

3-21-1996

## The Influence of Family Background on the Educational Attainment of Latinos

Yolanda C. Padilla  
*University of Texas at Austin*

Follow this and additional works at: <https://scholarworks.umb.edu/nejpp>



Part of the [Educational Sociology Commons](#), [Race and Ethnicity Commons](#), and the [Social Psychology and Interaction Commons](#)

---

### Recommended Citation

Padilla, Yolanda C. (1996) "The Influence of Family Background on the Educational Attainment of Latinos," *New England Journal of Public Policy*. Vol. 11: Iss. 2, Article 5.  
Available at: <https://scholarworks.umb.edu/nejpp/vol11/iss2/5>

This Article is brought to you for free and open access by ScholarWorks at UMass Boston. It has been accepted for inclusion in New England Journal of Public Policy by an authorized editor of ScholarWorks at UMass Boston. For more information, please contact [scholarworks@umb.edu](mailto:scholarworks@umb.edu).

---

## The Influence of Family Background on the Educational Attainment of Latinos

### Cover Page Footnote

This research was partially supported by grants from the Ford and Rockefeller foundations to the University of Michigan and my fellowship from the Social Science Research Council. I thank Sheldon Danziger, Mary Corcoran, Reynolds Farley, and William Frey for their comments on earlier versions of this article. However, the opinions expressed are mine alone.

# The Influence of Family Background on the Educational Attainment of Latinos

Yolanda C. Padilla, Ph.D.

---

*This study examines the family background and late childhood factors that influence the educational attainment of young Latino men. Using rich data available from the National Longitudinal Survey of Labor Market Experience–Youth Cohort, the author approached this study through a series of incremental regression models. The sample consists of 419 Latino male youth, ages 14 to 17, who were living at home in 1979. The analysis covers the years 1978 to 1988. The study, using data gathered during the respondents' childhood and early adolescence, surveys their educational outcomes approximately ten years later, when they are young adults. To account for the diversity of the experience of Latinos of different ethnic origins, the author included a dummy variable for ethnicity. The findings show that family background and resources, namely father's income and education, number of siblings, educational resources in the home, and national origin, have a strong effect on the total years of schooling completed. However, social psychological attributes, cognitive ability, parental socialization, and timing of immigration and generational status have a significant effect on education independent of social origins. In addition, the study also shows that second-generation Latino men achieve greater educational success than immigrants, but that third-generation Latino men show a marked lack of progress. Finally, the study, controlling for social origins and generation, demonstrates that Puerto Ricans acquire, on average, one full year less schooling than men of Mexican origin. Overall, the full model explains 44 percent of the variance in the level of educational attainment of young Latino men.*

---

As Latinos come to represent a substantial proportion of the U.S. population, there is growing concern that they will not be educationally prepared to meet the challenges of the changing U.S. economy. According to the Bureau of Labor Statistics, the Latino share of the labor force from 1992 to 2005 is projected to grow by 63.7 percent, a rate of increase greater than that of any other demographic group.<sup>1</sup> While in 1992 Latinos represented 8 percent of the labor force, with 10.1 million workers, in 2005, they are expected to comprise 11 percent of the work force with 16.5 million workers. Yet currently, scarcely 60 percent of young Latino adults between the ages of 24 and 35 have completed high school in comparison with 89 percent of their non-Latino counterparts.<sup>2</sup>

As the primary avenue to viable employment, education is considered a key mechanism to economic success and escaping poverty. While the returns to education are

Yolanda C. Padilla is assistant professor of social work, University of Texas at Austin.

*“The educational achievement of young Latino men is explained by key factors associated with social origins, including family background. However, social psychological characteristics, cognitive ability, parental socialization, and immigration factors also play an important role. In terms of family background, family income is the most important predictor of educational attainment among young Latino men, all other factors remaining constant.”*

— Yolanda C. Padilla



lower overall for Latinos than for non-Latino whites, there exist for Latinos dramatic within-group differences in earnings according to educational levels.<sup>3</sup> For example, in 1989, 41 percent of Latino men who had not completed high school had earnings that fell below the poverty line for a family of four.<sup>4</sup> In comparison, that proportion fell to 25.4 for those with at least a high school degree and 13.1 percent for those with a college degree.

