The Generational Progress of Mexican Americans

Brian Duncan
Department of Economics
University of Colorado Denver
brian.duncan@ucdenver.edu

Jeffrey Grogger
Harris School of Public Policy
University of Chicago
jgrogger@uchicago.edu

Ana Sofia Leon
Public Policy Institute, Department of Business and Economics
Universidad Diego Portales, Chile
ana.leon@mail.udp.cl

Stephen J. Trejo
Department of Economics
University of Texas at Austin
trejo@austin.utexas.edu

February 18, 2017

Abstract

Immigrants from Mexico, the largest single nationality group entering the United States, generally arrive with low levels of education. Their children acquire more schooling than their parents, but still lag behind U.S.-born individuals from other racial/ethnic groups. After the second generation, progress has widely been observed to stagnate. We show that stagnation is largely an artifact of the way that intergenerational data have been collected. Whereas most surveys use self-identification to identify descendants of immigrants beyond the 2nd generation, we take advantage of data on grandparent birthplace that are newly available in the National Longitudinal Survey of Youth. These data show clear educational progress between the 2nd and 3rd generations. Indeed, on some measures, 3rd-generation Mexican Americans compare closely to non-Hispanic whites. Similar comparisons for labor market outcomes including earnings, employment, and occupation uphold the pattern of intergenerational gains for Mexican Americans through the 3rd generation.

I. Introduction

Understanding the intergenerational progress of immigrants is crucial for assessing the long-term impact of immigration on society. Immigrants from many national origin groups to the United States fare well from the start, arriving with education levels that meet or exceed those of the typical American (Duncan and Trejo 2015). This point is evident in Table 1, which presents mean years of schooling for men from the Current Population Survey (CPS).[1] Most immigrants (the 1st generation) arrive with schooling levels near or above the average of 14.3 years among U.S. natives. Their successors maintain similar levels of education.

Mexican Americans, the largest immigrant group in the United States, represent an important exception. The average Mexican immigrant arrives with 9.4 years of schooling. Their children narrow the gap, averaging 12.6 years of education, but that number still lags well below the average of US natives.

Considering the low levels of schooling, English proficiency, and other types of human capital brought to the United States by the typical Mexican immigrant, it is not surprising that their U.S.-born children do not eliminate all of these enormous socioeconomic deficits in a single generation (Perlmann 2005; Smith 2006). Moreover, Smith (2003, 2006) has shown that, when the data are configured by age cohorts to match 1st-generation "fathers" (e.g., ages 50-59) with 2nd-generation "sons" (e.g., ages 25-34), progress between the first and second generations is even larger than it appears in Table 1. The crucial question for Mexican Americans is thus, how much progress do they experience after the 2nd generation? Because they start out further behind, will they simply require an extra generation or two to catch up?

Table 1 shows what other analysts have observed as well: there appears to be little if any

[1] This table updates Table 22.12 of Cadena, Duncan, and Trejo (2015); see that paper for further details about the calculations.

improvement for Mexican Americans beyond the 2nd generation. Matching age cohorts of potential "fathers" and "sons" shows a bit more progress between the 2nd and 3rd+ generations (Smith 2003, 2006; Duncan, Hotz, and Trejo 2006), but all studies conclude that education and earnings largely stagnate (relative to non-Hispanic whites) for 3rd+-generation Mexican Americans (Trejo 1997, 2003; Fry and Lowell 2002; Farley and Alba 2002; Grogger and Trejo 2002; Livingston and Kahn 2002; Duncan, Hotz, and Trejo 2006; Blau and Kahn 2007; Telles and Ortiz 2008).

Certainly, factors associated with the immigration experience of Mexican Americans might account for slowed or stalled progress among later generations (Portes and Rumbaut 2001), including discrimination (Telles and Ortiz 2008) and widespread undocumented status (Bean *et al*. 2011). But there are at least two potentially important limitations of the data that could cause estimates such as those in Table 1 to be biased toward stagnation.

First, there is the issue of ethnic attrition. In the CPS and other comparable data sets, information on the countries of birth of the respondent and his parents can be used to more or less "objectively" assign the national origins of 1st- and 2nd-generation members (e.g., a 2nd-generation Mexican American is a U.S.-born individual with at least one parent born in Mexico). Virtually no large, nationally-representative data sets, however, provide information on the countries of birth of an adult respondent's grandparents. As a result, third-and-higher-generation Mexican Americans (or the so-called 3rd+ generation) must be assigned using more "subjective" measures of racial/ethnic identification. Typically, 3rd+-generation Mexican Americans in such data represent those who are U.S.-born, have two U.S.-born parents, and self-identify as "Mexican" or "Mexican American" in response to the Hispanic origin question. Given such data limitations, researchers seeking to study later-generation Mexican Americans seldom have a

better option. Nevertheless, the problem with using subjective measures of racial/ethnic identification is that assimilation and intermarriage can cause ethnic attachments to fade across generations (Alba 1990; Waters; 1990; Perlmann and Waters 2007). As a result, subjective measures of racial/ethnic identification might miss a significant portion of the later-generation descendants of immigrants. Furthermore, if such ethnic attrition is selective on socioeconomic attainment, then it can distort assessments of integration and generational progress. For Mexican Americans, Duncan and Trejo (2007, 2011, 2017) provide evidence that ethnic attrition is substantial and could produce significant bias toward the appearance of stagnation. The implication is that available data for 3rd+-generation Mexican Americans, who usually can only be identified by their subjective responses to questions about Hispanic ethnicity, understate the socioeconomic attainment of this population and lead to the appearance of stagnation after the 2nd generation.

