.S. labor force (i.e., relative to the occupational attainment of children of White natives), we examine how educational investments (i.e., optimism) and postmigration barriers (i.e., pessimism) may promote or impede children's occupational attainment.

First, we assume that educational investments are central to how immigrant parents promote and facilitate children's occupational attainment. According to classic status attainment models, parents affect children's occupational attainment by setting class aspirations and by helping children achieve these aspirations through enrolment in good schools and through concerted cultivation practices that instill cultural knowledge (e.g., styles of speaking) that are rewarded in schools and professional occupations (Lareau 2003). Given the select nature of immigration and the frequently unobserved class status/skill set of immigrants (Feliciano and Lanuza 2017; Ichou 2014; Portes and Fernández-Kelly 2008), we outline the following hypotheses:

*Hypothesis 2A:* We expect that immigrant parents will seek to promote their child's occupational attainment through educational investments.

*Hypothesis 2B:* However, we expect that no matter their parents' postmigration occupational mobility, children of high- versus low-skilled immigrants will benefit more from these educational investments because their parents have richer educational resources and educational system experience.

Second, as suggested by assimilation literatures (Alba and Nee 2003; Portes and Rumbaut 2001), we assume that postmigration disparities in institutional resources (i.e., schools for children) and racial/ethnic stratification will shape the occupational attainment of immigrants' children. Research has found that children of immigrants, particularly Latinos, are segregated into low-income, poorly resourced schools, which can hinder educational investments, access to middle-class job networks, and subsequent occupational mobility (Orfield and Lee 2005; Perreira et al. 2006; Portes and Rumbaut 2001; Rumbaut 1999; Stone and Han 2005). Presumably, high- versus low-skilled immigrant parents will be better equipped to navigate and buffer children from



these schooling challenges, but both lack familiarity with the U.S.-specific schooling system (Alon et al. 2010; Louie 2012). Moreover, all immigrant parents may be limited in their ability to buffer children from labor market racial discrimination (Bean et al. 2015; Greenman and Hall 2013; Heath et al. 2008; Park and Myers 2010).

*Hypothesis 3A:* We expect that postmigration barriers related to disparities in schooling quality and racial/ethnic stratification will hinder the occupational attainment of all children of immigrants.

*Hypothesis 3B:* However, we expect that these postmigration barriers will be even greater for children of low-skilled immigrants, no matter their parents' postmigration occupational mobility, because they may be less equipped to navigate such barriers.

## Methodology

### Data

We use panel data from the Educational Longitudinal study of 2002 (ELS), sponsored by the [National Center for Education Statistics \(NCES\)](#). In 2002, the ELS collected data on a cohort of 15,890 10th graders from 750 schools, with follow-ups in 2004, 2006, and 2012.<sup>2</sup> We use the base year (2002) through third follow-up (2012), which tracks the educational achievement/attainment and occupational mobility of children from 10th grade into early adulthood. The ELS is unique because it collects information on immigrant parents' pre- and postmigration occupations, which is unavailable in most data sets, and tracks students into early adulthood.

### Sample

We focus on children of immigrants whose parents worked premigration.<sup>3</sup> We restrict the panel sample to children of immigrants (i.e., both parents foreign-born, child U.S.-born or foreign-born;  $N = 1,250$ ) employed in the civilian sector,<sup>4</sup> not currently seeking a degree, and who had a parent(s) employed in the civilian sector in both the origin country and the United States. We also include children of non-Hispanic White native parents ( $N = 4,800$ ) as a comparison group. Missing data are more concentrated among children of immigrants (35%) than children of non-Hispanic White natives (3%), resulting in a final analytic sample of 5,520.<sup>5</sup> Children of immigrants with missing data, however, are demographically similar to our analytical sample, with a few exceptions: they have

<sup>2</sup> Sample sizes are rounded to the nearest 10.

<sup>3</sup> Results (not shown) were robust with an added parent age-of-arrival requirement (21+) to adjust for potential part-time or unofficial work.

<sup>4</sup> Approximately 2% were not employed, and <1% were in the military. Non-employment was lower among children of natives (1.4%) than immigrants (3.2%).

<sup>5</sup> In the baseline sample, 190 were missing parent and/or child U.S. occupation, 390 were missing parent origin-country occupation, and 240 were missing another independent variable(s).

older-age arrival parents, are more likely to be Asian, and are less likely to be Mexican or from a two-parent family (see Table A1 in the online appendix). Results were robust to different missing data approaches. We present complete case analysis results, but we found similar results using multiply imputed data (online appendix, Tables A2 and A3).<sup>6</sup>

## Measures

To create our outcome and main independent variable of interest, we first classify and code occupational status for three occupations: parents' origin-country occupation (baseline survey), parents' U.S. occupation (baseline survey), and child's early adulthood occupation (third follow-up). For both parent occupation measures, we focus on highest parent occupation (parent survey respondent or his/her spouse) because, like prior immigrant research (Pong and Landale 2012), we treat parents as part of a family unit and aim to measure immigrant family occupational mobility.

Because the NCES collected data for each parent and child occupation measure in different formats, we strive to ensure comparability in our coding while also maximizing occupational precision. For children's and parents' U.S. occupation, the NCES provides extensive occupational detail, matching self-reported job title and descriptions to one of the 821 occupational listings in the Occupational Information Network (O\*NET). Parents' origin-country occupations, however, are not operationalized in the same manner, and the level of detail is not sufficient to map directly to O\*NET because parents' origin-country occupations are open-ended text. Thus, using the text on self-reported job titles and descriptions, we code parents' origin-country occupation into one of four hierarchical categories—(1) professional/managerial; (2) lower white-collar; (3) trade/craft; and (4) labor/service—by classifying self-reported job titles and descriptions into a simplified 14-category occupational taxonomy that follows the NCES's detailed guidelines (Ingels et al. 2014). To reduce measurement error when coding parents' origin-country occupation and to be consistent with macro-level, cross-country occupational classifications established by social class/mobility theorists (see Jonsson et al. 2009; Weeden and Grusky 2012) and related immigrant research (Chiswick et al. 2005), we reclassify these 14 categories into the final 4 noted. See Table A4 in the online appendix for a full summary overview of this occupational match.