The purpose of this study is to examine the factors in an individual's background and late childhood that influence the educational outcomes of young Latino adults. Specifically, it investigates the processes mediating the effects of family background on education. The study uses a standard socioeconomic achievement model (social origins→education→socioeconomic achievement) and integrates community- and social-level processes. This research thereby reflects the state-of-the-art conceptualizations of social mobility, which focus on the processes by which social status or position shape individual outcomes.<sup>5</sup> Second, the study takes into account the latest theoretical discussions, which emphasize that the social and economic problems of Latinos, while similar in outcomes to other U.S. populations, come about through quite distinctive mechanisms, particularly immigration.<sup>6</sup>

The focus is on four areas affecting Latino education: family background, including family resources; characteristics of the local community during childhood; social psychological and cognitive attributes as a child, including parental socialization; and immigration and generational status. Each set of variables is incorporated into the analysis by estimating a series of incremental regression models. Providing a number of specifications is one way of discovering the effect of omitted variables and arriving at a more relevant model.<sup>7</sup>

Using a nationally representative longitudinal data set, this analysis utilizes data gathered during a respondent's childhood and early adolescence and observes the educational outcomes approximately ten years later when they are young adults. To take into account the diversity of the experiences of Latinos of different national origins, I included a dummy variable for ethnicity. We are therefore able to determine whether the educational achievement of Latinos is significantly different for Mexicans, Puerto Ricans, Cubans, and other Latinos.

---

## **Review of the Theoretical and Empirical Literature**

Empirical analyses of the variables that affect Latino school success is quite limited. A review of the existing literature reveals that the previous research falls into three broad areas: analyses of the effects of school behavior, social mobility studies based primarily on cross-sectional or short-term longitudinal data, and ethnographic research of selected populations. This theoretical and empirical review draws on that literature.

### ***Family Background and Resources***

According to classic social mobility literature, family background is one of the most powerful predictors of socioeconomic achievement, including educational achievement. Recent reconceptualizations of the social mobility model include the emphasis on the intergenerational "transmission" of economic status; that is, individual success reflects parental advantage or disadvantage.<sup>8</sup> Studies of Latino educational attainment have provided support for the social mobility theory, revealing that individuals whose parents had low levels of income and education tend to complete less education than those who

come from more advantaged families.<sup>9</sup> This study extends such research by observing the respondents over a much longer period than previous studies have and during a key period in the life cycle, the transition to adulthood.

### ***Community Origins***

While the association between achievement and community origins has received attention in the literature, the focus has been on the effect on earnings. For example, research by Anna Santiago and Maria Enchautequi suggests that economic status is linked to an interaction between individual characteristics and geographic location.<sup>10</sup> Much less is known about the impact of childhood community on school performance.<sup>11</sup> Research on the effect of geographic location during childhood on adult educational achievement is virtually nonexistent for Latinos. A cross-sectional study by Russell W. Rumberger found that Latino youth who were 18 to 21 years old in 1979 and not enrolled in high school had a greater probability of having completed high school if they resided in the South and in areas with high unemployment rates.<sup>12</sup> A major weakness of this study, owing to the cross-sectional nature of the data, however, is that geographic characteristics are measured after school completion.

### ***Social Psychological and Cognitive Attributes and Socialization***

A third set of variables associated with academic accomplishments consists of social psychological attributes, cognitive ability, and socialization. Studies of the general population indicate that high occupational aspirations and parental expectations concerning education have a positive effect on school success.<sup>13</sup> In addition, cognitive ability has a strong effect on the school continuation decisions of individuals.<sup>14</sup> Related research on Latino socialization has focused on school behavior. For example, a study by William Velez found that school-related social behavior, such as cutting classes and dating, had a negative effect on the probability of completing school.<sup>15</sup> However, all in all, the social psychological aspects of Latino education have not been addressed.