Second, for similar reasons, available data typically cannot distinguish the "true" 3rd generation from higher-order generations of Mexican Americans. This is potentially a problem because Mexican Americans in generations beyond the 3rd are disproportionately descended from ancestors who came of age in places (e.g., Texas rather than California) and times (e.g., before the Civil Rights era) where Mexican Americans faced discrimination that was more severe and often institutionalized (Foley 1997; Alba 2006; Montejano 2010). The more limited opportunities for advancement experienced by these families may result in lower attainment for Mexican Americans in the 4th+ generations compared with their 3rd generation counterparts whose families experienced less hostile environments. Alba, Abdel-Hady, Islam, and Marotz (2011) and Bean, Brown, and Bachmeier (2015) provide evidence of this pattern for schooling levels, highlighting the importance of distinguishing 3rd-generation Mexican Americans from

higher generations.

Our research exploits previously untapped information from the National Longitudinal Survey of Youth 1997 (NLSY97) in order to address both of these issues using a nationally-representative data set that allows us to assess generational progress for a recent cohort of young Mexican-American adults whose parents grew up largely after the enactment of Civil Rights reforms. At the same time, however, this cohort of Mexican Americans is also coming of age in a time of economic restructuring, rising returns to skill, and increasing inequality (Autor and Katz 1999; Autor, Katz, and Kearney 2008). It is not clear whether the net effect of these opposing forces—Civil Rights era environment versus increasing inequality—will raise or lower the attainment of the cohort of Mexican Americans that we study, but by analyzing data on this young, recent cohort we are able to provide the best information currently available on the future progress of Mexican Americans.

Our analysis relates most closely to two important recent studies of Mexican Americans that, through ambitious data collection efforts for specific locations, are also able to distinguish the 3rd generation from higher generations and, at least in part, account for ethnic attrition. Telles and Ortiz (2008) analyze samples of Mexican-American families originally living Los Angeles and San Antonio in 1965, after re-surveying available individuals and their U.S.-born children in 2000. They find little evidence of educational or earnings progress beyond the 2nd generation. Bean, Brown and Bachmeier (2015) rely on survey information collected from multiple generations of Mexican-origin individuals living in the greater Los Angeles metropolitan area in 2004. Their analysis does suggest significant schooling and earnings gains for Mexican Americans between the 2nd and 3rd generations.

Our study contributes in several important ways to this ongoing scholarly debate over

Mexican-American progress after the 2nd generation. First, we employ nationally-representative data from the NLSY97. In this way, we avoid issues of selective geographic mobility that can make it difficult to interpret results from studies of particular locations (Alba, Jimenez, and Marrow 2014). Second, we are in a better position to assess and account for the effects of ethnic attrition, because roughly half of our Mexican-American respondents come from a sampling design that did *not* screen on race or ethnicity. In contrast, most of the original 1965 respondents in Telles and Ortiz (2005) and the Mexican-origin respondents in Bean, Brown, and Bachmeier (2015) had to self-identify as being of Mexican descent to be included in the survey. Finally, the recency and youth of our sample—described in greater detail below—suggest that our analyses provide better information about the future trajectories of U.S.-born Mexican Americans than previous work could.

II. Data and Basic Patterns

The NLSY97 provides longitudinal information for a nationally-representative sample of just under 9,000 youth born in the years 1980-84 who were living in the United States when the survey began in 1997. Importantly for our purposes, there are two subsamples: a "cross-sectional sample" that is representative of all U.S. youth in the sampling universe at the time the survey began, and a "supplemental sample" designed to oversample black and Hispanic youth. Roughly half of Mexican-origin respondents in the NLSY97 come from each of these subsamples. Note that, because Hispanic identification by the respondent (or by his parent) is used to determine inclusion in the supplemental sample but not the cross-sectional sample, the supplemental sample of Mexican Americans is subject to ethnic attrition.

Here, we use the data available through round 16 of the NLSY97, which was conducted

in 2013-14 when the respondents were between the ages of 28-34. The NLSY97 provides information on the countries of birth of the respondent, his biological parents, and his biological grandparents. Using this information, we define generations of Mexican Americans as follows:

1.5 generation: Respondent was born in Mexico.[2]

2nd generation: Respondent was born in the United States but at least one of his parents was born in Mexico.

3rd generation: Respondent and both of his parents were born in the United States, but at least one of his grandparents was born in Mexico.

4th+ generation: Respondent, both parents, and all grandparents were born in the United States, but the respondent or one of his parents self-identifies as Mexican or Mexican American.