### *U.S. Occupational Outcome Measures*

We use occupational data for our two outcomes: (1) child-parent intergenerational U.S. occupational mobility and (2) child's U.S. occupational attainment. For both, we measure occupational status using the International Socio-Economic Index (ISEI-08),

<sup>6</sup> Following NCES guidelines and immigrant wage imputation research (Borjas and Friedberg 2009), we impute missing data separately for children of immigrants and White natives, using multivariate normal imputation. This method replaces missing values with plausible substitutes based on a multivariate normal distribution and creates  $n$  ( $n=10$ ) data sets, combines results into one set of regression coefficients and standard errors, and yields results similar to those of other multiple imputation specifications (Johnson and Young 2011; Lee and Carlin 2010).



which can be matched to the O\*NET code via the International Standard Classification of Occupations. The ISEI-08 scale—the most widely used socioeconomic status indices in comparative international studies—measures the hierarchical position of the occupation by using weighting techniques that maximize the role of occupation as an intervening variable between education and income (Ganzeboom and Treiman 2010; Ganzeboom et al. 1992). The scale ranges from 11.01 (farmers, fishers, hunters) to 88.96 (judges) and is commonly used in immigrant intergenerational mobility pre-/postmigration studies (Kanas et al. 2012; Pong and Landale 2012). Because income-based occupational measures are also commonly used in immigrant intergenerational mobility studies (Duncan and Trejo 2015), we also ran our analysis using median occupational earnings based on U.S. census data and found similar results (Hall et al. 2019; Lofstrom et al. 2013) (see Tables A2 and A3 in the online appendix).

Children's U.S. occupational attainment is based on their current or most recent job as reported in the third follow-up. The mean ISEI-08 occupational status for children's occupation in our sample is 48.2 (SD=20.5), which is equivalent to a travel attendant or firefighter. A 1 standard deviation increase (ISEI score=68.7) is equivalent to being a government official or teaching professional. A 1 standard deviation decrease (ISEI score=28.7) is equivalent to being a carpenter or factory worker/assembler. The child-parent intergenerational U.S. occupational mobility measure captures the difference between the ISEI-08 score for the child and highest parent U.S. occupation.

### *Parent Nativity and Pre-/Postmigration Occupational Status and Mobility*

Our primary independent variable of interest is a five-category classification scheme based on parents' nativity, premigration occupational status, and U.S. occupational mobility. Table 1 reports this scheme, and Table A5 in the online appendix shows its detailed creation. We first distinguish between children of natives and children of immigrants; then, using immigrant parents' highest occupation in origin country and the United States, we classify children of immigrants into four subcategories based on parents' premigration occupational status (high- vs. low-skilled) and postmigration occupational mobility (i.e., upward, same, or downward; combined at times to adjust for floor/ceiling effects). We use the four hierarchical macro categories noted earlier to distinguish between manual and nonmanual occupations—the two big classes in social class/mobility research (Jonsson et al. 2009; Weeden and Grusky 2012)—and classify immigrants as high-skilled (i.e., professional/managerial, lower white-collar) or low-skilled (i.e., trade/craft, and labor/service) accordingly. We measure occupational mobility based on movement among the four macro categories.<sup>7</sup> Because

<sup>7</sup> Observed immigrant-group and model patterns persist when we include interactions between parent years in the United States (drop age of arrival and use age for natives) and our five-category immigrant classification to control for potential skill groupings and U.S. tenure conflation. The interactions are small and mostly nonsignificant, except for children of high-skilled downwardly mobile immigrants, who are slightly less upwardly mobile as parents' time in the United States grows (i.e., interaction is negative and significant). Perhaps parent occupation is more transitory for recent arrivals (i.e., they make later gains), leading to an upward mobility bias. This bias, however, does not drive our results. See the online appendix, sections B and C.

**Table 1** Classifying children of immigrants by parents’ premigration occupational status and postmigration occupational mobility

Five-Category Classification Scheme for Children of Immigrants and Natives	Parent’s Premigration Occupational Status	Parent’s Postmigration Origin Country to U.S. Occupational Mobility	Sample Distribution (%)
Children of Immigrant Parents			15
Low-skill: “Stuck” parents	Low Skill	Downward or Same	21
Low-skill: Upwardly mobile parents	Low Skill	Upward	21
High-skill: Downwardly mobile parents	High Skill	Downward	20
High-skill: Status maintaining parents	High Skill	Same or Upward	39
Children of Non-Hispanic White Native Parents	—	—	85

*Notes:* The focus is on immigrant parents who worked in their origin country before migrating. Parents’ premigration occupational status is based on the highest parental occupation. Low-skill immigrants include those in labor/service or trade/craft occupations in their origin country. High-skilled immigrants include those in low white-collar or professional/managerial occupations in their origin country.  $N = 5,520$ .

*Source:* National Center for Education Statistics (Ingels et al. 2014).

of small sample sizes, we cannot distinguish the degree of movement (e.g., one vs. two position moves), and we combine categories to adjust for floor (i.e., same/downward for low-skilled) and ceiling (i.e., same/upward for high-skilled) effects. These decisions produce five final categories: (1) children of U.S.-born non-Hispanic Whites (hereafter, *White natives*; reference group), (2) children of high-skilled status-maintaining immigrants, (3) children of high-skilled downwardly mobile immigrants, (4) children of low-skilled upwardly mobile immigrants, and (5) children of low-skilled “stuck” immigrants.

*Premigration and Demographic Characteristics*

To control for premigration and demographic differences, we include indicators for students’ nativity, gender, and student/parents’ native language (1 = non-English native language); parents’ age, age of arrival, and education; and family structure (1 = two-parent family).

*Educational Investments*

To provide a comprehensive view of educational investments, we measure educational expectations, achievement, and attainment. Parent’s expectations for their child and their child’s own educational expectations were reported in the base year (10th grade). We create two independent dichotomized (1 = expects graduate school) expectation measures: parents’ expectations for their child, and child’s own educational expectations. We include indicators of students’ 10th grade schooling achievement

(10th grade composite math and reading test score) and educational attainment in early adulthood (highest degree obtained and current enrollment status).

### *Postmigration Measures*

To assess potential postmigration disparities in schooling quality and racial/ethnic stratification, we include three common indicators of school quality: proportion receiving free/reduced-price lunch, student-teacher ratio, and school type (1=public, 0=private). We assess racial/ethnic differences in our immigrant sample by including seven indicators categorizing students' racial/ethnic background: non-Hispanic White (reference group), non-Hispanic Black, Chinese origin, other Asian origin, Mexican origin, other Hispanic origin, and other non-Hispanic origin race/ethnicity. As social constructs, these race/ethnicity measures capture both premigration country-/region-of-origin differences and well-documented U.S. racial/ethnic disparities. Because our other premigration measures should capture important country-/region-of-origin differences, we use race/ethnicity as a postmigration measure.