### ***Immigration and Generational Status***

The dynamics of Latino immigration is key to an understanding of the Latinos' social mobility.<sup>16</sup> The timing of immigration in an individual's life cycle is a particularly important aspect. Generally, research findings show that recent Latino immigrants receive less education than those who immigrated at a young age and nonimmigrants.<sup>17</sup> Another consequential dimension of immigration is the recency of immigration represented by generational status. Initial findings indicate that Latino youth who are children of immigrants (second generations) do better than immigrants (first generations).<sup>18</sup> However, a descriptive analysis by Jorge Chapa also shows that third-generation Latino youth do not show an improvement in educational attainment over second-generation youth.<sup>19</sup> Vilma Ortiz finds evidence to support these results as they pertain to high school completion.<sup>20</sup>

Nevertheless, the level of educational improvement across generations is a most important issue because it reflects the historical progress of Latinos and their ability to reach full economic, political, and social integration in the United States. The discontinuity in intergenerational advancement may be due to a number of complex factors. Two ethnographic studies shed some light on this issue. Harriett Romo, comparing the perceptions of schooling among Mexican-origin families in the Southwest, found a growing sense of alienation toward schools on the part of third-generation parents in



comparison with second-generation families.<sup>21</sup> Lloyd H. Rogler and Rosemary Santana Cooney, basing their research on Puerto Rican families in New York City, concluded that the processes of educational mobility are not the same from one generation to the next. They found that “the migration experience affects the intergenerational processes . . . by rupturing the socioeconomic continuity,” because new generations of Latinos face a totally different occupational and employment structure from that of their parents.<sup>22</sup> As a result, Latino generations subsequent to immigration have a more difficult time developing their human capital and transferring it to the labor market.

---

### **Data, Methodology, and Measures**

The data for this study were drawn from the National Longitudinal Surveys of Labor Market Experience–Youth Cohort (NLSY). This survey contains eleven waves of data on a nationally representative sample of youth from 1979 to 1988. NLSY includes a supplemental sample of Latinos (for a total  $n = 2002$ ), thus providing an adequate number of respondents to allow for statistical analysis of this group. Geographic-environmental data for NLSY respondents was obtained from the NLSY supplemental geocode data file (1979–1988).<sup>23</sup>

The sample, confined to Latino male youth ages 14 to 17 who were living in the parental home in 1979 and had no missing values on the variables included in the analysis, totaled 419 respondents. Respondents who were part of an NLSY supplementary military sample conducted between 1979 and 1984, which was designed to represent the population serving in the military, were not included. The analyses, based on data from the 1979–1989 NLSY reports, cover the years 1978 to 1988.

I approached the statistical analysis by setting up an incremental multiequation model of educational achievement and used the ordinary least-squares method to estimate the education equation. In addition to the regression analyses, I present the results of descriptive analyses. To obtain nationally representative characteristics of the Latino sample across the period of observation, I weighted all variables in the descriptive analyses by the 1988 sample, which corrects for oversampling and attrition across the period of study.

Explanatory variables were measured when the respondents were between 14 and 17 years old. Education, the outcome variable, was measured in 1988 when the respondents ranged in age from 24 to 27. In addition, I selected this interval in order to capture the respondents’ transition to adulthood. Thus, explanatory variables were measured during late childhood and outcome variables during early adulthood. The latter age span corresponds roughly to the period of the upper limit of young adulthood, which is usually considered to be between the ages of 18 and 30.<sup>24</sup> According to Duane F. Alwin and Arland Thorton, the relationships between family socioeconomic variables and school achievement are quite similar whether measured in early childhood or during late adolescence.<sup>25</sup>

Table 1 provides the list of variables included in the analyses and their definitions. The table is organized according to the sets of explanatory variables included in each of the four incremental models: (1) family background and resources, (2) community origins, (3) social psychological and cognitive attributes, and (4) immigration and generational status.