As interesting reference groups, we can also define 4th+-generation groups for non-Hispanic whites and non-Hispanic blacks. Based on these criteria, the NLSY97 data yield a sample of over 1000 Mexican-origin respondents across the four generation categories, with sample sizes of 150 or more in each generation (see Table 2). These sample sizes are roughly similar to those employed by Telles and Ortiz (2008) and Bean, Brown, and Bachmeier (2015), but note that our samples are nationally representative, rather than stemming from particular metropolitan areas. Substantially larger samples are available for the non-Hispanic white and black reference groups.

One important goal of our analysis is to compare educational and labor market outcomes of 3rd-generation Mexicans with those of the non-Hispanic white and black reference groups. When we can distinguish the 3rd generation from higher generations, and when we can limit the

[2] Because foreign-born respondents in the NLSY97 must have been resident in the United States by the age of 12-16 to be included in the sample, we adopt the standard nomenclature of "1.5 generation" when referring to such immigrants who arrived in the destination country as children.

effects of ethnic attrition, do we see greater convergence for Mexican Americans? Are attainments lower for 4th+-generation Mexican Americans compared with their 3rd-generation counterparts? For schooling outcomes, the tabulations reported in Table 2 suggest that the answer to both of these questions is a resounding yes. Table 2 presents various measures of educational attainment—average years of schooling, and the percent completing at least a high school degree, some college, or a bachelors degree—for the Mexican-American generation groups and for the non-Hispanic white and black reference groups.[3] Standard errors are shown in parentheses. All calculations reported in the paper employ sampling weights based on the initial sampling universe in 1997, but unweighted results show similar patterns.

For every schooling measure in Table 2, Mexican Americans exhibit steady improvement from the 1.5 to the 2nd to the 3rd generation. In most cases, this is followed by a marked decline from the 3rd to the 4th+ generation. For example, the proportion of Mexican Americans with a high school diploma rises from 62 percent for the 1.5 generation to 76 percent for the 2nd generation to 84 percent for the 3rd generation before falling back to 68 percent for the 4th+ generation. The high school completion rate of 84 percent for 3rd-generation Mexican Americans approaches the 86 percent rate for 4th+-generation whites and exceeds the 75 percent rate for 4th+-generation blacks.[4] Similar generational patterns emerge for the other education measures, with the exception of bachelor's degree completion, which remains roughly constant between the 3rd and 4th+ generations. For all other measures, larger gaps ultimately remain

[3] For the respondents in our sample, completed years of schooling ranges from of low of 2 to a high of 20. The sample sizes reported in Table 2 are for the completed years of schooling variable. Because of less missing information regarding degree completion, the corresponding sample sizes are slightly larger for the binary measures of educational attainment.

[4] In these tabulations, those with a GED (rather than a high school diploma) and no further education are counted as *not* having completed high school. If GED recipients are instead counted as high school completers, completion rates rise for all groups, but especially for later-generation Mexicans Americans and blacks, such that the gap between 3rd-generation Mexican Americans and 4th+-generation whites entirely disappears (with completion rates of 92 percent for 4th+-generation blacks and 95 percent for both 3rd-generation Mexican Americans and 4th+-generation whites). Our NLSY97 findings are consistent with recent evidence of improving high school completion rates for U.S.-educated Hispanics from 1990 to 2010, with particularly large gains observed during the second half of this period (Murnane 2013).

between 3rd-generation Mexican Americans and 4th+-generation whites.

In marked contrast to the CPS data in Table 1 and virtually all existing studies of Mexican-American educational progress, the NLSY97 data in Table 2 reveal substantial improvement after the 2nd generation. One crucial advantage of the NLSY97 data in Table 2 is the ability to distinguish 3rd-generation from higher-generation Mexican Americans. The final set of tabulations for Mexican Americans in Table 2 shows what happens when the 3rd and 4th+ generations are aggregated into the "3rd+ generation," similar to what must be done in surveys such as the CPS. For the most part, the NLSY97 data show much less improvement after the 2nd generation, and a larger remaining deficit relative to 4th+-generation whites, when 3rd- and 4th+-generation Mexican Americans are aggregated in this way. The exception again involves bachelor's degree completion. However, average years of schooling, rise from 12.94 for the 2nd generation to 13.49 for the 3rd generation, but only to 12.97 when the 3rd and higher generations are pooled together. Likewise, both high school completion and college attendance fall slightly between the 2nd and 3rd+ generations, although they rise between the 2nd and true 3rd generations.

Educational attainment for the sample of 4th+-generation Mexican Americans observed in the NLSY97 is biased downward for the same reason they are biased downward among the 3rd+-generation in CPS-type surveys: selective ethnic attrition. At the same time, actual educational attainment for this population could also be lower because of the harsher environment these families faced in pre-1960s America. Previous work by Duncan and Trejo (2007, 2011, 2017) established the direction and potential importance of the biases created by selective ethnic attrition, but could not determine the ultimate magnitude of these biases. Using NLSY97 data that can identify 3rd-generation Mexican-American adults objectively (from the countries of birth of the respondent, his parents, and his grandparents) and that is free of ethnic attrition (as is true

of the cross-sectional sample in the NLSY97 data), here we are able to accurately measure the attainment of 3rd-generation Mexican Americans and directly assess the biases produced by selective ethnic attrition.