### **Analytic Approach**

We first document the prevalence of occupational upgrading and downgrading among immigrant parents. We then focus on the children of immigrants and use descriptive and multivariate tools to examine patterns of intergenerational U.S. occupational mobility and children's U.S. occupational attainment using our five-category classification. For both outcomes, we use the following general model:<sup>8</sup>

$$Y_{ij} = \alpha_0 + \beta_1 \mathbf{Imm}_{ij} + \beta_2 \mathbf{PreMig}_{ij} + \beta_3 \mathbf{EduInvest}_{ij} + \beta_4 \mathbf{PostBarrier}_{ij} + \varepsilon_{ij},$$

where  $i$  indexes individuals, and  $j$  indexes (former) high schools;  $Y_{ij}$  is the outcome;  $\mathbf{Imm}_{ij}$  is a vector of dummy variables indicating our five-category classification of children of immigrants (with children of White natives are the reference);  $\mathbf{PreMig}_{ij}$  is a vector of premigration and demographic characteristics;  $\mathbf{EduInvest}_{ij}$  captures educational investments;  $\mathbf{PostBarrier}_{ij}$  represents postmigration characteristics; and  $\varepsilon_{ij}$  is an error term. Analyses correct for design effects by using the base year to third follow-up panel sample weight and school ( $j$ ) clustering adjustment (Maas and Hox 2004). For both outcomes, we assess alternative equation specifications: we first use a parsimonious specification (i.e., no controls) that captures overall differences in occupational attainment and mobility and then, for each outcome, use different modeling strategies that capture different theoretical blocks of interest.

<sup>8</sup> For the intergenerational mobility analysis, we also ran standard regression to the mean models of mobility, regressing child occupational attainment on parent attainment and its interaction with the child of immigrant classification. We found substantively similar results. For ease of interpretation, however, we use the parent-child difference modeling strategy, similar to change studies of adult immigrants' pre-/postmigration occupational mobility (Akresh 2006; Lofstrom et al. 2013).

## Results

### Occupational Upgrading and Downgrading Among Immigrant Parents

**Table 2** displays the pre- and postmigration occupational experiences of immigrant parents. The results highlight the bifurcation of U.S. immigration streams but also demonstrate that these streams experience different rates of postmigration mobility. Immigrant parents are evenly split between high-skilled (51%) and low-skilled (49%) status. After coming to the United States, however, high- and low-skilled immigrant parents experience markedly different rates of occupational mobility. Among high-skilled parents, 43% experience occupational downgrading, and 57% maintain or improve their occupational status. In contrast, for low-skilled parents, nearly one-half (48%) experience occupational upgrading, and 52% remain in the same or lower occupation. Similar pre- and postmigration occupational patterns occur across all racial/ethnic groups, but Latinos are more likely to be low-skilled at premigration and to face greater postmigration occupational mobility challenges (i.e., greater downward and more limited upward mobility) than Asians and other racial/ethnic groups. Moreover, aligning with prior research (Akresh 2006, 2008; Chiswick et al. 2005), occupational downgrading is more common among nonnative English speakers; those with lower education levels; and, among the high-skilled, those of Mexican origin (see Table A6 in the online appendix).

### Characteristics of Children of Immigrants by Parental Pre- and Postmigration Occupational Mobility

**Table 3** displays summary statistics for the characteristics and resources of our five-category classification of children of immigrants. As expected, pre- and postmigration resources differ across subgroups. For instance, high-skilled immigrant parents have higher levels of education than low-skilled immigrant parents, and within high- and low-skilled immigrant parents, the upwardly mobile are more educated. In fact, the educational attainment of high-skilled status-maintaining parents exceeds that of White natives: 66% versus 42%, respectively, have a bachelor's degree or more. In terms of educational investments, all immigrant parents have high educational expectations for their children, often exceeding those of White natives. However, only children of high-skilled immigrants, particularly children of high-skilled status maintainers, demonstrate achievement and attainment levels like those of White natives. In fact, children of high-skilled status maintainers are more likely to attain a bachelor's degree or more (54%) than children of White natives (43%). Finally, all children of immigrants—but especially children of low-skilled immigrants—face potential postmigration barriers: schools with higher rates of free/reduced-price lunch and student-teacher ratios than those attended by children of White natives, and, for most, a racial/ethnic minority status.

### Patterns of Intergenerational U.S. Occupational Mobility

Next we examine intergenerational occupational mobility patterns. It is important to remember that given the design of ELS, we observe parent and child occupation at

**Table 2** Immigrant parents' premigration background and postmigration occupational mobility

	Full Sample	Latinos	Asians	Other Race
Premigration Low-Skilled Immigrant Parents	48.9	60.8	29.1	29.6
Downward mobility (%)	8.3	8.4	6.8	8.6
Same (%)	43.3	47.3	33.1	27.4
Upward mobility (%)	48.4	44.3	60.2	64.0
<i>N</i>	340	210	90	40
Premigration High-Skilled Immigrant Parents	51.1	39.2	70.9	70.4
Downward mobility (%)	42.9	62.5	24.6	24.9
Same (%)	45.8	31.6	63.7	54.6
Upward mobility (%)	11.4	5.9	11.7	20.6
<i>N</i>	470	150	210	110

*Notes:* Postmigration occupational mobility is the difference between highest parent occupation in origin country and the United States. Data are weighted, but unweighted and nonimputed *N*s are reported and rounded to the nearest 10. Other Race combines Whites, Blacks, and other racial/ethnic groups. The six categories of immigrant parents presented are an expanded version of the simplified four-category classification that adjusts for small sample sizes due to floor/ceiling effects.

*Source:* National Center for Education Statistics (Ingels et al. 2014).

different career stages: mid-career for parents (about age 45) versus early career for their children (about age 26). Consequently, child-parent mobility patterns are likely to be biased negatively but equally across skill, nativity, and racial/ethnic groups. Thus, by comparing the relative change in child-parent intergenerational mobility for children of White natives and our different children of immigrant subgroups, we net out this negative bias and identify whether our subgroups of children of immigrants make intergenerational gains that differ from those made by children of White natives.

