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ABSTRACT

U.S.-born Mexican Americans suffer a large schooling deficit relative to other Americans, and standard data sources suggest that this deficit does not shrink between the 2nd and later generations. Standard data sources lack information on grandparents' countries of birth, however, which creates potentially serious issues for tracking the progress of later-generation Mexican Americans. Exploiting unique NLSY97 data that address these measurement issues, we find substantial educational progress between the 2nd and 3rd generations for a recent cohort of Mexican Americans. Such progress is obscured when we instead mimic the limitations inherent in standard data sources.

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I. Introduction

Understanding the progress that takes place across immigrant generations is crucial for assessing the long-term impact of immigration on society. In many respects, 2nd-generation immigrants—the U.S.-born children of foreign-born migrants to the United States—show signs of rapid integration. On average, the 2nd generation as a whole and 2nd-generation members from most contemporary national origin groups meet or exceed the schooling level of the typical American (Duncan and Trejo 2018). Not conforming to this pattern, however, are Mexican Americans, who because of historical continuity and demographic size constitute arguably the most significant U.S. immigrant flow.

Panel A of Table 1 illustrates the seemingly persistent educational disadvantage of Mexican Americans. These calculations of average years of schooling for men use 2003-2016 data from the Current Population Survey (CPS).[1] Mexican Americans display impressive growth in educational attainment between the 1st generation (9.5 years) and the 2nd generation (12.7 years), but no further improvement is evident for the 3rd+ generation (the grandchildren and later descendants of Mexican immigrants). As a result, even when the comparisons are confined to individuals whose families have lived in the United States for at least a couple of generations (i.e., the 3rd+-generation), Mexican Americans possess schooling deficits of more than a year relative to non-Hispanic whites and almost one-third of a year relative to African Americans.

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). Of potentially greater concern, however, is the

[1] See the note to Table 1 and Duncan and Trejo (2018) for further details about the data and calculations. Patterns for women are very similar.

evidence that progress seems to stall after the 2nd generation for Mexican Americans.[2] Certainly, Mexican immigrants to the United States confront obstacles that 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).

In addition, Huntington (2004) points to several other factors that could slow the pace of intergenerational integration by Hispanics today as compared to Europeans in the past. These factors include the large scale of current immigration flows from Mexico and other Spanish-speaking countries, the substantial (though lessening) geographic concentration of these flows within the United States, and the fact that such flows have remained sizeable over a much longer period of time than did the influx from any particular European country. In addition, the close proximity of Mexico to the United States facilitates return and repeat migration. These unique features of Hispanic immigration might foster the growth of ethnic enclaves in the United States where immigrants and their descendants could, if they so choose, live and work without being forced to learn English or to Americanize in other important ways.[3] Because of these and other concerns, Mexican Americans' prospects for future upward mobility are subject to much recent debate.[4]

In evaluating such theoretical arguments for slower integration by Mexican Americans, however, it is important to consider several potentially serious limitations of the existing

[2] Table 1 suggests educational stagnation beyond the 2nd generation for Mexican Americans, and the same pattern has been observed for earnings. Studies reporting limited progress in education and/or earnings after the 2nd generation for Mexican Americans include 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), and Duncan and Trejo (2018).

[3] Contrary to Huntington's thesis, however, available evidence suggests rapid linguistic assimilation for the U.S.-born descendants of contemporary immigrant groups (Alba et al. 2002). This holds even for Hispanics who live in areas with high concentrations of Spanish-speaking immigrants. In Southern California, for example, 96 percent of 3rd-generation Mexican Americans prefer to speak English rather than Spanish at home, and only 17 percent of 3rd-generation Mexican Americans retain the ability to speak fluent Spanish (Rumbaut, Massey, and Bean 2006).

[4] See, for example, Perlmann (2005), Portes (2006), Telles and Ortiz (2008), Alba, Abdel-Hady, Islam, and Marotz (2011), Alba, Kasinitz, and Waters (2011), Haller, Portes, and Lynch (2011a, 2011b), Perlmann (2011), Alba, Jimenez, and Marrow (2014), Park, Myers, and Jimenez (2014), and Bean, Brown, and Bachmeier (2015).

empirical evidence. We consider, in turn, the following three measurement issues: (1) comparisons of immigrant generations in cross-sectional data, (2) ethnic attrition, and (3) the inability to distinguish the 3rd generation from higher generations.

First, as noted by Borjas (1993, 2006) and Smith (2003, 2006), generational comparisons in a single cross-section of data—like those reported in Panel A of Table 1—can be misleading because they do a poor job of matching parents and grandparents in an earlier generation with their actual descendants in later generations. If we assume that schooling is essentially complete by the age of 25 and changes little thereafter, we can use CPS data to conduct an analysis of intergenerational changes in educational attainment similar in spirit to Smith (2003). Panel B of Table 1 reports the relevant calculations. This panel presents average schooling levels for Mexican Americans similar to those displayed in Panel A, except that now separate calculations are reported for two particular age groups: 25-34 and 50-59. By choosing age groups 25 years apart, we create a situation in which the older age group from a particular generation potentially represents the parental cohort for the younger age group in the next generation. For example, the cohort of 1st-generation men aged 50-59 includes fathers of the 2nd-generation cohort of sons aged 25-34.