Table 3 demonstrates that ethnic attrition is not a problem for the 1.5 and 2nd generations of Mexican Americans in the NLSY97 data, but it does become a significant issue by the 3rd generation. This table reports the percentage of individuals from each generation who identify subjectively as Hispanic, based on information collected at the beginning of the survey in 1997. Everyone born in Mexico (i.e., the 1.5 generation) identifies as Hispanic and all but about two percent of the 419 U.S.-born individuals with a parent born in Mexico (i.e., the 2nd generation) identify as Hispanic as well. Among objectively-defined 3rd-generation Mexican Americans (i.e., U.S.-born individuals with U.S.-born parents but at least one Mexican-born grandparent), however, 13 percent are *not* identified as Hispanic. Moreover, this understates the true amount of ethnic attrition in the population of 3rd-generation Mexican Americans, because the NLSY97 includes a supplemental oversample of blacks and Hispanics. The selection criteria for inclusion in this supplemental sample preclude the possibility of ethnic attrition in this sample, as is confirmed in the bottom panel of Table 3.[5] The cross-sectional sample of the NLSY97 does not suffer from this problem, and the middle panel of Table 3 shows that in this sample about 80 percent of 3rd-generation Mexican Americans are identified as Hispanic, yielding an ethnic attrition rate of 20 percent.[6]

For ethnic attrition to bias estimates of socioeconomic progress, not only must it exist,

[5] The small number of 3rd-generation Mexican Americans in the supplemental sample not identified as Hispanic all qualified for this sample by virtue of identifying racially as black.

[6] Because we employ here a broad indicator of "Hispanic" identification rather than a more specific indicator for "Mexican" identification, even these results for the cross-sectional sample may understate the relevant amount of ethnic attrition. Hispanic identification can capture some individuals who would not identify specifically as Mexican-origin, including those who identify with other Hispanic national origin groups (such as Puerto Rican or Cuban) as well those who identify with pan-ethnic labels such as Hispanic or Latino.

but it must also be selective. Table 4, which restricts attention to the cross-sectional sample, provides some evidence that this is the case for 3rd-generation Mexican Americans. Among such individuals, those who do *not* identify as Hispanic average about two-thirds of a year more education than those who do so identify. Although high school graduation and college attendance rates are slightly higher for 3rd-generation Mexican Americans who self-identify as Hispanic, Bachelor's degree completion is again higher among those who do not so self-identify than among those who do.

Although we lack the data to confirm this point, we would expect ethnic attrition to be even more extensive among 4th-and-later generations of Mexican Americans. If the educational selectivity of ethnic attrition operates similarly for these later generations as it does for 3rd-generation Mexican Americans, then ethnic attrition could potentially account for the relatively poor educational outcomes observed for our sample of 4th+-generation Mexican Americans, whom we can identify only when the respondent self-identifies as being of Mexican descent.

III. Regression Analyses

For the same samples and schooling measures introduced in Table 2, Table 5 presents least squares regressions describing how educational outcomes vary by race/ethnicity and generation. The dependent variables are the various measures of educational attainment, and the reported figures are estimated coefficients on dummy variables identifying groups defined by race/ethnicity and generation (with 4th+-generation non-Hispanic whites as the omitted reference group). Heteroskedasticity-robust standard errors are shown in parentheses. To maximize sample sizes, these regressions pool together observations from the cross-sectional and supplemental samples of the NLSY97. Pooling improves improves the precision of the

estimates, but has their little effect on their magnitude, since educational attainment is similar for the cross-sectional and supplemental samples. The sample sizes are 4,851 for regressions where the dependent variable is completed years of schooling and 4,894 for regressions where the dependent variables are the binary measures of educational attainment.

Specification (1) includes as independent variables only an intercept and the dummy variables identifying race/ethnicity and generation groups. These estimates simply reproduce, for comparison purposes, the unadjusted education differences implicit in Table 2. For example, the specification (1) estimates for completed years of schooling in Table 5 indicate that the educational deficit for Mexican Americans (relative to 4th+-generation whites) shrinks from 2.5 years for the 1.5 generation to 1.4 years for the 2nd generation to 0.9 years for the 3rd generation before climbing back to 1.6 years for the 4th+ generation. As noted earlier, the high school completion rate of 3rd-generation Mexican Americans almost converges to that of the white reference group, and the remaining deficit of 1.7 percentage points, shown in the third column, is not statistically significant.

Of course, the advantage of the regression analysis is that it allows us to introduce control variables, the omission of which could potentially distort these estimates of educational progress. Specification (2) replicates these educational comparisons while conditioning on each respondent's sex, birth year, and state of birth. By comparing the estimates in specifications (1) and (2), we see that adding the control variables has little impact on the estimated coefficients and therefore on the implied schooling differences across race/ethnicity and generation groups. In particular, the striking pattern of intergenerational gains in education for Mexican Americans through the 3rd generation and then a substantial decline for the 4th+ generation is robust to the inclusion of the control variables, and even the magnitudes of these generational differences are

only slightly altered by the controls.