Figure 1 shows overall intergenerational occupational mobility patterns by using mean differences and the simplified 4-point occupational rank scale (1 = labor/service; 2 = trade/craft; 3 = lower white-collar; 4 = professional/managerial), which allows for comparisons across all three occupations: parents' origin-country occupation, parents' U.S. occupation, and child's early adulthood occupation. Figure 1 highlights intergenerational mobility patterns based on parents' U.S. occupation (panel a) and origin-country occupation (panel b). Overall, the results support our occupational class reproduction thesis but demonstrate that to observe this requires the inclusion of immigrant parents' origin-country occupation (Hypotheses 1A–1D). As shown in Figure 1, excluding immigrant parents' origin-country occupation biases our understanding of intergenerational U.S. mobility for children of high-skilled downwardly mobile immigrants.

Across the panels of Figure 1, patterns of intergenerational U.S. occupational mobility differ for only some children of immigrants. The starkest difference occurs for children of high-skilled downwardly mobile immigrants. These children make large intergenerational gains, moving up from craftsman/tradesman to lower white-collar professionals (see panel a). These large intergenerational gains, however, are just replications of their parents' origin-country occupation (see panel b). Still early in their careers, these children are on track to regain their parents' origin-country professional status (Hypothesis 1A). A second notable difference is that children of

**Table 3** Summary statistics for children of immigrants and non-Hispanic White natives

	Children of Immigrants						Children of Non-Hispanic White Native Parents
	Low-Skilled Parents			High-Skilled Parents			
	"Stuck" Immigrants	Upwardly Mobile Immigrants	Sig. Within-Group Differences	Downwardly Mobile Immigrants	Status-Maintaining Immigrants	Sig. Within-Group Differences	
Premigration/Demographic Characteristics							
Child is female	0.57	0.42	*	0.53	0.46	**	0.51
Child is foreign-born	0.58 <sup>a</sup>	0.48 <sup>a</sup>		0.67 <sup>a</sup>	0.47 <sup>a</sup>	**	—
Non-English native language (child)	0.92 <sup>a</sup>	0.81 <sup>a</sup>	*	0.79 <sup>a</sup>	0.59 <sup>a</sup>	**	0.01
Parent's age of arrival	28.37 <sup>a</sup>	25.66 <sup>a</sup>	**	31.19 <sup>a</sup>	30.07 <sup>a</sup>		—
Parent's age	44.91	44.84		44.60	46.72 <sup>a</sup>	**	45.16
Highest parent education							
<High school	0.57 <sup>a</sup>	0.38 <sup>a</sup>	**	0.12 <sup>a</sup>	0.02	**	0.02
High school	0.24	0.22		0.15	0.10 <sup>a</sup>		0.21
Some college	0.14 <sup>a</sup>	0.22 <sup>a</sup>		0.48 <sup>a</sup>	0.22 <sup>a</sup>	***	0.36
Bachelor's degree+ (ref.)	0.04 <sup>a</sup>	0.19 <sup>a</sup>	***	0.26 <sup>a</sup>	0.66 <sup>a</sup>	***	0.42
Two-parent family							
	0.84	0.78		0.80	0.78		0.81
Educational Investments							
Child educational expectations: >College	0.25 <sup>a</sup>	0.33		0.36	0.50 <sup>a</sup>	*	0.37
Parent educational expectations: >College	0.43	0.51 <sup>a</sup>		0.49	0.59 <sup>a</sup>		0.36
Reading and math test (10th grade)	42.82 <sup>a</sup>	45.54 <sup>a</sup>	*	47.38 <sup>a</sup>	53.32	***	53.54
Educational attainment							
High school or less	0.26 <sup>a</sup>	0.30 <sup>a</sup>		0.16	0.05 <sup>a</sup>	**	0.15
Some college	0.58 <sup>a</sup>	0.45	*	0.44	0.41		0.42
Bachelor's degree+ (ref.)	0.16 <sup>a</sup>	0.25 <sup>a</sup>	*	0.41	0.54 <sup>a</sup>	*	0.43



Table 3 (continued)