Panel B reveals only slightly more progress beyond the 2nd-generation for Mexican Americans than did Panel A. When we compare age/generation groups that potentially match Mexican-American fathers with their sons (by moving northeast between the connected cells with similar shading in Panel B), average schooling rises from 12.6 years for the older 2nd generation to 12.7 years for the younger 3rd+ generation, a positive but small gain.[5] Therefore, the evidence of educational stagnation for later-generation Mexican Americans does not seem to

[5] Note, however, that calculating schooling progress between 1st- and 2nd-generation Mexican Americans in this same way produces even bigger gains than those observed in Panel A: 4.2 years in Panel B compared with 3.2 years in Panel A.

derive largely from biases associated with comparing immigrant generations in a cross-section. Further, note in Panel B that young 3rd+-generation Mexican Americans continue to trail the average schooling of their non-Hispanic white and African-American peers by the same substantial amounts observed in Panel A.

Potential measurement bias arising from "ethnic attrition" is a second issue that might make it difficult to track progress across immigrant generations. In Table 1, 1st- and 2nd-generation Mexican Americans are identified using the relatively "objective" information collected by the CPS on the countries of birth of the respondent and his parents (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, 3rd-and-higher-generation Mexican Americans (or the so-called 3rd+ generation) must be assigned using more "subjective" measures of racial/ethnic identification. In Table 1, we follow standard practice in defining 3rd+-generation Mexican Americans as those who are U.S.-born, have two U.S.-born parents, and identify as "Mexican" or "Mexican American" in response to the Hispanic origin question. Given 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). Consequently, 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 downward bias in standard measures of attainment for later generations. In this way, measurement biases generated by ethnic attrition could create a misleading appearance of socioeconomic stagnation after the 2nd generation for Mexican Americans, similar to what is observed in Table 1.

A third but related measurement issue is that the data limitations just described also imply that, for adults, researchers typically cannot distinguish the "true" 3rd generation from higher generations. For this reason, Table 1 and the discussion so far refer to the "3rd+" generation. 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 1987). The more limited opportunities for advancement experienced by these families may result in lower attainment for Mexican Americans in the 4th and higher 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.

In the current paper, we exploit previously untapped information from the National Longitudinal Survey of Youth 1997 (NLSY97) that allows us to address the last two measurement issues just discussed: ethnic attrition and distinguishing the 3rd generation from higher generations. For our purposes, a key feature of the NLSY97 is that it reports the countries of birth of respondents' grandparents. This means that we can minimize ethnic attrition by identifying 3rd-generation Mexican Americans using ancestors' countries of birth rather than

subjective ethnic identification. It also means that we can distinguish 3rd-generation Mexican Americans from higher generations.

We use these data to analyze educational progress between 2nd- and 3rd-generation Mexican Americans. Once we address the measurement issues just described, we find a substantial increase in educational attainment between generations. Moreover, we show that such progress is largely hidden when we mimic standard data sets and aggregate the 3rd and higher generations into a "3rd+" generation. Our analysis thus provides promising evidence of generational progress for a recent cohort of Mexican-Americans. Indeed, for this birth cohort, the high school graduation rate of 3rd-generation Mexican Americans is only slightly below that of non-Hispanic whites from the 4th and higher generations.[6]

Our paper 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. Starting with a survey conducted in 1965 of Mexican-American families living Los Angeles and San Antonio, Telles and Ortiz (2008) re-interview in 2000 available original respondents and their U.S.-born children. 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 analysis contributes in several important ways to the ongoing scholarly debate over Mexican-American progress after the 2nd generation. First, we employ nationally-representative

[6] This finding is consistent with other recent evidence of improving high school completion rates for U.S.-educated Hispanics (Murnane 2013, Gramlich 2017).

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 (2008) and the Mexican-origin respondents in Bean, Brown, and Bachmeier (2015) had to subjectively identify as being of Mexican descent to be included in these surveys. Third, the recency and youth of our sample—described in greater detail below—imply that our analyses provide better information about the future trajectories of U.S.-born Mexican Americans than previous work could.

II. Data

The NLSY97 provides longitudinal information for a nationally-representative sample of just fewer than 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 17 of the NLSY97, which was conducted in 2015-16 when the respondents were between the ages of 30-36. 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.[7]

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 subjectively 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 1,000 Mexican-origin respondents across the four generation categories, with sample sizes of 150 or more in each generation (see Table 2 below). 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 coming from particular metropolitan areas. Substantially larger samples are available for the non-Hispanic white and black reference groups.

III. Generational Patterns of Educational Attainment

The primary aims of our analysis are to compare educational outcomes across generations of Mexican Americans and to make similar comparisons between later-generation Mexican

[7] 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.