We can use the NLSY97 data to explore these generational comparisons for a wide range of relevant outcomes besides the schooling measures presented so far. Given the importance of human capital in general and education in particular for the socioeconomic integration of Mexican Americans (Trejo 1997; Duncan, Hotz, and Trejo 2006), measures of educational attainment will remain a primary focus of our analysis, but the richness of the NLSY97 data allows us to conduct complementary investigations of other key indicators of integration. In addition to standard labor market outcomes such as employment status, work hours, earnings, and occupational attainment, the NLSY97 provides various indicators of risky behavior, such as smoking, drinking, criminal activity, and bearing or fathering children as a teenager. Similar indicators of risky behavior have been employed recently to help assess the integration of 2nd-generation Mexican Americans (Rumbaut 2005; Haller, Portes, and Lynch 2011a), although interpretation of the resulting evidence is subject to debate (Alba, Kasinitz, and Waters 2011; Haller, Portes, and Lynch 2011b). We will extend this analysis to the 3rd and later generations, examining differences between 3rd- and 4th+-generation Mexican Americans and the influence of ethnic attrition. As a group, these analyses will provide a more accurate assessment and deeper understanding than we currently have of the socioeconomic integration of the later-generation Mexican Americans presently transitioning into adulthood.

IV. Conclusion

Immigrants from Mexico, the largest single nationality group entering the United States, generally arrive with low levels of education. Their children acquire more schooling than their

parents, but still lag behind natives. After the second generation, progress has widely been observed to stagnate.

We show that the appearance of stagnation arises due to the way that data have been collected in most past surveys. When descendants of immigrants beyond the 2nd generation must self-identify in order to be counted, selective ethnic attrition may arise. Previous research has raised this issue and suggested that such selection is likely to bias estimated educational progress in a downward direction. Without objective data on grandparents' place of origin, however, it has been impossible to quantify that bias.

Here we use data on grandparents' place of birth to objectively identify 3rd-generation descendants of immigrants. When we do so, the apparent stagnation between the 2nd and 3rd generations disappears. Mean years of schooling rise by half a year and high school graduation rates rise by 8 percentage points. College attendance also rises substantially.

This work is very preliminary. In the near future, we plan to extend our analyses to focus on labor market outcomes and measures of youthful risky behavior. Understanding true socioeconomic progress between the 2nd and 3rd immigrant generations has the potential to greatly change our thinking about immigrant assimilation.

References

Alba, Richard D. *Ethnic Identity: The Transformation of White America*. New Haven, CT: Yale University Press, 1990.

Alba, Richard D. "Mexican Americans and the American Dream." *Perspectives on Politics*, June 2006, 4(2), pp. 289-96.

Alba, Richard D.; Abdel-Hady, Dalia; Islam, Tariqul; and Marotz, Karen. "Downward Assimilation and Mexican Americans: An Examination of Intergenerational Advance and Stagnation in Educational Attainment," in Richard Alba and Mary C. Waters, eds., *The Next Generation: Immigrant Youth in a Comparative Perspective*. New York: New York University Press, 2011.

Alba, Richard D.; Jimenez, Tomas R.; and Marrow, Helen B. "Mexican Americans as a Paradigm for Contemporary Intra-Group Heterogeneity." *Ethnic and Racial Studies*, February 2014, 37(3), pp. 446-66.

Alba, Richard D.; Kasinitz, Philip; and Waters, Mary C. "The Kids Are (Mostly) Alright: Second Generation Assimilation; Comments on Haller, Portes and Lynch." *Social Forces*, March 2011, 89(3), pp. 733-62.

Autor, David, and Katz, Lawrence F. "Changes in the Wage Structure and Earnings Inequality," in Orley Ashenfelter and David Card, eds., *Handbook of Labor Economics*, vol. 3A. Amsterdam: North Holland, 1999, pp. 1463-1555.

Autor, David; Katz, Lawrence F.; and Kearney, Melissa S. "Trends in U.S. Wage Inequality: Revising the Revisionists." *Review of Economics and Statistics*, May 2008, 90(2), pp. 300-23.

Bean, Frank D.; Brown, Susan K.; and Bachmeier, James D. *Parents Without Papers: The Progress and Pitfalls of Mexican-American Integration*. New York: Russell Sage Foundation, forthcoming 2015.

Bean, Frank D.; Leach, Mark; Brown, Susan K.; Bachmeier, James; and Hipp, John. "The Educational Legacy of Unauthorized Migration: Comparisons across U.S.-Immigrant Groups in How Parents' Status Affects Their Offspring." *International Migration Review*, Summer 2011, 45(2), pp. 348-385.

Black, Sandra E., and Devereux, Paul J. "Recent Developments in Intergenerational Mobility," in Orley Ashenfelter and David Card, eds., *Handbook of Labor Economics*, vol. 4B. Amsterdam: Elsevier, 2011, pp. 1487-1541.

Blau, Francine D., and Kahn, Lawrence M. "Gender and Assimilation among Mexican Americans," in George J. Borjas, ed., *Mexican Immigration to the United States*. Chicago: University of Chicago Press, 2007, pp. 57-106.

Borjas, George J. "Ethnic Capital and Intergenerational Mobility." *Quarterly Journal of Economics*, February 1992, 107(1), pp. 123-50.