Table 1

**Definition of Variables Included in the Analyses**

Variable	Definition
EDUC88	Highest grade completed, 1988
MEXAM	1 if Mexican origin; 0 otherwise
PRICAN	1 if Puerto Rican origin; 0 otherwise
CUBAN	1 if Cuban origin; 0 otherwise
OTHHis	Other Hispanic; omitted category for ethnic origin dummy variables
AGE88	Age in 1988
FAJRHS	Father had a junior high school education; omitted category for father's education dummy variables
FAHS	1 if father had a high school education; 0 otherwise
FASOMCOL	1 if father had some college; 0 otherwise
FACOLGR	1 if father was a college graduate; 0 otherwise
FADKEDU <sup>a</sup>	1 if did not know father's education; 0 otherwise
FAMINC78	(Log) Family income in 1978 (in thousands)
FINCMISS <sup>a</sup>	1 if missing data for family income variable; 0 otherwise
EDUCRES	1 if at age 14 household received either magazine(s) or newspaper(s), or had a member who held a library card; 0 otherwise
SINGMOTH	1 if grew up in a female-headed family; 0 otherwise
TWOPAR	1 if grew up in a two-parent family; 0 otherwise
OTHPAR	Grew up in a another family arrangement; omitted category for family structure dummy variables
SIBLINGS	Number of siblings
HIUNEM79	1 if unemployment rate for SMSA or nonmetropolitan area is above the sample mean, 1979; 0 otherwise
NEAST79	1 if Northeast region, 1979; 0 otherwise
OTHREG79	1 if other region, 1979; 0 otherwise
SWEST79	Southwest, 1979; omitted category for region dummy variables
ASPNPROF	1 if at age 14–17 reported nonprofessional/managerial occupational aspirations; 0 otherwise
ASPDK	1 if unsure of occupational aspiration; 0 otherwise
ASPPROF	Reported professional/managerial occupational aspirations; omitted category for occupational aspirations dummy variables
AFQT	1980 Armed Forces Qualification Test (AFQT) raw score
AFQTMIS <sup>a</sup>	1 if did not take AFQT test; 0 otherwise
PAEXPCOL	1 if parent expected college attendance; 0 otherwise
OTHINFLU	1 if someone other than parent most influential; 0 otherwise
PANOCOL	Parent did not expect college attendance; omitted category for parent's college expectations dummy variables
FIRNEWIM	1 if first generation, recent immigrant; 0 otherwise
FIROLDIM	1 if first generation, early immigrant; 0 otherwise
SECGENER	1 if second generation; 0 otherwise
DKGENER	1 if could not determine generation because father's place of birth was missing; 0 otherwise
THIGENER	Third generation; omitted category for generation dummy variables.

Source: Computations with the 1979 to 1989 waves of the National Longitudinal Survey of Youth for men aged 14 to 17 in 1979.

<sup>a</sup>For these variables, the mean value was assigned to the cases with missing values: father's education, AFQT score, unemployment rate, and family income in 1978. In addition, cases that did not have family income information in 1978 were assigned the 1979 family income value adjusted for inflation.



Table 2 contains the means (or proportions), standard deviations, and minimum and maximum values for the variables used in the equations. Level of education completed is measured as the highest grade (between 0 and 20) a respondent had attained as of 1988.