Americans and the non-Hispanic white and black reference groups. We focus on education because it is a fundamental determinant of economic success, social status, health, family stability, and life opportunities (Hout 2012; Heckman, Humphries, and Veramendi 2017). In addition, information on educational attainment is available for all adults, whereas earnings data are available only for those currently working. When we can distinguish the 3rd generation from higher generations, and when we can limit the effects of ethnic attrition, do we see schooling gains for Mexican Americans between the 2nd and 3rd generations? If so, how much of a schooling gap remains between 3rd-generation Mexican Americans and other Americans?

The tabulations reported in Table 2 suggest that the answer to the first question 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 each of the Mexican-American generation groups and for the non-Hispanic white and black reference groups.[8] 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, average years of schooling for Mexican Americans grow from 11.9 for the 1.5 generation to 13.0 for the 2nd generation to 13.5 for the 3rd generation, but average years of schooling then regress to 12.8 for the 4th+ generation. Similarly, the proportion of Mexican Americans with a high school diploma rises from 61.5 percent for the

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

1.5 generation to 76.2 percent for the 2nd generation to 84.3 percent for the 3rd generation before falling back to 68.3 percent for the 4th+ generation. The high school completion rate of 84.3 percent for 3rd-generation Mexican Americans approaches the 86.2 percent rate for 4th+-generation whites and exceeds by a considerable margin the 75.0 percent rate for 4th+-generation blacks.[9] The only education measure that does not conform to this generational pattern is bachelor's degree completion, which increases slightly between the 3rd and 4th+ generations. For all education measures besides high school completion, however, large gaps ultimately remain between 3rd-generation Mexican Americans and 4th+-generation whites (i.e., deficits of 0.9 years for average schooling, 11.5 percentage points for college attendance, and 19.6 percentage points for bachelors degree completion).[10]

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 row 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 Table 1 due to limitations of CPS data. For all education measures other than bachelor's degree completion, the NLSY97 data show little improvement after the 2nd generation and a larger remaining deficit relative to 4th+-generation whites when 3rd- and 4th+-generation Mexican

[9] 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 Mexican Americans and blacks, such that the gap between 3rd-generation Mexican Americans and 4th+-generation whites almost entirely disappears (i.e., the revised rates are 94.3 percent for 3rd-generation Mexican Americans, 94.7 percent for 4th+-generation whites, and 91.5 percent for 4th+-generation blacks).

[10] Alon, Domina, and Tienda (2010) present evidence that the relatively low rates of post-secondary enrollment and degree attainment observed for U.S.-born Hispanics derive not just from having parents with lower rates of college attendance and completion, but also from those Hispanic parents who did attend college being less successful than other groups at getting their children to follow suit.

Americans are aggregated in this way. Average years of schooling, for example, rise from 13.0 for the 2nd generation to 13.5 for the 3rd generation, whereas the corresponding increase is negligible (0.07 years) when the 3rd and higher generations are pooled together. Likewise, improvements in high school completion and college attendance between 2nd- and 3rd-generation Mexican Americans instead appear to be modest declines when the 3rd+ generation is used in place of the 3rd generation.

For the same samples and schooling measures introduced in Table 2, Table 3 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. The sample sizes are 4,851 for regressions where the dependent variable is completed years of schooling and 4,893 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 3 indicate that the educational deficit for Mexican Americans (relative to 4th+-generation whites) shrinks from 2.6 years for the 1.5 generation to 1.5 years for the 2nd generation to 0.9 years for the 3rd generation before climbing back to 1.7 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 1.9 percentage points, shown in the third column, is

not statistically significant.

An 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) reproduces 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 followed by 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 altered only slightly by the controls.

IV. Ethnic Attrition

Biases from selective ethnic attrition are likely to be more severe in our NLSY97 sample of 4th+-generation Mexican Americans than in the corresponding sample of 3rd-generation Mexican Americans. One reason is that the 3rd-generation can be identified objectively (from information on the countries of birth of the respondent, his parents, and his grandparents), whereas inclusion in the 4th+-generation sample requires that the respondent or a parent subjectively identifies as being of Mexican descent. In addition, ethnic attachments tend to fade with more generations since immigration, and this tendency produces more extensive ethnic attrition in higher generations. Consequently, greater downward bias from ethnic attrition is one potential explanation for the relatively poor educational outcomes we observe for 4th+-generation Mexican Americans.

Previous work by Duncan and Trejo (2007, 2011, 2017) establishes the direction and potential importance of the biases created by selective ethnic attrition, but that work suffers from significant limitations. Of particular concern is that the 3rd-generation samples in these earlier studies are confined to children living in intact families, and therefore the earlier findings can only indirectly suggest the extent and selectivity of ethnic attrition that would be observed among adults. Because the cross-sectional sample of the NLSY97 allows us to construct a sample of 3rd-generation Mexican-American adults that is free from ethnic attrition, these data offer some key advantages for further exploration of this issue. One notable disadvantage of using NLSY97 data for this purpose, however, is the small sample size: the cross-sectional sample includes only 81 3rd-generation Mexican Americans (see Table 4 below).

