

## Tracking Intergenerational Progress for Immigrant Groups: The Problem of Ethnic Attrition

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Historically, much of the socioeconomic mobility achieved by US immigrant families has taken place *across* rather than *within* generations. For example, previous waves of predominantly unskilled immigrants, such as the Italians and Irish, enjoyed substantial intergenerational progress that ultimately enabled their descendants to join the economic mainstream of American society, but this process took at least two or three generations to unfold (Lisa J. Neidert and Reynolds Farley 1985; Joel Perlmann 2005). There is considerable skepticism, however, that the processes of assimilation and adaptation will operate similarly for the predominantly nonwhite immigrants who have entered the United States in increasing numbers over the past several decades. Indeed, Samuel P. Huntington (2004) voices a particularly strong version of such skepticism with regard to Hispanic immigration. When assessing the long-term economic integration and impact of immigrants, it is therefore important to analyze differences not just between the foreign-born and US-born, but also, when possible, across generations of the US-born (James P. Smith 2006).

In tracking generational progress for the descendants of immigrants, common practice is to use self-reported race/ethnicity to approximate the national origins of immigrant groups, especially for individuals beyond the first generation (e.g., a second-generation Hispanic is someone born in the United States who identifies as Hispanic and has a foreign-born parent). An

alternative approach is to assign national origins based on the birthplaces of the individual and his ancestors (e.g., a second-generation Hispanic is someone born in the United States to a parent born in a Spanish-speaking country). For foreign-born individuals, the two approaches to assigning national origins yield very similar samples and results (Ruben G. Rumbaut 2004; Anthony Daniel Perez and Charles Hirschman 2009). For second-generation individuals, “ethnic attrition” becomes noticeable (e.g., US-born individuals who do not self-identify as Hispanic despite being the children of immigrants from a Spanish-speaking country), but the overall impact on measured characteristics of the population appears to be small (Rumbaut 2004; Brian Duncan and Stephen J. Trejo 2011). By the third generation, however, intermarriage and assimilation complicate ethnic identification to an extent that might distort our inferences about the socioeconomic attainment of the descendants of immigrants. Moreover, because large, national surveys almost never provide information on the countries of birth of an adult respondent’s grandparents, studies of immigrants beyond the second generation typically have little choice but to employ “subjective” measures of ethnic identification rather than arguably more “objective” measures based on the countries of birth of the respondent and his ancestors. Although this issue is difficult to analyze with available data, it is increasingly recognized as an important consideration when assessing the long-term integration of some immigrant groups (Frank D. Bean et al. 2005; Richard Alba and Tariqul Islam 2009). Here, we present some of our recent findings on the extent and selectivity of ethnic attrition among the later-generation descendants of key Hispanic and Asian immigrant groups.

### I. Mexicans

Over the past few years, we have explored the linkages between intermarriage, generational complexity, and ethnic identification for the

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specific case of Mexican Americans (Duncan and Trejo 2007, 2009, 2011). We find that selective ethnic attrition creates potentially serious problems for tracking the socioeconomic progress of the US-born descendants of Mexican immigrants. Almost without exception, studies of later-generation Mexican Americans rely on subjective measures of ethnic identification to identify the population of interest. As the descendants of Mexican immigrants assimilate into American society and often intermarry with non-Mexicans, ethnic identification weakens, particularly among the children produced by Mexican intermarriages. Unfolding across generations, this dynamic suggests that an increasingly small fraction of the descendants of Mexican immigrants continue to identify themselves as Mexican. Moreover, this process of ethnic leakage is highly selective, because Mexican Americans who intermarry tend to have much higher education and earnings than Mexican Americans who do not intermarry. Consequently, available data for third- and higher-generation Mexicans understate the socioeconomic attainment of this population.