Table 2

**Descriptive Statistics of the Variables Included in the Analyses**

Variable	Mean/ Proportion	Standard Deviation	Minimum	Maximum
EDUC88	11.914	2.164	2.00	19.00
MEXAM	.511	.500	.00	1.00
PRICAN	.172	.378	.00	1.00
CUBAN	.043	.203	.00	1.00
OTHHIS	.274	.447	.00	1.00
AGE88	25.060	1.104	23.00	27.00
FAJRHS	.360	.481	.00	1.00
FAHS	.313	.464	.00	1.00
FASOMCOL	.064	.246	.00	1.00
FACOLGR	.062	.242	.00	1.00
FADKEDU	.200	.401	.00	1.0.0
FAMINC78	13.549	10.206	.00	75.00
FINCMISS	.076	.266	.00	1.00
EDUCRES	.788	.410	.00	1.00
SINGMOTH	.222	.416	.00	1.00
TWOPAR	.730	.444	.00	1.00
OTHPAR	.048	.213	.00	1.00
SIBLINGS	4.375	2.896	.00	16.00
SWEST79	.599	.491	.00	1.00
NEAST79	.153	.360	.00	1.00
OTHREG79	.248	.432	.00	1.00
HIUNEM79	.389	.488	.00	1.00
ASPPROF	.473	.500	.00	1.00
ASPNPROF	.394	.489	.00	1.00
ASPDK	.134	341.00	.00	1.00
AFQT	55.223	19.646	6.00	101.00
AFQTMISS	.038	.192	.00	1.00
PAEXPCOL	.504	.501	.00	1.00
PANOCOL	.143	.351	.00	1.00
OTHINFLU	.353	.479	.00	1.00
FIRNEWIM	.050	.218	.00	1.00
FIROLDIM	.232	.422	.00	1.00
SECGENER	.260	.439	.00	1.00
THIGENER	.434	.496	.00	1.00
DKGENER	.024	.153	.00	1.00

Number of valid observations = 419

Source: Computations with the 1979 to 1989 waves of the National Longitudinal Survey of Youth for men aged 14 to 17 in 1979.

The first set of variables, family background and resources, includes ethnic origin, age in 1988, father’s education, parents’ income in 1979, educational resources, family structure, and number of siblings.

*Ethnicity*, referring to the national origin of the Latinos, is based on self-classification. It is divided into the largest groups, Mexicans and Puerto Ricans, with a separate

category created for Cubans. In NLSY terminology, all other Latinos are grouped under “other Hispanics.”

*Father’s education* refers to the total number of years of education the respondent’s father had completed as of 1979.

*Family income* refers to the annual income of the respondent’s family in 1979. Since the analysis is confined to respondents who lived in their parents’ home in 1979, this represents the economic status of their family of origin.

*Educational resources in the home* refers to whether any household member regularly received magazines or newspapers or had a library card at the time the respondent was 14 years old.

*Family structure* at age 14 is divided into three categories: two-parent families (not confined to intact families — includes father/stepmother or mother/stepfather families); female-headed families (single mother, including single-mother families with another relative in the home), and other (family configurations, including single-father families or families headed by relatives).

*Number of siblings* refers to the number of siblings in the respondent’s family in 1979. The size of the family is expected to influence educational achievement because of its strain on family resources.

*Community origins* consists of a set of variables representing the economic environment of the area where the respondents lived and attended school as children (in 1979). They include the 1979 *unemployment rate* in the respondent’s metropolitan area of residence and the respondent’s region of origin, grouped as the Northeast, the Southwest, and other. Thus, region is categorized into U.S. areas of Latino concentration.

The third set of predictor variables, *social psychological and cognitive attributes and socialization*, represents factors measured in late childhood: the respondent’s occupational aspiration and cognitive ability and the parents’ educational expectations for the respondent.

*Individual’s occupational aspiration* refers to the occupation in which the respondent aspires to engage at age 35 (recoded from the census three-digit occupation codes). These variables are categorized as professional/managerial, nonprofessional/managerial, or unsure of occupational aspirations.

*Cognitive ability* refers to the respondent’s score on the Armed Forces Qualification Test (AFQT), which is used to measure the respondent’s skill level. The test, administered in 1980, yields a raw score based on the sum of the scores of four areas: word knowledge, arithmetic reasoning, paragraph comprehension, and half the score of the numeric operations area.

*Parental college expectations* represents parental socialization and refers to parental attitudes concerning the respondent’s educational potential. It is the respondent’s perception in 1979 of the expectations of his parent(s) concerning his education. Specifically, does the respondent think that his parent(s) would disapprove if after completing high school he decided not to attend college? (Not all respondents had information on this variable because some did not identify their parent[s] as their major influence. A dummy was created for individuals who reported being more influenced by people other than their parent[s]. In 65 percent of the cases the person identified by the respondent as “the most influential person in R’s attitude toward life” was a parent; in 10.2 percent of the cases it was another family member. The remaining persons identified as influential were teachers, peers and friends, coworkers, and guidance counselors.)