Table 4 reports the percentage of Mexican Americans from each generation who identify subjectively as being of Hispanic origin, based on information collected at the beginning of the survey in 1997. [11] The top panel of the table shows the relevant calculations for the cross-sectional sample that is representative of all U.S. youth in the sampling universe at the time the NLSY97 began. The middle panel repeats these calculations for the supplemental oversample of Hispanics, and the bottom panel does this for the combined sample that pools together observations from both the cross-sectional and supplemental samples.

The middle panel of Table 4 reveals perfect Hispanic identification rates for every generation of Mexican Americans in the supplemental sample. This result confirms that the selection criteria for inclusion in the supplemental sample have effectively excluded from this

[11] The NLSY97 also collected information about Hispanic identification in 2002 and at other times. These alternative measures of Hispanic identification display the same patterns as the 1997 measure reported in Table 4. We employ here a broad indicator of "Hispanic" identification rather than a more specific indicator for "Mexican" identification so that the resulting estimates of ethnic attrition are conservative. In addition to capturing individuals who identify as Mexican or Mexican American, Hispanic identification also captures 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.

subsample any Mexican Americans who do not identify as Hispanic. Because the supplemental sample does not provide useful information about ethnic attrition, we instead focus our attention on the cross-sectional sample in the top panel of Table 4.

The rates of Hispanic identification reported in the top panel of Table 4 indicate that ethnic attrition is negligible for the 1.5 and 2nd generations of Mexican Americans in the NLSY97, but it does become a significant issue by the 3rd generation. Everyone born in Mexico (i.e., the 1.5 generation) identifies as Hispanic, as do 95 percent of U.S.-born individuals with a parent born in Mexico (i.e., the 2nd generation). Among objectively-defined 3rd-generation Mexican Americans, however, only 80 percent identify as Hispanic, implying an ethnic attrition rate of 20 percent. This pattern of ethnic attrition across generations of Mexican Americans is roughly similar to what Duncan and Trejo (2016) report in recent CPS data.[12]

For ethnic attrition to bias estimates of socioeconomic progress, not only must it exist, but it must also be selective. Table 5, which restricts attention to 3rd-generation Mexican Americans in the cross-sectional sample, provides some evidence that this is indeed the case. Among such individuals, those who do *not* identify as Hispanic average about three-fifths of a year more schooling than those who do so identify. Similarly, the rate of bachelor's degree completion is higher for those not identifying as Hispanic (29 percent) than for those who do identify (22 percent). Rates of high school graduation and college attendance do not conform to this pattern, however, with slight advantages observed for 3rd-generation Mexican Americans who identify as Hispanic. Although suggestive, these estimates are imprecise because of the small samples involved (e.g., the calculations for 3rd-generation Mexican Americans who do not identify as Hispanic are based on a sample size of 11). Nonetheless, the educational selectivity

[12] In particular, see Appendix Tables A.1-A.3 in Duncan and Trejo (2016).

of ethnic attrition among 3rd-generation Mexican Americans that we directly observe for *adults* in NLSY97 data conforms to what prior studies inferred indirectly from 3rd-generation samples that were limited to *children* (Duncan and Trejo 2007, 2011, 2017).

Table 5 and previous research suggest that selective ethnic attrition generates downward-biased estimates of socioeconomic attainment for later generations of Mexican Americans when, as is typically the case, target sample members can only be detected using subjective measures of ethnic identification. The analysis of educational attainment presented in the previous section largely avoids this problem by using data that can identify 1.5-, 2nd-, and 3rd-generation Mexican Americans without relying on subjective measures of ethnic identification. To preserve sample size, Tables 2 and 3 in the previous section reported results based on the full NLSY97 sample that pooled together observations from the cross-sectional and supplemental samples. Because the supplemental sample filters out Mexican Americans who do not identify as Hispanic, the resulting ethnic attrition may generate downward-biased measures of educational attainment for Mexican Americans in Tables 2 and 3, particularly for the 3rd generation where ethnic attrition becomes non-negligible. As it turns out, however, very similar patterns of generational differences emerge when Tables 2 and 3 are reproduced using only the cross-sectional sample that does not suffer from ethnic attrition. In light of this, we will continue to report results based on the full NLSY97 sample, where appropriate, in order to increase sample sizes and improve precision.

Given that selective ethnic attrition helps explain the apparent lack of generational progress reported elsewhere, it is interesting to consider the source of selective ethnic attrition. Previous research (Duncan and Trejo 2011, 2017) indicates that the selectivity of ethnic attrition observed for Mexican Americans—i.e., the strong negative relationship between ethnic

identification and socioeconomic attainment—largely reflects patterns associated with intermarriage. Mexican Americans with mixed ethnic origins are less likely to identify as Mexican or Hispanic and also display higher levels of average attainment.