We uncover evidence that is consistent with this story. Data from the 1970 Census Content Reinterview Study suggest that self-identified samples of US Hispanics omit a large proportion of later-generation individuals with Hispanic ancestors, and that intermarriage is a fundamental source of such intergenerational ethnic attrition (US Bureau of the Census 1974, p. 8, Table C). Data from the 2000 census indicate that intermarriage is widespread among Mexican Americans. More than a third of married, US-born Mexicans have non-Mexican spouses, with the overwhelming majority of these non-Mexican spouses being US-born, non-Hispanic whites. Because it takes two Mexican-origin spouses to create an endogamous Mexican marriage, whereas a Mexican intermarriage requires only one Mexican-origin spouse, the observed rate of intermarriage implies that almost half of Mexican American marriages involve a non-Mexican spouse. In addition, Mexican intermarriage is highly selective on human capital and labor market success, and having a non-Mexican parent largely determines whether children of Mexican descent are at risk of losing their Mexican identity (Duncan and Trejo 2007). Taken together, these findings provide a mechanism for selective ethnic attrition among

Mexican Americans. Those Mexicans who intermarry tend to have higher levels of education and earnings, and many of the resulting children are not identified as Mexican in standard data sources. In this way, selective intermarriage interacts with the intergenerational transmission of human capital and ethnic identity to create a situation in which available data for later-generation Mexican Americans may omit an increasingly large share of the most successful descendants of Mexican immigrants.

Two pieces of indirect evidence corroborate the direction of the measurement bias generated by this process of selective ethnic attrition. First, in 1980 census data for five southwestern states where the Hispanic population was overwhelmingly Mexican origin at that time, men with a Spanish surname who nonetheless self-identify as “not Hispanic” are much more educated and English proficient, on average, than their counterparts who are consistently identified as Hispanic by both surname and self-report (Duncan and Trejo 2007). Second, in 2000 census data, human capital advantages are also evident for men who list a Mexican ancestry but simultaneously report their ethnicity as “not Hispanic,” relative to men who report Mexican as both their ancestry and their ethnicity (Duncan and Trejo 2009). In each case, the segment of the Mexican-American population that seems to have weaker or more distant ethnic ties displays significantly higher levels of socioeconomic attainment.

Finally, using data on US-born Mexican American children from recent years of the Current Population Survey (CPS), we provide some direct evidence of selective ethnic attrition (Duncan and Trejo 2011). For children living with both parents, the CPS data reveal how many parents and grandparents were born in Mexico. We assess the influence of endogenous ethnicity by comparing an objective indicator of Mexican descent (based on the countries of birth of the child, his parents, and his grandparents) with the standard subjective measure of Mexican identification (based on the response to the Hispanic origin question). Immigrant generations turn out to be quite complex, and this complexity is closely related to children’s subjective Mexican identification. For example, only 17 percent of third-generation Mexicans have a majority of their grandparents born in Mexico. Moreover, third-generation children

are virtually certain of identifying as Mexican if three or four grandparents were born in Mexico, whereas rates of Mexican identification fall to 79 percent for children with two grandparents born in Mexico and 58 percent for children with just one Mexican-born grandparent. Overall, about 30 percent of third-generation Mexican children fail to identify as Mexican in our CPS sample, and this ethnic attrition is highly selective. In particular, the high school dropout rate of third-generation Mexican youth (ages 16 and 17) is 25 percent higher when the sample is limited to those youth who subjectively identify as Mexican. Therefore, these CPS data provide some direct evidence that ethnic attrition is substantial and could produce significant downward bias in standard measures of attainment which rely on ethnic self-identification rather than objective indicators of Mexican descent.

## II. Other Immigrant Groups

Do these findings necessarily mitigate concerns that Mexican Americans are experiencing markedly less intergenerational progress than other immigrant groups (Huntington 2004; Perlmann 2005)? We show that available data are likely to understate the socioeconomic achievement of later-generation Mexican Americans, but what does this imply about their standing relative to other immigrant groups? Given that intermarriage is the primary source of this bias, we might expect similar or larger biases for other immigrant groups, because most other groups exhibit intermarriage rates at least as high as those of Mexicans (Daniel T. Lichter and Zhenchao Qian 2005). If the direction of the bias is the same for all groups, then appropriate corrections could produce no improvement or even deterioration in the relative position of Mexican Americans.