*Immigration and generational status* are combined and broken down into four categories of generational status.

*Generational status* was computed from information available in NLSY on the place of birth of the respondent and the respondent's father. Generation is defined as follows: a first-generation Latino is a person born outside the United States (an immigrant); a second-generation person is one born in the United States of a foreign-born father; a third-plus-generation individual is U.S.-born of a U.S.-born father. First generation was recoded into two categories, recent immigrant and early immigrant. Latinos who immigrated prior to their fourteenth birthday are considered early immigrants. For Puerto Ricans, the education model was estimated by two specifications: one classifies all respondents as native-born; the other takes into account the migrant status of respondents who arrived from Puerto Rico.

## **Results: Descriptive Analysis**

The longitudinal analysis shows that Latino males 14 to 17 years old who were living in the United States in 1979 had attained an average of twelve years of schooling as of 1988. While 44.9 percent had completed exactly twelve years of school, 27.6 percent had less than a high school education. Another 27.5 percent had some college or other training beyond high school. In addition, 87.3 percent reported having completed their education as of 1988, most within three years or more. Another 12.7 percent were still enrolled in school as of 1988.

Educational attainment varied significantly for Latino groups according to national origin. As shown in Table 3, a greater proportion of Puerto Ricans (48.9%) had attained twelve years of schooling compared with Mexican-Americans (44.8%), Cubans (41.9%), and other Latinos (30%). However, the proportion of Puerto Ricans who had obtained schooling beyond high school, 18.9 percent, was much lower than that of the other three groups (24% of Mexican-Americans, 41.6% of Cubans, and 35.5% of other Latinos). On the other hand, the greater educational achievement of Cubans, with a mean of 13.2 years, is evident from this bivariate analysis.

While nativity — foreign or U.S. birth — affected the educational achievement of Latinos, the difference is not statistically significant. A greater proportion of the foreign born did not finish high school in comparison with U.S.-born individuals (46.8% versus 36.8%). But nativity had less of an effect on college attendance, only a slightly greater proportion of the native born having gone to college (28.6% versus 24.6%).

However, breaking down nativity by generational status reveals some important information and statistically significant group differences. Not surprisingly, recent immigrants had much less education; about half of them had less than high school. Compared with early immigrants and second- and third-plus-generation Latinos, recent immigrants averaged at least one and a half years less schooling. Two other points stand out: the superior performance of first-generation early immigrants and second-generation men and the lack of progress among third-plus generations.

### ***The Effects of Immigration on the Educational Mobility of Latinos***

The findings provide evidence for the significance of timing of family immigration and generational status for educational achievement among Latinos. They offer some insights concerning the differences in the educational attainment of Latinos who were born in the United States or immigrated here prior to their seventeenth birthday versus



those who immigrated at an older age. That is, observing the educational trajectories of U.S. Latino adolescents in 1979 through their transition to adulthood in 1988 yields a different profile of the Latino educational levels than a cross-sectional view of the total Latino population at the same end point.

Table 3

**Educational Attainment of Latino Men Aged 23 to 27 in 1988  
by National Origin, Nativity, and Generational Status**

Ethnic Background Factors	Below High School	High School	Some College	Mean Years
All Latino Men	27.60	44.90	27.50	12.00
National Origin <sup>a</sup>				
Mexican-American	30.50	44.80	24.70	11.90
Puerto Rican	32.20	48.90	18.90	11.40
Cuban	16.50	41.90	41.60	13.20
Other Latino	22.20	43.00	34.70	12.30
Nativity				
In the United States	25.50	45.90	28.60	12.10
In Other Country	32.90	42.40	24.60	11.60
Generational Status <sup>a</sup>				
First — Recent Immigrant	49.00	17.00	24.00	10.50
First — Early Immigrant	28.60	48.90	22.50	11.90
Second	25.50	37.10	37.40	12.40
Third-Plus	24.80	51.40	23.70	12.00
Number of cases	131.00	214.00	131.00	476.00

Source: Computations with the 1979 to 1989 waves of the National Longitudinal Survey of Youth for men aged 14 to 17 in 1979.