Table 6 suggests that something similar occurs within our sample of 3rd-generation Mexican Americans from the NLSY97. In particular, average years of schooling are higher for 3rd-generation individuals with weaker ancestral attachments to Mexico. In the top part of Table 6, 3rd-generation Mexican Americans are distinguished by how many of their grandparents were born in Mexico. The vast majority of 3rd-generation Mexican Americans (88 percent) have only one or two grandparents born in Mexico, and such individuals average about 1.75 more years of schooling than their counterparts with stronger ethnic attachments (i.e., those with three or four Mexican-born grandparents).

The bottom part of Table 6 instead distinguishes 3rd-generation Mexican Americans according to whether their Mexican ancestry is observed on their father's side only, on their mother's side only, or on both sides of their family. In this typology, Mexican ancestry is said to be observed on the father's side of the family when at least one of the following two things is true: (1) the respondent has a paternal grandparent who was born in Mexico, or (2) the respondent's father subjectively identifies as Mexican American. Analogously, presence of a Mexican-born maternal grandparent and/or the mother's subjective identification as Mexican American determine whether a respondent is observed to have Mexican ancestry on his mother's side of the family.[13] The distribution of 3rd-generation Mexican Americans is almost evenly distributed across the three groups defined in the bottom part of Table 6. Average years of

[13] Here, we make use of information on the subjective Mexican identification of the respondent's parents in order to construct a broader definition of Mexican ancestry. If we instead adopt a narrower but more objective definition of Mexican ancestry that is based solely on the presence of Mexican-born grandparents, similar schooling patterns emerge, but the fraction of 3rd-generation Mexican Americans defined to have Mexican ancestry on both sides of their family is cut in half (to 16 percent).

schooling are markedly higher for those with Mexican ancestry on just one side of their family (13.7 for father's side only and 14.0 for mother's side only) than for those with Mexican ancestry on both sides of their family (13.0). Once again, a substantial educational advantage is observed for those with seemingly weaker ancestral attachments to Mexico. Given previous research (Duncan and Trejo 2011, 2017) documenting that later-generation Mexican Americans with weaker ancestral attachments are much less like to identify as Mexican or Hispanic, the schooling patterns in Table 6 are consistent with other work indicating that ethnic attrition among Mexican Americans is positively selected on socioeconomic attainment.

V. Why Is Schooling Lower for the 4th+ Generation?

A somewhat surprising finding in Tables 2 and 3 is the low level of educational attainment for 4th+-generation Mexican Americans. In terms of average years of schooling, high school completion, and college attendance, Mexican Americans in the 4th+ generation exhibit large deficits relative to the 3rd generation and smaller but still sizeable gaps relative to the 2nd generation. As noted in the previous section, one possible explanation for this pattern is that ethnic attrition generates greater downward bias for the 4th+-generation sample. In this section, we consider alternative explanations that focus on disadvantaged family and social environments for 4th+-generation Mexican Americans.

Table 7 shows how the samples of 3rd-generation and 4th+-generation Mexican Americans compare with respect to their geographic "roots" and their parents' educational attainment. In Panels A and B of Table 7, an individual is defined as having California roots when at least one of the following three things is observed: (1) the respondent was born in California; or (2) the respondent resided in California in 1997 when the survey began; or (3)

either (or both) of the respondent's parents was born in California. An analogous procedure determines whether an individual is defined as having Texas roots.

Mexican Americans in the 3rd generation are equally distributed among those with any California roots, those with any Texas roots, and those with neither California nor Texas roots.[14] Compared with the 3rd generation, the 4th+ generation displays a dramatic decline in the proportion with any California roots (from 36 percent to 10 percent) and a corresponding increase in the proportion with neither California nor Texas roots (from 36 percent to 60 percent), with relatively little change in the proportion with any Texas roots. These differences in the geographic roots of the 3rd generation versus the 4th+ generation are potentially important because Mexican Americans arguably faced less severe discrimination and enjoyed better opportunities for advancement in California than in Texas or other parts of the United States, especially prior to the civil rights reforms of the 1960s and 1970s (Foley 1997; Alba 2006; Montejano 1987).

Panel C of Table 7 indicates that 4th+-generation Mexican Americans are also somewhat disadvantaged relative to the 3rd generation when it comes to parental education levels. In particular, mothers' average years of schooling are 12.6 for the 3rd generation versus 12.1 for the 4th+ generation, whereas the corresponding difference is smaller for fathers' average years of schooling (12.3 for the 3rd generation versus 12.2 for the 4th+ generation).

Do these deficits in California roots and parental schooling for 4th+-generation Mexican Americans relative to the 3rd generation help to account for the lower educational attainment of the 4th+ generation? Table 8 presents least squares regressions which suggest that these

[14] Given the way we define geographic roots, it is possible for someone to have *both* California and Texas roots. In our sample of 3rd-generation Mexican Americans, 8 percent have both California and Texas roots, 28 percent have California but not Texas roots, and another 28 percent have Texas but not California roots. Among the 4th+generation, however, the proportion with overlapping California and Texas roots falls to just 1 percent of the sample.

observable differences between 3rd-generation and 4th+-generation Mexican-Americans do not explain the lion's share of the corresponding education gap. The dependent variable is completed years of schooling, and the estimation sample includes 3rd-generation and 4th+-generation Mexican Americans. All specifications include a dummy variable identifying membership in the 4th+ generation (as opposed to membership in the reference group consisting of the 3rd generation) and indicators for the respondent's sex and birth year. Specification (1) includes only these variables, and the estimated coefficient on the 4th+-generation dummy reproduces the average schooling deficit for 4th+-generation Mexican Americans (relative to the 3rd generation) of about three-quarters of a year that was observed previously in Tables 2 and 3.