Borjas, George J. "Ethnicity, Neighborhoods, and Human Capital Externalities." *American Economic Review*, June 1995, 85(3), pp. 365-90.

Borjas, George J. "Making It in America: Social Mobility in the Immigrant Population." *The Future of Children*, Fall 2006, 16(2), pp. 55-71.

Cadena, Brian; Duncan, Brian, and Trejo, Stephen J. "The Labor Market Integration and Impacts of U.S. Immigrants," in Barry R. Chiswick and Paul W. Miller, eds., *Handbook on the Economics of International Migration*, vol. 1B. Amsterdam: Elsevier, 2015, pp. 1197-1259.

Card, David; DiNardo, John; and Estes, Eugena. "The More Things Change: Immigrants and the Children of Immigrants in the 1940s, the 1970s, and the 1990s," in George J. Borjas, ed., *Issues in the Economics of Immigration*. Chicago: University of Chicago Press, 2000, pp. 227-69.

Duncan, Brian; Hotz, V. Joseph; and Trejo, Stephen J. "Hispanics in the U.S. Labor Market," in Marta Tienda and Faith Mitchell, eds., *Hispanics and the Future of America*. Washington, DC: Washington, DC: National Academies Press, 2006.

Duncan, Brian, and Trejo, Stephen J. "Ethnic Identification, Intermarriage, and Unmeasured Progress by Mexican Americans," in George J. Borjas, ed., *Mexican Immigration to the United States*. Chicago: University of Chicago Press, 2007, pp. 227-69.

Duncan, Brian, and Trejo, Stephen J. "Intermarriage and the Intergenerational Transmission of Ethnic Identity and Human Capital for Mexican Americans." *Journal of Labor Economics*, April 2011, 29(2), pp. 195-227.

Duncan, Brian, and Trejo, Stephen J. "Assessing the Socioeconomic Mobility and Integration of U.S. Immigrants and Their Descendants." *Annals of the American Academy of Political and Social Science*, vol. 657, January 2015, pp. 108-135.

Duncan, Brian, and Trejo, Stephen J. "The Complexity of Immigrant Generations: Implications for Assessing the Socioeconomic Integration of Hispanics and Asians." *Industrial and Labor Relations Review*, forthcoming 2017.

Farley, Reynolds, and Alba, Richard. "The New Second Generation in the United States." *International Migration Review*, Fall 2002, 36(3), pp. 669-701.

Foley, Neil. *The White Scourge: Mexicans, Blacks and Poor Whites in Texas Cotton Culture*. Berkeley, CA: University of California Press, 1997.

Fry, Richard, and Lowell, B. Lindsay. "Work or Study: Different Fortunes of U.S. Latino Generations." Report. Washington, DC: Pew Hispanic Center, 2002.

Grogger, Jeffrey. "Speech Patterns and Racial Wage Inequality." *Journal of Human Resources*, Winter 2011, 46(1), pp. 1-25.

Grogger, Jeffrey, and Trejo, Stephen J. *Falling Behind or Moving Up? The Intergenerational Progress of Mexican Americans*. San Francisco: Public Policy Institute of California, 2002.

Haller, William; Portes, Alejandro; and Lynch, Scott M. "Dreams Fulfilled, Dreams Shattered: Determinants of Segmented Assimilation in the Second Generation." *Social Forces*, March 2011a, 89(3), pp. 733-62.

Haller, William; Portes, Alejandro; and Lynch, Scott M. "On the Dangers of Rosy Lenses; Reply to Alba, Kasinitz, and Waters." *Social Forces*, March 2011b, 89(3), pp. 775-82.

Hout, Michael. "Social and Economic Returns to College Education in the United States." *Annual Review of Sociology*, 2012, 38, pp. 379-400.

Livingston, Gretchen, and Kahn, Joan R. "An American Dream Unfulfilled: The Limited Mobility of Mexican Americans." *Social Science Quarterly*, December 2002, 83(4), pp. 1003-12.

Luthra, Renee Reichl, and Soehl, Thomas. "From Parent to Child? Transmission of Educational Attainment within Immigrant Families: Methodological Considerations." *Demography*, April 2015, 52(2), pp. 543-67.

Luthra, Renee Reichl, and Waldinger, Roger. "Intergenerational Mobility," in David Card and Steven Raphael, eds., *Immigration, Poverty, and Socioeconomic Inequality*. New York: Russell Sage Foundation, 2013, pp. 169-205.

Mare, Robert D. "A Multigenerational View of Inequality." *Demography*, February 2011, 48(1), pp. 1-23.

Mare, Robert D. "Multigenerational Aspects of Social Stratification: Issues for Further Research." *Research in Social Stratification and Mobility*, March 2014, 35, pp. 121-28.

Montejano, David. *Anglos and Mexicans in the Making of Texas: 1836-1986*. Austin, TX: University of Texas Press, 1987.

Murnane, Richard J. "U.S. High School Graduation Rates: Patterns and Explanations." *Journal of Economic Literature*, June 2013, 51(2), pp. 370-422.