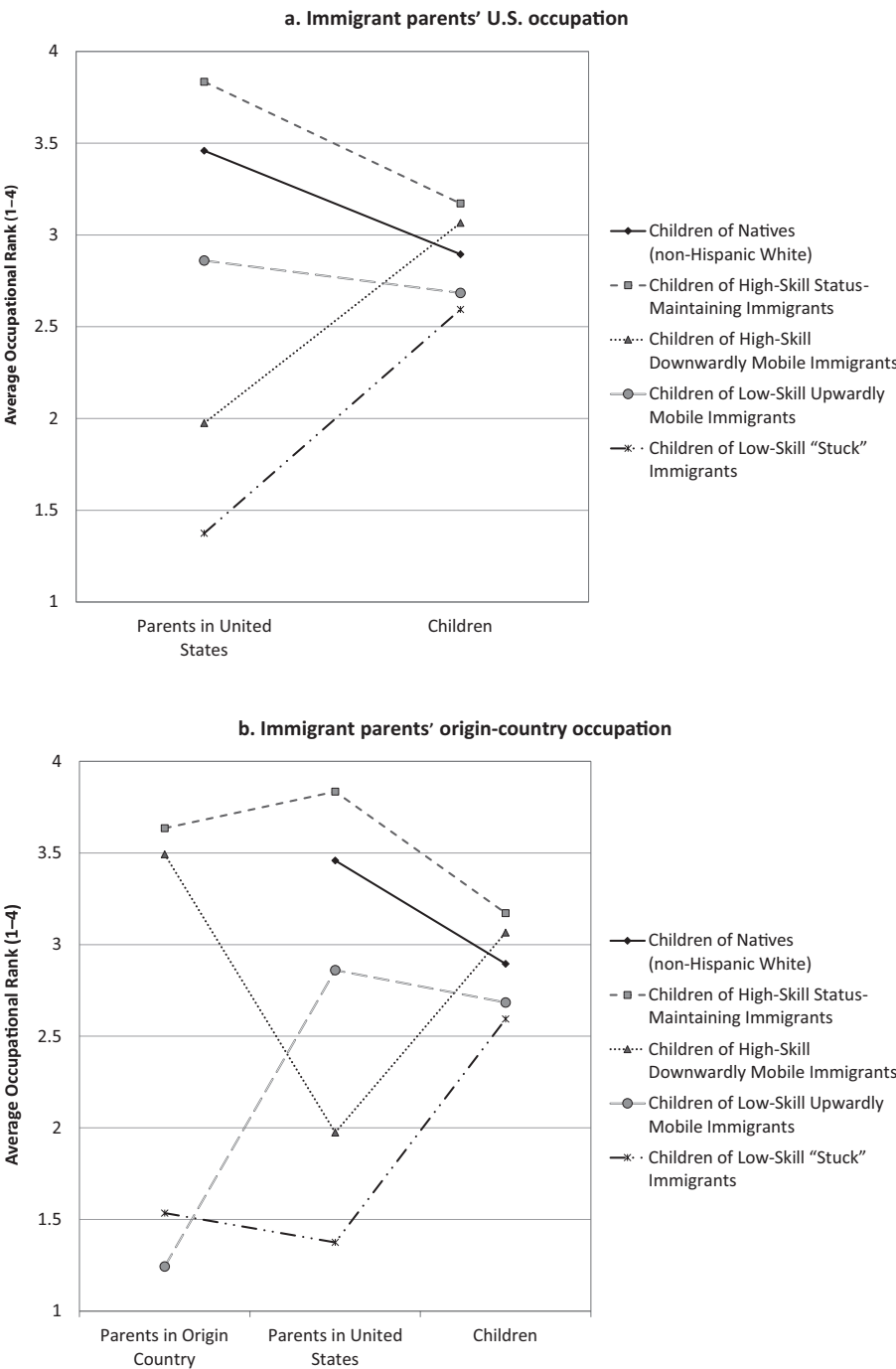
	Children of Immigrants						Children of Non-Hispanic White Native Parents
	Low-Skilled Parents			High-Skilled Parents			
	"Stuck" Immigrants	Upwardly Mobile Immigrants	Sig. Within- Group Differences	Downwardly Mobile Immigrants	Status- Maintaining Immigrants	Sig. Within- Group Differences	
Postmigration Barriers							
Schooling context (10th grade)							
Public vs. private school	0.99 <sup>a</sup>	0.98 <sup>a</sup>		0.99 <sup>a</sup>	0.88	***	0.90
Proportion receiving free/reduced-price lunch	0.40 <sup>a</sup>	0.38 <sup>a</sup>		0.32 <sup>a</sup>	0.21 <sup>a</sup>	***	0.15
Student-teacher ratio	19.93 <sup>a</sup>	19.91 <sup>a</sup>		19.11 <sup>a</sup>	18.46 <sup>a</sup>		16.21
Children of immigrants' race/ethnicity							
Non-Hispanic White (ref.)	0.05 <sup>a</sup>	0.10 <sup>a</sup>		0.08 <sup>a</sup>	0.17 <sup>a</sup>	*	—
Non-Hispanic Black	0.04 <sup>a</sup>	0.03 <sup>a</sup>		0.06 <sup>a</sup>	0.13		—
Mexican	0.69 <sup>a</sup>	0.56 <sup>a</sup>	*	0.44 <sup>a</sup>	0.14 <sup>a</sup>	***	—
Non-Mexican Latino	0.14 <sup>a</sup>	0.15 <sup>a</sup>		0.26 <sup>a</sup>	0.17 <sup>a</sup>	†	—
Chinese	0.02 <sup>a</sup>	0.02 <sup>a</sup>		0.04 <sup>a</sup>	0.08 <sup>a</sup>	*	—
Non-Chinese Asian	0.06 <sup>a</sup>	0.11 <sup>a</sup>		0.10 <sup>a</sup>	0.23 <sup>a</sup>	***	—
Other race	0.00 <sup>a</sup>	0.04 <sup>a</sup>	†	0.03	0.07		—
N	170	170		160	320		4,700

Note: Data are weighted, but unweighted and nonimputed Ns are reported and rounded to the nearest 10.

Source: National Center for Education Statistics (Ingels et al. 2014).

<sup>a</sup> Indicates statistically different ( $p < .05$ ) from children of non-Hispanic White native parents.

† $p < .10$ ; \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$



**Fig. 1** Intergenerational mobility by immigrant parents' U.S. and origin country occupation. High- and low-skilled refer to premigration occupational status. Occupational rank is based on the 4-point scale, where 1=labor/service, 2=trade/craft, 3=lower white-collar, and 4=professional/managerial. *Source:* National Center for Education Statistics (Ingels et al. 2014).

**Table 4** OLS models predicting child's intergenerational U.S. occupational mobility

	Model 1 Base	Model 2 Premigration and Demographics	Model 3 Full
Children of Immigrants (ref. = non-Hispanic White children of natives)			
High-skill: Status maintainer	5.21 (1.73) **	7.22 (4.40)	5.47 (4.86)
High-skill: Downwardly mobile	24.57 (2.31) ***	22.84 (5.02) ***	20.80 (5.28) ***
Low-skill: Upwardly mobile	14.45 (2.38) ***	10.36 (4.21) *	9.57 (4.97) †
Low-skill: "Stuck"	22.85 (2.24) ***	15.42 (4.61) ***	14.80 (5.17) **
Premigration and Demographic Characteristics			
Child is female		5.06 (0.73) ***	3.01 (0.72) ***
Child is foreign-born		-0.66 (2.29)	0.88 (2.24)
Parent's education <high school		15.26 (2.19) ***	23.21 (2.47) ***
Parent's education high school		11.45 (1.00) ***	17.52 (1.05) ***
Parent's education some college		6.79 (0.90) ***	10.91 (0.91) ***
Non-English native language		-1.25 (2.16)	-0.75 (2.13)
Parent's age		0.01 (0.06)	-0.07 (0.06)
Parent's age of arrival		0.04 (0.13)	0.03 (0.13)
Two-parent family		-0.61 (0.98)	-2.38 (0.94) *
Constant	-7.71 (0.43) ***	-15.22 (3.16) ***	-8.02 (4.42) †
R <sup>2</sup>	.04	.10	.17
Sample Mean (SD)		-5.77 (24.50)	

Notes: Data are weighted and adjusted for school clustering. Unweighted  $N=5,520$ . The full model includes educational investment and postmigration barrier controls listed in Table 3. Standard errors are shown in parentheses.

Source: National Center for Education Statistics (Ingels et al. 2014).

† $p < .10$ ; \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

low-skilled upwardly mobile immigrants are replicating their parents' U.S. occupational advances, not their parents' lower origin-country occupation (Hypothesis 1C). Finally, patterns are similar in both panels of the figure for children of low-skilled "stuck" and high-skilled status-maintaining immigrants. As expected, the former make large intergenerational gains (Hypothesis 1D), and the latter sustain their parents' immigrant-native occupational advantage (Hypothesis 1B).