In regression specification (2), we add to specification (1) an indicator for whether the respondent has any California roots, as defined previously. All else equal, later-generation Mexican Americans with California roots average three-fifths of a year more schooling than those without California roots, and adding this variable to the regression shrinks (in absolute value) the estimated coefficient of the 4th+-generation dummy from -.76 to -.58.[15] Similarly, specification (3) instead adds to specification (1) a vector of parental schooling variables (including indicators for missing information on parental schooling). Not surprisingly, mother's and father's years of schooling have strong positive effects on the respondent's educational attainment. In addition, controlling for parental education changes the estimated coefficient of the 4th+-generation dummy to -.50. Finally, specification (4) includes all of these controls—the California roots dummy and the parental schooling variables—in the same regression, and the estimated coefficient of the 4th+-generation dummy becomes -.45.

In summary, controlling for differences in geographic roots and parental education

[15] The impact on the estimated coefficient of the 4th+-generation dummy is virtually identical when we replace the single indicator variable for California roots with a vector of indicators distinguishing the more detailed categories of geographic roots listed in Panel A of Table 7.

shrinks (by up to 40 percent) but does not eliminate the substantial schooling deficit for 4th+-generation Mexican Americans relative to their 3rd-generation counterparts. For reasons discussed previously, greater downward bias from ethnic attrition in the 4th+-generation sample is another potential explanation for this schooling deficit. Indeed, more severe ethnic attrition in the 4th+ generation is a potential explanation for the differences in geographic roots and parental schooling we observe between 3rd-generation and 4th+-generation Mexican Americans, because previous research suggests that ethnic attrition is more prevalent among later-generation Mexican Americans with relatively advantaged family backgrounds (Duncan and Trejo 2011, 2017). As a result, although the regressions reported in Table 8 indicate that geographic roots and parental schooling provide proximate explanations for a portion of the schooling deficit observed for 4th+-generation Mexican Americans, it is still possible that ethnic attrition generates these proximate correlations as well as the portion of the schooling deficit not accounted for by geographic roots and parental schooling. Moreover, to the extent that ethnic attrition ultimately accounts for the schooling deficit observed for 4th+generation Mexican Americans, then this deficit is illusory rather than real. An important goal for future research, therefore, should be to better understand the role that ethnic attrition plays in generating observed schooling differences across generations of Mexican Americans.

VI. Conclusion

In contrast with the descendants of almost every other contemporary immigrant group, U.S.-born Mexican Americans maintain a large schooling deficit relative to other Americans. Moreover, standard data sources suggest that this deficit does not shrink between the 2nd and later generations of Mexican Americans. The apparent intergenerational stagnation of

educational attainment for Mexican Americans raises concerns about this important group's prospects for long-term integration into American society.

Available evidence on this issue, however, suffers from some potentially serious limitations. A major problem is that data sources rarely provide information on the countries of birth of an adult respondent's grandparents. As a result, Mexican Americans beyond the 2nd-generation almost always must be identified from subjective measures of ethnic identification, such as the Hispanic origin question asked in U.S. Census Bureau surveys. These data limitations create two key measurement issues for tracking the generational progress of Mexican Americans: (1) ethnic attrition, and (2) aggregation of 3rd–generation and higher-generation individuals. Both of these measurement issues could lead standard analyses to understate socioeconomic improvement between 2nd-generation and 3rd-generation Mexican Americans.

Ethnic attrition takes place when U.S.-born descendants of Mexican immigrants do not subjectively identify as Mexican American or Hispanic. Previous research indicates that ethnic attrition is substantial among later-generation Mexican Americans and that such attrition typically arises in families with mixed ethnic origins. Moreover, previous research suggests that selective intermarriage and the resulting ethnic attrition produce downward bias in estimates of socioeconomic attainment that rely on subjective measures of ethnic identification to detect later-generation Mexican Americans.

The lack of information on grandparents' countries of birth also implies that analysts cannot distinguish 3rd-generation from higher-generation Mexican Americans. Instead, the only group beyond the 2nd generation available for study is an aggregated "3rd+" generation that pools together individuals from the 3rd and all higher generations. Such aggregation could hide progress for the disaggregated 3rd generation, because Mexican Americans beyond the 3rd

generation may have experienced harsher family and social environments, and also because the biases from ethnic attrition are likely to be more severe for higher generations.