Perlmann, Joel. *Italians Then, Mexicans Now: Immigrant Origins and Second-Generation Progress, 1890-2000*. New York: Russell Sage Foundation, 2005.

Perlmann, Joel, and Waldinger, Roger. "The Second Generation and the Children of the Native Born: Comparisons and Refinements." Working Paper no. 174. Annandale-on-Hudson, NY: Jerome Levy Economics Institute, November 1996.

Perlmann, Joel, and Waldinger, Roger. "Second Generation Decline? Children of Immigrants, Past and Present—A Reconsideration." *International Migration Review*, Winter 1997, 31(4), pp. 893-922.

Perlmann, Joel, and Waters, Mary C. "Intermarriage and Multiple Identities," in Mary C. Waters and Reed Udea, eds., *The New Americans: A Guide to Immigration Since 1965*. Cambridge, MA: Harvard University Press, 2007, pp. 110-23.

Portes, Alejandro, and Rumbaut, Ruben G. *Legacies: The Story of the Immigrant Second Generation*. Berkeley, CA: University of California Press, 2001.

Rumbaut, Ruben G. "Turning Points in the Transition to Adulthood: Determinants of Educational Attainment, Incarceration, and Early Childbearing Among Children of Immigrants." *Ethnic and Racial Studies*, November 2005, 28(6), pp. 1041-1286.

Smith, James P. "Assimilation across the Latino Generations." *American Economic Review*, May 2003, 93(2), pp. 315-319.

Smith, James P. "Immigrants and the Labor Market." *Journal of Labor Economics*, April 2006, 24(2): 203-33.

Solon, Gary. "Intergenerational Income Mobility in the United States." *American Economic Review*, June 1992, 82(3), pp. 393-408.

Telles, Edward E., and Ortiz, Vilma. *Generations of Exclusion: Mexican Americans, Assimilation, and Race*. New York: Russell Sage Foundation, 2008.

Trejo, Stephen J. "Why Do Mexican Americans Earn Low Wages?" *Journal of Political Economy*, December 1997, 105(6), pp. 1235-68.

Trejo, Stephen J. "Intergenerational Progress of Mexican-Origin Workers in the U.S. Labor Market." *Journal of Human Resources*, Summer 2003, 38(3), pp. 467-89.

Waters, Mary C. *Ethnic Options: Choosing Identities in America*. Berkeley, CA: University of California Press, 1990.

Zimmerman, David J. "Regression toward Mediocrity in Economic Stature." *American Economic Review*, June 1992, 82(3), pp. 409-29.

Table 1: Average Years of Schooling, Men Ages 25-59, by Race/Ethnicity and Immigrant Generation, 2003-2013 CPS Data

Race/Ethnicity	Immigrant Generation		
	1st	2nd	3rd+
Mexican American	9.4	12.6	12.6
	(0.02)	(0.03)	(0.02)
Non-Hispanic:			
White	14.3	14.4	13.8
	(0.02)	(0.02)	(0.004)
Black	13.4	13.9	12.9
	(0.04)	(0.08)	(0.01)
Asian	14.7	15.0	14.3
	(0.02)	(0.04)	(0.04)
All race/ethnic groups	12.1	13.9	13.6
	(0.01)	(0.01)	(0.004)

Source: 2003-2013 Current Population Survey outgoing rotation group data.
Note: Standard errors are reported in parentheses. The samples include men ages 25-59. The "1st generation" consists of foreign-born individuals, excluding those born abroad of an American parent. The "2nd generation" consists of U.S.-born individuals who have at least one foreign-born parent. Remaining persons are members of the "3rd+ generation" (i.e., the third and all higher generations), which consists of U.S.-born individuals who have two U.S.-born parents. Sampling weights were used in the calculations.

Table 2: Educational Attainment, by Race/Ethnicity and Immigrant Generation, NLSY97 Data

Race/Ethnicity and Generation	Average Years of Schooling	Percent with at least: High School Diploma	Some College	Bachelors Degree	Sample Size
Mexican American:					
1.5 generation	11.83	61.53	27.49	7.73	197
	(0.18)	(3.46)	(3.17)	(1.90)	
2nd generation	12.94	76.23	46.69	13.50	411
	(0.13)	(2.09)	(2.45)	(1.68)	
3rd generation	13.49	84.25	52.66	19.74	155
	(0.22)	(2.90)	(3.97)	(3.17)	
4th+ generation	12.73	68.28	42.37	21.16	276
	(0.18)	(2.79)	(2.96)	(2.45)	
3rd+ generation	12.97	73.55	45.77	20.69	431
	(0.14)	(2.11)	(2.38)	(1.94)	
Non-Hispanic:					
Black, 4th+ generation	13.26	74.65	50.93	18.52	1,332
	(0.08)	(1.19)	(1.36)	(1.06)	
White, 4th+ generation	14.35	85.90	64.05	38.11	2,480
	(0.06)	(0.70)	(0.96)	(0.97)	

Source: National Longitudinal Survey of Youth 1997 data through round 16 (2013-2014).
Note: Standard errors are reported in parentheses. The samples include men and women whose race/ethnicity and immigrant generation could be identified; see text for further information. Measures of educational attainment incorporate all relevant information collected up through the most recent survey, when respondents were between the ages of 28-34. The sample sizes listed above are for the completed years of schooling variable. Because of less missing information regarding degree completion, the corresponding sample sizes are slightly larger for the binary measures of educational attainment. Sampling weights were used in the calculations.