We have begun to investigate ethnic attrition for national origin groups besides Mexicans, and our findings suggest that correcting for the resulting biases will in fact raise the attainment of later-generation Mexican Americans relative to the descendants of many other US immigrant groups. We use CPS data from outgoing rotation groups for all months from January 1994 through December 2008. With these data, we extend some of our previous analyses for third-generation Mexican children (Duncan and Trejo 2011) to a wide range of

national origin groups from important Hispanic (Mexico, Puerto Rico, Cuba, El Salvador, and the Dominican Republic) and Asian (China, India, Japan, Korea, and the Philippines) source countries. Our samples of so-called “third-generation” immigrants include US-born children ages 17 and under who live in intact families and have two US-born parents (ages 18 and above) but at least one grandparent born in the relevant source country.<sup>1</sup>

Table 1 illustrates some of the complexity of immigrant generations. The top half of the table (panel A) provides information about the descendants of immigrants from Hispanic source countries, and the bottom half (panel B) does the same for Asian source countries. First, for third-generation children from each national origin group, we present the percentage distribution of how many grandparents were born in the relevant source country. Next, we report the percentage of children who are actually identified as Hispanic (Asian) by the Hispanic origin (race) question in the CPS, as well as how such ethnic identification varies with the number of grandparents born in the relevant source country.<sup>2</sup> Finally, in order to learn something about the selectivity of ethnic attrition, we show how father’s education varies with whether the child reports the appropriate ethnic identification. (Although not shown in the table, similar patterns emerge for mother’s education.)

<sup>1</sup> We limit the sample to children in married, intact families because complete information regarding grandparents’ countries of birth is available only for children living in the same household as both of their parents. To the extent possible, we exclude children suspected of being adopted or stepchildren. We also exclude those with missing or imputed information about their own race or Hispanic origin or about the country of birth of themselves or any parent or grandparent. Finally, note that the samples for specific national origin groups will overlap whenever a child has grandparents born in more than one of the relevant source countries.

<sup>2</sup> Here, we employ the broad indicator of “Hispanic” ethnic identification that potentially applies to all of the Hispanic national origin groups. In our previous work that focused on Mexicans, we employed the specific indicator for “Mexican” ethnic identification. In CPS data, the “Hispanic” indicator captures all those who designate a specific national origin (such as Mexican, Puerto Rican, or Cuban) as well as those who identify as Hispanic but fail to indicate a specific national origin. Therefore, the results reported here may understate the amount of ethnic attrition that would be relevant when a particular Hispanic national origin group is the focus of analysis.

TABLE 1—THIRD-GENERATION CHILDREN FROM HISPANIC AND ASIAN COUNTRIES

	Mexico	Puerto Rico	Cuba	El Salvador	Dominican Republic
<i>Panel A. Hispanic countries</i>					
Percent with:					
1 grandparent born in country	47.4	37.3	52.2	93.6	49.4
2 grandparents born in country	33.3	40.3	37.7	5.4	40.8
3 or 4 grandparents born in country	19.2	22.4	10.1	1.0	9.8
Total	100.0	100.0	100.0	100.0	100.0
Percent identified as Hispanic:					
1 grandparent born in country	68.9 (0.9)	42.5 (1.7)	38.9 (2.5)	7.3 (0.8)	57.0 (5.4)
2 grandparents born in country	84.9 (0.8)	57.6 (1.6)	53.5 (3.0)	45.6 (6.7)	70.4 (5.5)
3 or 4 grandparents born in country	97.5 (0.5)	93.3 (1.1)	93.2 (3.0)	9.1 (9.1)	88.2 (8.1)
All	79.7 (0.5)	60.0 (1.0)	49.9 (1.9)	9.4 (0.9)	65.5 (3.6)
Average education of fathers:					
Child identified as Hispanic	12.45 (0.03)	12.97 (0.06)	14.24 (0.12)	12.66 (0.21)	13.51 (0.18)
Child not identified as Hispanic	13.52 (0.06)	13.55 (0.07)	14.52 (0.14)	13.59 (0.08)	13.57 (0.30)
All	12.67 (0.03)	13.20 (0.05)	14.38 (0.09)	13.50 (0.07)	13.53 (0.16)
Sample size	5,865	2,264	724	1,063	174
<i>Panel B. Asian countries</i>					
Percent with:					
1 grandparent born in country	52.6	53.0	92.6	82.0	60.8
2 grandparents born in country	36.9	40.3	6.2	17.0	31.9
3 or 4 grandparents born in country	10.5	6.7	1.2	1.0	7.3
Total	100.0	100.0	100.0	100.0	100.0
Percent identified as Asian:					
1 grandparent born in country	38.7 (2.9)	8.9 (3.2)	40.2 (2.0)	41.5 (3.9)	34.3 (1.9)
2 grandparents born in country	72.7 (3.2)	48.3 (6.5)	82.9 (5.9)	88.2 (5.6)	69.7 (2.5)
3 or 4 grandparents born in country	89.3 (4.2)	90.0 (10.0)	100.0 (0.0)	100.0 (0.0)	100.0 (0.0)
All	56.5 (2.1)	30.2 (3.8)	43.5 (1.9)	50.0 (3.5)	50.4 (1.6)
Average education of fathers:					
Child identified as Asian	15.85 (0.12)	17.13 (0.23)	14.66 (0.13)	15.27 (0.23)	13.89 (0.09)
Child not identified as Asian	15.56 (0.18)	15.41 (0.22)	13.89 (0.12)	14.26 (0.22)	14.12 (0.10)
All	15.72 (0.10)	15.93 (0.18)	14.23 (0.09)	14.77 (0.16)	14.01 (0.06)
Sample size	536	149	666	200	1,025