In this paper, we are able to address both of these measurement issues by exploiting previously untapped information from the NLSY97 on the countries of birth of respondents' grandparents. With these data, we can identify 3rd-generation Mexican Americans using ancestors' countries of birth rather than subjective ethnic identification, thereby minimizing ethnic attrition and isolating the 3rd generation from higher generations. To our knowledge, we are the first to address these measurement issues using nationally-representative data. In addition, compared to two related studies that focus on particular metropolitan areas (Telles and Ortiz 2008; Bean, Brown, and Bachmeier 2015), our analysis is better able to account for ethnic attrition. Finally, we study a more recent cohort of Mexican Americans than others have studied, and therefore our findings provide timely insights into future trends.

Using NLSY97 data that allow us to minimize ethnic attrition and distinguish the 3rd-generation from higher generations, we find substantial educational progress between 2nd- and 3rd-generation Mexican Americans. Such progress is hidden when we instead mimic standard data sets and aggregate the 3rd and higher generations into a 3rd+ generation. For a recent cohort of Mexican-Americans, our analysis thus provides promising evidence of generational advance. In particular, for this cohort of individuals born in the years 1980-84, the high school graduation rate of 3rd-generation Mexican Americans is only slightly below that of later-generation non-Hispanic whites. Other measures of educational attainment—completed years of schooling, college attendance, and bachelors degree completion—also show sizable gains for Mexican Americans between the 2nd and 3rd generations. In contrast with high school completion, however, for these other education measures 3rd-generation Mexican Americans maintain large

deficits relative to non-Hispanic whites, despite their generational gains. Further analyses document patterns of ethnic attrition among 3rd-generation Mexican-American adults in the NLSY97 that are similar to those reported previously in CPS data where the 3rd-generation samples are confined to children. Ultimately, our findings suggest that Mexican Americans do indeed experience substantial socioeconomic progress beyond the 2nd generation, and that this progress is obscured by limitations of the data sources commonly used to look for it.

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Table 1: Average Years of Schooling of Men, by Race/Ethnicity, Age, and Immigrant Generation, 2003-2016 CPS Data

Race/Ethnicity and Age	Immigrant Generation 1st	2nd	3rd+
A. Ages 25-59			
Mexican American	9.49	12.69	12.65
	(0.02)	(0.03)	(0.02)
Non-Hispanic White			13.80
			(0.004)
Non-Hispanic Black			12.95
			(0.01)
B. By Age Cohort			
Mexican American:			
Ages 25-34	9.92	12.67	12.65
	(0.03)	(0.03)	(0.03)
Ages 50-59	8.50	12.56	12.51
	(0.06)	(0.09)	(0.05)
Non-Hispanic White:			
Ages 25-34			13.80
			(0.007)
Ages 50-59			13.79
			(0.007)
Non-Hispanic Black:			
Ages 25-34			12.96
			(0.02)
Ages 50-59			12.80
			(0.02)

Source: 2003-2016 Current Population Survey outgoing rotation group data.
Note: Standard errors are reported in parentheses. The samples include men in the relevant racial/ethnic and age groups. For Mexican Americans, the "1st generation" consists of individuals born in Mexico, excluding those born abroad of an American parent, and the "2nd generation" consists of U.S.-born individuals who have at least one Mexican-born parent. The "3rd+ generation" (i.e., the 3rd and all higher generations) consists of U.S.-born individuals who have two U.S.-born parents, and these individuals are assigned to racial/ethnic groups based on their responses to the Hispanic origin and race questions. 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	11.85	61.53	27.49	8.61	197
	(0.18)	(3.46)	(3.17)	(1.99)	
2nd generation	12.97	76.23	47.71	13.50	412
	(0.13)	(2.09)	(2.45)	(1.68)	
3rd generation	13.54	84.25	53.53	19.74	155
	(0.22)	(2.90)	(3.97)	(3.17)	
4th+ generation	12.79	68.28	42.37	21.16	276
	(0.18)	(2.79)	(2.96)	(2.45)	
3rd+ generation	13.04	73.55	46.05	20.69	431
	(0.14)	(2.11)	(2.38)	(1.94)	
Non-Hispanic:					
Black, 4th+ generation	13.37	74.97	52.08	19.84	1,330
	(0.08)	(1.18)	(1.36)	(1.09)	
White, 4th+ generation	14.46	86.17	65.00	39.34	2,481
	(0.06)	(0.69)	(0.95)	(0.98)	

Source: National Longitudinal Survey of Youth 1997 data through round 17 (2015-2016).
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 30-36. 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: 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	-2.61	-2.78	-.246	-.293	-.375	-.427	-.307	-.272
	(.19)	(.25)	(.038)	(.043)	(.034)	(.044)	(.021)	(.034)
2nd generation	-1.48	-1.56	-.099	-.111	-.173	-.197	-.258	-.235
	(.15)	(.18)	(.023)	(.026)	(.028)	(.033)	(.021)	(.026)
3rd generation	-.91	-.93	-.019	-.015	-.115	-.121	-.196	-.177
	(.26)	(.28)	(.031)	(.033)	(.044)	(.048)	(.037)	(.039)
4th+ generation	-1.66	-1.63	-.179	-.161	-.226	-.216	-.182	-.171
	(.22)	(.22)	(.032)	(.031)	(.035)	(.035)	(.030)	(.030)
Non-Hispanic:								
Black, 4th+ generation	-1.09	-.94	-.112	-.095	-.129	-.119	-.195	-.176
	(.10)	(.12)	(.014)	(.016)	(.018)	(.019)	(.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 17 (2015-2016).
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 4,893 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.