<sup>a</sup>Statistically significant at least at the .10 level.

These analyses employing the NLSY data represent the 1988 situation of the cohort of 14- to 17-year-old Latino men who were U.S. residents in 1979. However, according to an analysis of the 1990 Panel Study of Income Dynamics–Latino National Political Survey (Early Release File), 31.7 percent of Latinos living in the United States in 1988 who would have been 14 to 19 years old in 1979 were not living here at that time (weighted estimate).<sup>26</sup> Therefore, the NLSY is roughly representative of two-thirds of the 1988 Latino population in this age group. The advantage to such a selective sample representation is that because it is not confounded by the status of newly arrived immigrants, it provides a clearer profile of the intergenerational social mobility of Latinos.

Tables 4 and 5 compare the educational attainment of Latinos based on Current Populations Reports (census data) and the NLSY for the same period and similar age groupings. As shown in Table 4, the 1988 proportion of high school graduates among all Latino men 25 to 29 is considerably lower than that of whites and blacks, 61 percent compared with 84.8 percent and 80.6 percent, respectively.<sup>27</sup> However, educational

attainment is much higher for Latinos who were living in this country by 1979 (70.5%), namely, those who had immigrated by at least age 17.

A breakdown by ethnic origin also shows dramatic differences between the NLSY longitudinal data and the census cross-sectional data on the educational attainment of Latinos. Table 5 shows the proportion of men ages 25 to 34, classified by ethnicity, who had completed four years of high school or more as of 1988. (The 25 to 34 age group available in the census reports is the closest to the 24 to 28 age group in the current NLSY analysis.) The figures show that, overall, only 59.9 percent of Latinos and 72.4 percent of Latinos living in the United States in 1979 had completed at least four years of education compared with 89.2 percent of men of non-Latino origin. Even the group with the highest educational level, Cubans, fell below non-Latinos.<sup>28</sup>

Educational achievement is quite different among Latino men of various ethnic origins. According to census figures, those of Mexican origin have the lowest educational levels: only 49.8 percent acquired four years of high school or more, followed by 75.9 percent of Puerto Ricans and 83.8 percent of Cubans. But the figures for the 1979 NLSY cohort show different results: the proportions for Mexicans and Puerto Ricans converge to near 70 percent. The levels for Cubans and other Latinos remain stable.

Table 4

**Years of School Completed for Men Ages 25 to 29  
by Race and Latino Origin, 1988**

Race or Origin	Median Years of School Completed	Percentage High School Graduates
All Races	12.9	84.4
Whites	12.9	84.8
Blacks	12.7	80.6
All Latinos	12.3	61.0
Latinos Living in the United States as of 1979 <sup>a</sup>	12.0	70.5

Source: U.S. Bureau of the Census, *Educational Attainment in the United States*, Current Population Reports, Series P-20, No. 451 (Washington, D.C.: U.S. Government Printing Office, 1991), Table 1. Figures are for March 1989.

<sup>a</sup>Source: Computations with the 1979 to 1989 waves of the National Longitudinal Survey of Youth for men aged 14 to 17 in 1979. These figures, based on weighted estimates, are for individuals who were 24 to 28 in 1988. NLSY interviews conducted June–December 1988. Dates of both reports are chosen to represent the years of school completed by the end of the school year in 1988 (approximately May/June).