Table 3: Rates of Hispanic Identification (%) for Mexican Americans, by Sample Type and Immigrant Generation

Sample Type and Generation	Percent Identified as Hispanic	Sample Size
Both Samples Combined		
Mexican American:		
1.5 generation	100.00	199
	(0.00)	
2nd generation	97.62	419
	(0.75)	
3rd generation	87.28	159
	(2.65)	
Cross-Sectional Sample		
Mexican American:		
1.5 generation	100.00	91
	(0.00)	
2nd generation	95.15	168
	(1.66)	
3rd generation	79.85	81
	(4.48)	
Supplemental Sample		
Mexican American:		
1.5 generation	100.00	108
	(0.00)	
2nd generation	100.00	251
	(0.00)	
3rd generation	100.00	78
	(0.00)	

Source: National Longitudinal Survey of Youth 1997 data through round 16 (2013-2014).
Note: Standard errors are reported in parentheses. The samples include men and women who could be identified as 1.5-, 2nd-, or 3rd-generation Mexican Americans based on the countries of birth reported for each respondent, his parents, and his grandparents; see text for further information. The "sample type" indicates if a given observation is part of the "cross-sectional" sample that is representative of all U.S. youth in the sampling universe when the survey began in 1997, or if the observation instead comes from the "supplemental" oversample of blacks and Hispanics. Hispanic identification is based on information collected at the beginning of the survey in 1997. Sampling weights were used in the calculations.

Table 4: Educational Attainment of 3rd-Generation Mexican Americans from the Cross-Sectional Sample, by Hispanic Identification

Sample Type and Hispanic Identification	Average Years of Schooling	Percent with at least: High School Diploma	Some College	Bachelors Degree	Sample Size
Cross-Sectional Sample					
Identified as Hispanic	13.56	85.92	52.21	22.35	67
	(0.34)	(4.22)	(6.06)	(5.05)	
Not identified as Hispanic	14.22	82.07	49.26	29.17	11
	(1.16)	(11.57)	(15.07)	(13.70)	
All	13.69	85.14	51.62	23.72	78
	(0.34)	(3.98)	(5.59)	(4.76)	

Source: National Longitudinal Survey of Youth 1997 data through round 16 (2013-2014).
Note: Standard errors are reported in parentheses. The sample includes men and women who could be identified as 3rd-generation Mexican Americans based on the countries of birth reported for each respondent, his parents, and his grandparents; see text for further information. Hispanic identification is based on information collected at the beginning of the survey in 1997. Measures of educational attainment incorporate all relevant information collected up through the most recent survey, when respondents were between the ages of 28-34. The sample sizes listed above are for the completed years of schooling variable. Because of less missing information regarding degree completion, the corresponding sample sizes are slightly larger for the binary measures of educational attainment. Sampling weights were used in the calculations.

Table 5: Education Regressions

	Dependent Variable							
			Indicator for completion of at least:					
	Completed Years of Schooling		High School Diploma		Some College		Bachelors Degree	
Regressor	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Race/Ethnicity and Generation:								
Mexican American								
1.5 generation	-2.53	-2.70	-.244	-.291	-.366	-.414	-.304	-.273
	(.19)	(.25)	(.038)	(.043)	(.034)	(.044)	(.020)	(.033)
2nd generation	-1.41	-1.49	-.097	-.109	-.174	-.194	-.246	-.225
	(.15)	(.18)	(.023)	(.026)	(.028)	(.033)	(.021)	(.026)
3rd generation	-.86	-.89	-.017	-.012	-.114	-.119	-.184	-.167
	(.26)	(.28)	(.031)	(.033)	(.044)	(.048)	(.037)	(.039)
4th+ generation	-1.63	-1.60	-.176	-.158	-.217	-.205	-.169	-.160
	(.21)	(.22)	(.032)	(.031)	(.035)	(.035)	(.030)	(.030)
Non-Hispanic:								
Black, 4th+ generation	-1.09	-.94	-.113	-.093	-.131	-.117	-.196	-.177
	(.10)	(.11)	(.014)	(.016)	(.018)	(.020)	(.015)	(.017)
White, 4th+ generation (reference group)								
Control variables included?	No	Yes	No	Yes	No	Yes	No	Yes
R^2	.05	.09	.03	.06	.03	.06	.04	.08

Source: National Longitudinal Survey of Youth 1997 data through round 16 (2013-2014).
Note: The reported figures are estimated coefficients from least squares regressions in which the dependent variables are various measures of educational attainment. Heteroskedasticity-robust standard errors are shown in parentheses. The sample sizes are 4,851 for regressions where the dependent variable is completed years of schooling and 4,894 for regressions where the dependent variables are the binary measures of educational attainment. See Table 2 and the text for further information about the sample. The "control variables" included in specification (2) are indicators for the respondent's sex, birth year, and state of birth. Sampling weights were used in the calculations.