Table 4: Rates of Hispanic Identification (%) for Mexican Americans, by Sample Type and Immigrant Generation

Sample Type and Generation	Percent Identified as Hispanic	Sample Size
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)	
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)	

Source: National Longitudinal Survey of Youth 1997 data through round 17 (2015-2016).
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 5: 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	13.60	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	13.72	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 17 (2015-2016).
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. 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 6: Average Years of Schooling of 3rd-Generation Mexican Americans, by Source of Mexican Ancestry

Source of Mexican Ancestry	Percent of Sample	Average Years of Schooling	Sample Size
Number of Mexican-born grandparents:			
1	61.0	13.81	93
		(0.28)	
2	27.0	13.63	40
		(0.46)	
3	4.6	12.35	8
		(1.02)	
4	7.5	11.81	14
		(0.56)	
All 3rd-generation Mexican Americans	100.0	13.54	155
		(0.22)	
Mexican ancestry observed on:			
Father's side only	36.5	13.67	51
		(0.37)	
Mother's side only	31.3	14.00	48
		(0.42)	
Both sides of family	32.2	12.95	56
		(0.38)	
All 3rd-generation Mexican Americans	100.0	13.54	155
		(0.22)	

Source: National Longitudinal Survey of Youth 1997 data through round 17 (2015-2016).
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. Mexican ancestry is said to be observed on the father's side of the family when at least one of the following two things is true: (1) the respondent has a paternal grandparent who was born in Mexico, or (2) the respondent's father subjectively identifies as Mexican American. Analogously, presence of a Mexican-born maternal grandparent and/or the mother's subjective identification as Mexican American determine whether a respondent is observed to have Mexican ancestry on his mother's side of the family. Sampling weights were used in the calculations.

Table 7: Differences between 3rd- and 4th+-Generation Mexican Americans in Geographic Roots and Parental Education

	Immigrant Generation	
	3rd	4th+
A. Percent of generation with roots in:		
California but not Texas	28.0	8.6
Texas but not California	28.2	30.6
Both California and Texas	8.2	1.1
Neither California nor Texas	35.6	59.7
Total for generation	100.0	100.0
Sample size for generation	159	281
B. Percent of generation with:		
Any California roots	36.2	9.7
Any Texas roots	36.4	31.7
C. Average years of schooling:		
Mother	12.57	12.14
	(0.21)	(0.14)
	[149]	[261]
Father	12.32	12.20
	(0.24)	(0.19)
	[143]	[220]

Source: National Longitudinal Survey of Youth 1997 data through round 17 (2015-2016).
Note: In panel C, standard errors are reported in parentheses and sample sizes with non-missing information on parental schooling are shown in brackets. The samples include men and women who could be identified as 3rd-generation or 4th+-generation Mexican Americans; see text for further information. In panels A and B, an individual is defined as having California "roots" when at least one of the following things is observed: (1) the respondent was born in California; or (2) the respondent resided in California in 1997 when the survey began; or (3) either (or both) of the respondent's parents was born in California. An analogous procedure determines whether an individual is defined as having Texas roots. Sampling weights were used in the calculations.

Table 8: Education Regressions for 3rd- and 4th+-Generation Mexican Americans

Regressor	(1)	(2)	(3)	(4)
Mexican American:				
3rd generation (reference group)				
4th+ generation	-.76	-.58	-.50	-.45
	(.31)	(.32)	(.27)	(.29)
Any California roots		.62		.19
		(.39)		(.35)
Parental years of schooling:				
Mother			.35	.35
			(.06)	(.06)
Father			.32	.32
			(.05)	(.05)
Missing parental schooling data for:				
Mother only			3.25	3.19
			(1.14)	(1.15)
Father only			3.27	3.24
			(.76)	(.76)
Both parents			8.30	8.25
			(1.05)	(1.05)
Control variables included?	Yes	Yes	Yes	Yes
R^2	.04	.04	.25	.25

Source: National Longitudinal Survey of Youth 1997 data through round 17 (2015-2016).
Note: The reported figures are estimated coefficients from least squares regressions in which the dependent variable is completed years of schooling. Heteroskedasticity-robust standard errors are shown in parentheses. The sample includes men and women who could be identified as 3rd-generation or 4th+-generation Mexican Americans; see text for further information. The sample size is 431 for all regressions. An individual is defined as having California "roots" when at least one of the following things is observed: (1) the respondent was born in California; or (2) the respondent resided in California in 1997 when the survey began; or (3) either (or both) of the respondent's parents was born in California. The "control variables" included in all specifications are indicators for the respondent's sex and birth year. Sampling weights were used in the calculations.