To further examine patterns of intergenerational U.S. mobility, we use regression analysis and focus on parents' U.S. occupation, which allows for the use of the more precise ISEI-08 occupational scale. The results are presented in Table 4. Model 1 provides baseline estimates, and Model 2 controls for premigration factors and demographics that likely affect immigrant parents' initial occupational match (and thus our classification of children of immigrants) and children's U.S. occupational attainment. Although we cannot disaggregate these two effects (i.e., the effect on parent vs. child U.S. occupation), given the very low U.S. starting point we observe for some immigrant parents (see the online appendix, section G) and the well-documented literature showing that premigration and demographic factors (e.g., low parental education, native language) influence adult immigrants' pre-/postmigration occupational match (Akresh 2006, 2008; Chiswick et al. 2005), we suspect that Model 2 partially captures

the influence of premigration and demographic factors on immigrant parent's U.S. occupational attainment. Last, Model 3 adds the remaining controls.

Overall, the results show that the intergenerational U.S. gains made by children of immigrants compared with children of White natives partly reflect premigration disadvantages (e.g., low parental education, native language). However, even after controlling for pre- and postmigration factors, all children of immigrants—except high-skilled status maintainers who face ceiling effects—remain upwardly mobile, especially children of high-skilled downwardly mobile immigrants.

Notably, changes between Models 1 and 2 demonstrate the influence of premigration disadvantages. Using children of low-skilled “stuck” immigrants as an example, Model 1 shows large intergenerational U.S. occupational advances ( $b=22.85$ ), by about 1 standard deviation over children of White natives (e.g., the equivalent difference between being a cook and being a restaurant manager). However, once we control for premigration factors and demographics in Model 2, the coefficient for these children decreases by about one-third ( $b=15.42$ ). Similar patterns occur for children of low-skilled upwardly mobile parents.

In contrast, for children of high-skilled downwardly mobile immigrants the addition of premigration factors and demographics explains only a small portion (less than 10%) of their large baseline intergenerational gains ( $b=24.57$ ). Moreover, these large gains remain even after we include educational investment and postmigration measures ( $b=20.80$ ; Model 3). Similar but smaller intergenerational gains also persist for children of low-skilled upwardly mobile ( $b=9.57$ ) and “stuck” ( $b=14.80$ ) immigrants in the full model.

### Occupational Attainment Compared With Children of White Natives

Next we examine whether the intergenerational U.S. occupational status gains made by the children of immigrant subgroups are sufficient to ensure they reach occupational parity with children of White natives. We use ordinary least squares (OLS) regression to examine factors that shape children's occupational attainment (ISEI scale). The results are shown in Table 5. Model 1 provides baseline estimates, and Model 2 controls for premigration factors and demographics. Models 3 and 4, respectively, add educational investments (Hypothesis 2A and 2B) and postmigration barriers (Hypothesis 3A and 3B). Model 5 combines all measures into one full model.

Model 1 shows that children of high-skilled immigrants do as well as or, in the case of high-skilled status maintainers, better than children of White natives. In contrast, children of low-skilled upwardly mobile ( $b=-5.60$ ) and “stuck” immigrants ( $b=-7.60$ ) attain less than White natives. Thus, although children of low-skilled immigrants make sizable intergenerational U.S. occupational mobility gains, they still lag behind children of White natives. These occupational disadvantages are sizable, at about one-third of a standard deviation. Consistent with research on immigrant selection and the immigrant paradox, however, Model 2 reveals an immigrant occupational advantage across all subgroups once we control for parental socioeconomic status and other premigration factors: children of high-skilled status maintainers improve their occupational advantage, and children of high-skilled downwardly

Table 5 OLS models predicting child's U.S. occupational attainment

	Model 1 Base	Model 2 Premigration and Demographics	Model 3 Educational Investments	Model 4 Postmigration Barriers	Model 5 Full
Children of Immigrants (ref. =non-Hispanic White children of natives)					
High-skill: Status-maintaining	7.46 (1.51) ***	11.69 (3.26) ***	9.15 (2.98) **	20.53 (4.02) ***	13.96 (3.49) ***
High-skill: Downwardly mobile	1.92 (1.93)	11.20 (3.59) **	9.44 (3.23) **	23.36 (4.56) ***	15.08 (3.79) ***
Low-skill: Upwardly mobile	-5.60 (2.04) **	6.01 (3.34) †	5.67 (3.07) †	17.81 (4.22) ***	10.99 (3.99) **
Low-skill: "Stuck"	-7.60 (1.88) ***	6.22 (3.30) †	6.17 (2.92) *	18.99 (4.39) ***	11.81 (3.87) **
Educational Investments					
Child educational expectations: >College			2.56 (0.64) ***		2.54 (0.64) ***
Parent educational expectations: >College			1.80 (0.65) ***		1.79 (0.65) **
Reading and math test (10th grade)			0.27 (0.03) ***		0.26 (0.03) ***
Attainment: High school or less			-21.12 (0.93) ***		-20.97 (0.95) ***
Attainment: Some college			-15.37 (0.73) ***		-15.26 (0.74) ***
Postmigration Barriers					
Public vs. private school				-3.49 (0.86) ***	-0.71 (0.74)
Proportion receiving free/reduced-price lunch				-9.01 (2.38) ***	-2.36 (2.09)
Student-teacher ratio				-0.03 (0.09)	-0.02 (0.07)
Non-Hispanic Black				-9.40 (4.52) *	-6.78 (4.32)
Non-Mexican Latino				-8.90 (3.54) *	-5.26 (3.15) †
Mexican				-10.70 (3.46) **	-4.53 (3.23)
Non-Chinese Asian				-2.55 (3.39)	-2.11 (2.91)
Chinese				2.76 (4.34)	-2.13 (3.84)
Other race				-10.82 (5.30) *	-7.72 (4.62) †
Premigration and Demographic Controls	No	Yes	Yes	Yes	Yes
Constant	48.27 (0.42) ***	41.73 (2.68) ***	40.12 (3.09) ***	47.95 (3.05) ***	42.08 (3.33) ***
R <sup>2</sup>	.01	.09	.32	.11	.33
Sample Mean (SD)			48.19 (20.46)		

Notes: Data are weighted and adjusted for school clustering. Unweighted N = 5,520. Premigration and demographic controls include child's age and gender; parent's education, native language, age, and age of arrival; and family structure. Standard errors are shown in parentheses.

Source: National Center for Education Statistics (Ingels et al. 2014).