*Notes:* Standard errors are shown in parentheses. The samples include US-born children ages 17 and below who live in intact families and have two US-born parents but at least one grandparent born in the relevant source country.

*Source:* 1994–2008 CPS data.

For every source country, the overwhelming preponderance of third-generation children have only one or two grandparents who were born in that country, rather than three or four. The percentage of third-generation children with a majority of their grandparents born in the relevant source country tops out around 20 percent for Mexicans and Puerto Ricans, but it falls to 10 percent or less for the other immigrant groups. Moreover, children with three or four grandparents born in the source country are very likely to report the corresponding ethnic identification, but rates of ethnic identification are dramatically lower for the bulk of third-generation children who have only one or two immigrant grandparents and therefore weaker ethnic ties. Indeed, the magnitude of ethnic attrition in the third generation is striking. Except for the overall Hispanic identification rate of 80 percent for third-generation Mexicans, standard measures of ethnic identification capture less than two-thirds of the Hispanic and Asian children in our samples. Fewer than ten percent of the children with at least one grandparent born in El Salvador identify as Hispanic, and less than a third of the analogous Indian children identify as Asian, so analyses of the US-born members of these groups using conventional census and CPS datasets are likely to miss large segments of the target populations.

Perhaps even more interesting is how the selectivity of ethnic attrition varies across groups. For the largest Hispanic groups (Mexicans, Puerto Ricans, and Salvadorans), third-generation children who do *not* identify as Hispanic enjoy advantaged backgrounds (i.e., fathers with significantly more schooling, on average) compared to their peers who do identify as Hispanic. For all Asian groups except Filipinos, however, the selectivity runs in the opposite direction. Consider, for example, third-generation children from India. Overall, these children's fathers average fewer than 16 years of education, but average parental education exceeds 17 years in the relatively small (30 percent of the total) and select subsample of Indian children who identify as Asian. As a result, the indicator for an Asian race response commonly employed in analyses of US data captures a highly skewed sample of third-generation Indian Americans.

Delia Furtado (2006) advances a model of interethnic marriage that potentially explains why the selectivity of ethnic attrition works

in the opposite direction for low-education Hispanic groups versus high-education Asian groups. Her model is also consistent with the fact that the groups with intermediate levels of education (Cubans, Dominicans, and Filipinos) display little or no selectivity. Regardless of the theoretical explanation, our empirical results suggest that ethnic attrition generates measurement biases that vary across national origin groups in direction as well as magnitude, and that correcting for these biases will raise the socioeconomic standing of the US-born descendants of most Hispanic immigrants relative to their Asian counterparts. At this point, however, we cannot say whether correcting for selective ethnic attrition would produce a small or large improvement in the relative attainment of later-generation Hispanics.

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