†p < .10; \*p < .05; \*\*p < .01; \*\*\*p < .001

mobile and low-skilled upwardly mobile and “stuck” immigrants attain more occupationally than children of White natives.

Model 3 demonstrates that part of this immigrant occupational advantage reflects the strong educational investments of immigrant families (Hypothesis 2A) but more so for high-skilled than for low-skilled immigrants (Hypothesis 2B). Once we control for the high levels of educational expectations, achievement, and attainment observed among children of high-skilled immigrants, we find that the coefficients for these groups decrease by about one-fifth. In contrast, the coefficients for low-skilled upwardly mobile and low-skilled “stuck” immigrants remain relatively unchanged. This finding is likely attributable to the more mixed educational investments of children of low-skilled immigrants: these children (and their parents) have high educational expectations but lower achievement and attainment.

Model 4 shows that postmigration disparities in schooling quality and racial/ethnic stratification hinder the occupational attainment of all children of immigrant subgroups (Hypothesis 3A) but more so for children of low-skilled immigrants (Hypothesis 3B). When we adjust for race/ethnicity and the lower quality of schools for children of immigrants, we find that the coefficients for all subgroups increase sizably (by 76% to 205%). This suppression is particularly strong for children of low-skilled immigrants, who face more schooling and racial/ethnic disadvantages regardless of their postmigration mobility.

Despite these postmigration challenges, the full model (Model 5) demonstrates that all children of immigrant subgroups attain more occupationally than children of White natives. In fact, their occupational advantage is at least one-half standard deviation greater than that of children of White natives.

## Discussion

In this study, we examined patterns of immigrant intergenerational U.S. occupational mobility and occupational attainment for children of immigrants based on parental pre- and postmigration occupational status. In doing so, we assessed whether children of immigrant parents maintained or made U.S. occupational advances beyond those of their parents and whether they reached occupational parity with children of White natives. We also evaluated how educational investments and postmigration barriers shaped children of immigrants’ occupational attainment.

### Intergenerational U.S. Occupational Mobility: Evidence and Lessons

We found that all children of immigrants did as well as or better than their parents in the U.S. occupational structure, even though they were closer to the start of their careers. The children of high-skilled status maintainers, for instance, were on track to sustain their parents’ high-occupational status and further expanded the immigrant-native occupational advantage. Further, the children of low-skilled upwardly mobile immigrants had already made moderate occupational status gains beyond their parents’ U.S. occupation. Finally, we found extraordinary intergenerational occupational



gains—1 standard deviation in size—for both children of high-skilled downwardly mobile and low-skilled “stuck” immigrants.

Overall, these results clarify debates in the immigrant intergenerational mobility literature and highlight the importance of incorporating immigrant parents' labor market experiences prior to migration when examining patterns of mobility. More specifically, our results align with immigrant selection and class-reproduction arguments (Feliciano and Lanuza 2017; Ichou 2014; Pong and Landale 2012), demonstrating that children of immigrants reproduce their parents' origin-country class status in the United States. The large intergenerational occupational mobility gains made by children of high-skilled downwardly mobile immigrants, for instance, are not evidence of an immigrant paradox—that is, unexpected achievement among disadvantaged children of immigrants (Crosnoe and Turley 2011; Kao and Tienda 1995); instead, these gains reflect the reachivement of parents' origin-country high occupational status. These children are merely recovering their parents' lost occupational status. In addition, children of high-skilled status maintainers are able to maintain their parents' high U.S. achievements. This occupational class reproduction suggests potential misestimation in intergenerational mobility research if parents' origin-country occupation is not considered.

For children of low-skilled immigrants, the evidence on class-reproduction requires more nuance. These children demonstrate strong patterns of upward mobility. However, this upward mobility likely reflects parents' limited origin-country opportunities, which is most evident in the case of low-skilled upwardly mobile immigrants. These immigrant parents made sizable occupational gains upon arrival in the United States, moving up, on average, from a labor/service occupation to a lower white-collar occupation. Such gains suggest that the origin-country occupation of these low-skilled immigrant parents did not reflect their true occupational status or potential (Hagan et al. 2015), which is better captured by their U.S. occupation. Consequently, as expected by class-reproduction theories, we found that their children built on their parents' U.S. occupational advancements rather than regressing to the lower origin-country occupation.

In the case of low-skilled “stuck” immigrant parents, we contend that neither origin-country nor U.S. parental occupation likely reflects the select nature of these immigrants and the underlying skill set and resources they have to invest in their child. Contrary to class-reproduction theories, we found that the children of low-skilled “stuck” immigrants did not replicate this same low-skilled occupational status. Instead, these children made large intergenerational gains. Rather than being paradoxical, however, we expect that these children are overcoming many of the postmigration barriers (e.g., legal status, language) that prevented their parents from reaching a higher occupational status in the United States (Duncan and Trejo 2015). Thus, although on the surface, these immigrant parents appear “stuck,” they are achieving their familial goal of long-term social mobility (Dreby 2010; Heath et al. 2008).

For researchers, this study reemphasizes the importance of including premigration factors when evaluating children of immigrants' integration (Feliciano and Lanuza 2017; Ichou 2014; Pong and Landale 2012), particularly in the labor market. Our large-scale study adds to the growing qualitative and smaller-scale evidence that patterns of intergenerational occupational mobility will be misestimated for children of immigrants because of parents' U.S. occupational downgrading (Fernández-Kelly 2008; Louie 2012). Our research clarifies why children of immigrants whose parents

have similar occupations (e.g., those who are taxi drivers in the United States) can have diverging outcomes. For some (e.g., high-skilled downwardly mobile immigrants), their children's comparatively higher occupational gains reflect the reemergence of lost class status (i.e., selectivity), not more rapid assimilation or, as claimed by some, a "cultural superiority" (Huntington 2000).

### Children of Immigrants' U.S. Occupational Attainment: Evidence and Lessons

We also examined the U.S. occupational attainment of children of immigrants and potential educational investments and postmigration barriers that shaped this attainment. Overall, we found important differences and similarities between children of high- and low-skilled immigrants, no matter their parents' postmigration mobility.

First, we found distinct patterns of occupational incorporation for children of high- versus low-skilled immigrants. Children of high-skilled immigrants attained the same occupational status, or even higher in the case of status maintainers, compared with children of White natives. In contrast, although children of low-skilled immigrants—both upwardly mobile and "stuck"—made sizable occupational gains beyond that of their parents, they still lagged behind the occupational attainment of children of White natives. For these children and immigrant families, it may take an additional generation to completely overcome their sizably lower parental starting point in order to completely catch up to children of White natives (Duncan and Trejo 2015).

Second, we found that children of high- and low-skilled immigrants, no matter their parents' postmigration mobility, benefited from the commonly found immigrant paradox. That is, after controlling for parental education and other premigration factors and demographics, all children of immigrants attained a higher occupational status than children of White natives.

Third, consistent with status attainment and class-reproduction arguments, we found that educational investments partly explained this paradox but that children of high- versus low-skilled immigrants benefited more from these investments. Although both low- and high-skilled immigrants had high educational expectations for their children, only the children of high-skilled immigrants were able to attain the levels of education observed for children of White natives. This fits with our expectation that high-skilled immigrants are able to rely on their high levels of human capital and middle-class cultural capital to promote their children's educational (and subsequent occupational) attainment (Portes and Fernández-Kelly 2008). In contrast, as seen in prior research (Louie 2012), the strong educational motivations (i.e., expectations) of children of low-skilled immigrants appear to be offset by academic challenges that they and their family cannot completely overcome.

Fourth, aligning with assimilation theories, we found that both children of high-skilled immigrants and those of low-skilled immigrants faced postmigration schooling and racial/ethnic barriers, but these barriers were greater for children of low-skilled immigrants. Once we controlled for disparities in schooling quality and race/ethnicity, the immigrant occupational advantage expanded for all children of immigrants, particularly the low-skilled. The implication is that if these children had not faced these barriers related to educational quality and racial stratification, they would likely have attained even more occupationally than children of White natives. These results affirm assimila-

tion assumptions. Although immigrants may be inherently select and highly motivated, they must contend with postmigration institutional and racial barriers that hinder upward mobility; high-skilled immigrants, however, can rely on their premigration skill-sets to better navigate these barriers (Alba and Nee 2003; Portes and Rumbaut 2001).

Finally, even after accounting for postmigration barriers and educational investments, we found that all children of high- and low-skilled immigrants attained more occupationally than children of White natives. We suspect that this is because we are not able to observe the full selectivity and skill sets of immigrant parents (e.g., relative vs. absolute education levels) that we envision explain why children of immigrants, particularly low-skilled, achieve high occupational attainment (Feliciano and Lanuza 2017; Hagan et al. 2015; Ichou 2014). Moreover, as suggested by qualitative research, we suspect that even if immigrant parents' skill sets are limited in the U.S. context, their children—motivated by the immigrant bargain (i.e., the desire to reward parental sacrifices)—may be able to rely on their own skill sets to find external supports and achieve upward mobility (Louie 2012). Nonetheless, our research suggests that the upward mobility of children of immigrants, both high- and low-skilled, extends beyond just education: they are also occupationally upwardly mobile.

## Limitations and Avenues for Future Research

Although ELS is a unique data set with the necessary information to assess pre- and postmigration intergenerational occupational mobility, limitations remain. First, given the career stage mismatch between parents (mid-career) and children (early career), biases could remain if parent-child occupational gaps for children of immigrants and White natives are not similar across career stages. To assess this, we ran a sensitivity check using a synthetic cohort of parent and child occupational data from the American Community Survey/U.S. Census (Ruggles et al. 2019), which followed the same time frame and ages as the ELS (i.e., parents approximately age 45 in 2002; children approximately age 26 in 2012) but expanded to 2017 (when children were about 31 years old) (Park and Myers 2010). Because the ELS cohort is still young, we also tracked a 1990 cohort (i.e., approximately age 45 in 1990; children approximately age 26 in 2000) given that those children are now their parents' age (about age 43 in 2017). Results suggest that critical immigrant-native differences in early career stage are consistently sustained over children's career stages and provide reassurance that our study identifies important immigrant-native differences (see the online appendix, section H).

Second, our results may be biased due to nonrandom missing data and ELS coverage of only students who reach 10th grade. As noted earlier, data on the children of immigrant sample were highly missing, but how this biases our results is unclear because those missing had characteristics typically associated with immigrant advantages (e.g., Asian vs. Latino) and disadvantages (e.g., single-parent vs. two-parent family). We found, however, that relying on these typical characteristics may be misleading because of the exclusion of premigration data. For instance, Asian immigrants are often used as a proxy to identify high-skilled immigrants, but 29% of Asian immigrants in our sample were low-skilled. Thus, despite missing data challenges, our study makes an important contribution and highlights the need for more large-scale studies to collect vital premigration data so that researchers can assess the

true intergenerational mobility of children of immigrants. With such data, researchers could further explore some of the potential mechanisms highlighted but not fully explored (e.g., how the native language of immigrant parents shapes their own and their children's U.S. occupational attainment).

Third, our analysis of parents' pre-/postmigration occupational mobility captures only macro-level occupational changes (e.g., labor vs. trade) and not micro-level changes (e.g., teacher vs. doctor) or within-job improvements (e.g., better pay, benefits, working conditions) that can provide upward mobility opportunities, particularly for low-skilled immigrants (Hagan et al. 2015). Finally, because of space and data limitations, we cannot assess whether the intergenerational occupational mobility and attainment patterns that we identify differ across race/ethnicity, origin country, and gender, all of which are important avenues for future research. Future research should also examine how these patterns compare with children of different native subgroups. When we restrict our comparison group to children of high-skilled White natives, for instance, our results are consistent (i.e., children of immigrants demonstrate larger intergenerational occupational mobility gains and attainment) but highlight important similarities between children of low-skilled immigrants and children of low-skilled White natives as well as between children of high-skilled immigrants and those with high-skilled White native parents; these patterns should be examined further (online appendix, sections B and C).

## Conclusions and Policy Implications

The results provide an optimistic view of the labor market integration of immigrants and their children. Current policy proposals and discussions focus on attracting more high-skilled workers and limiting entry of low-skilled workers because of concerns about the latter's ability to integrate into the U.S. labor force (Gelatt 2017; Selee and Pierce 2017). Our results suggest that these concerns are unwarranted. We found that low-skilled immigrants and their children are successfully integrating into the U.S. labor market. Their low-skilled occupation is due to limited opportunities, not abilities. Once given the opportunity to gain upward mobility, they are doing so. Thus, as the nation struggles to rejuvenate its aging U.S. labor force and stimulate economic transformation (Batalova et al. 2016; Singer 2012), policymakers should not discount the potential for rapid economic integration of low-skilled immigrants and their children into the U.S. labor market. ■

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