What accounts for the differences in attainment when comparing the total Puerto Rican and Mexican populations and the 1979 cohorts? The total population of Puerto Ricans and Mexicans represent not only men who were U.S. residents as of 1979, but also the new immigrants since then. It is possible that the educational attainment of these groups reflects the “quality” of new immigrants. Evidence shows, for example, that Mexican immigrants are increasingly less educated than they were in the past, which depresses the educational levels of the overall U.S. Mexican-origin population.<sup>29</sup> On the other hand, limited research suggests increasingly higher educational levels

among Puerto Rican immigrants between 1960 and 1980. Between 1955 and 1960, 14 percent of immigrants were high school graduates; between 1975 and 1980, the figure rose to 37 percent.<sup>30</sup> One study by the Junta de Planificación de Puerto Rico attributes this increase to greater educational selectivity among Puerto Rican migrants to the United States relative to the population in Puerto Rico.<sup>31</sup> But a study by Vilma Ortiz shows that this change actually reflects the educational gains made in the island and that immigrants and remainers have similar educational status.<sup>32</sup>

Table 5

**Proportion of Young Men Completing Four Years of High School  
or More by Race and Latino Origin, 1988**

Race or Origin	All Men (Ages 25 to 34) <sup>a</sup>	Men Living in the United States as of 1979 (Ages 24 to 28) <sup>b</sup>
All Races	86.6	00.0
Not Latino Origin	89.2	00.0
All Latinos	59.9	72.4
Mexican	49.8	69.5
Puerto Rican	75.9	67.8
Cuban	83.8	83.5
Central and South American	70.2	00.0
Other Latino	77.0	77.8

<sup>a</sup>Source: U.S. Bureau of the Census, *The Hispanic Population in the United States: March 1989*, Current Population Reports, Series P-20, No. 444 (Washington, D.C.: U.S. Government Printing Office, May 1990), Table 1.

<sup>b</sup>Source: Computations with the 1979 to 1989 waves of the National Longitudinal Survey of Youth for Latino men aged 14 to 17 in 1979. These figures are based on weighted estimates. NLSY interviews conducted June–December 1988. Dates of both reports are chosen to represent the years of school completed by the end of the school year in 1988 (approximately May/June). The Other Hispanic category in the NLSY sample includes Central and South Americans. For Puerto Ricans “living in the United States” refers to the continental United States.

An equally important determinant of the education of Latinos is U.S. generational status. The descriptive analysis takes into account the effect of migrant status of Puerto Ricans. (Those born in Puerto Rico are classified as foreign born.) Overall, educational achievement is greater among the U.S. born than the foreign born. Although this is true, when years of school completed are measured for different generations, the results are mixed. The proportions of high school graduates increase across generations from 64.3 percent for first-generation Latinos, to 71.1 percent for second-generation, to 74.7 percent among third-plus-generation men. Nevertheless, there is virtually no difference in mean years of school completed between second- and third-generation Latino men within the same birth cohort; in fact, the figure is slightly higher for second-generation men. The results appear in Table 6.

The findings concerning the educational progress of Latinos across generations support Jorge Chapa’s contention in his study of Mexican-Americans that taking the higher achievement of native Latinos over immigrants as evidence of assimilation without reference to generational status can be misleading.<sup>33</sup>



The purpose of this brief analysis was to show that simply comparing the educational achievement of native-born and foreign-born Latinos provides a limited view. The reason is that classifying the educational attainment of the native born by generation shows that their progress across generations is much slower. While the NLSY data indicate that the proportion of high school graduates is greater among third-generation men, their mean educational achievement is lower than that of second generations at the same time.

Table 6

**Years of School Completed for Latino Men Ages 24 to 28 Who Lived in the United States in 1979, by Selected Social Characteristics, 1988**

Social Characteristics	Mean	Percent Median	High School Graduates
All Latinos	12.0	12.0	70.5
First Generation <sup>a</sup>	11.6	12.0	64.3
Second Generation	12.4	12.0	71.1
Third Generation	12.0	12.0	74.7
U.S. Born	12.1	12.0	73.0
Foreign Born <sup>b</sup>	11.6	12.0	63.9

Source: Computations with the 1979 to 1989 waves of the National Longitudinal Survey of Youth for Latino men aged 14 to 17 in 1979. These figures are based on weighted estimates.

<sup>a</sup>2.8 percent of the NLSY respondents did not have information on generation. For Puerto Ricans, generation is based on tenure in the continental United States.

<sup>b</sup>For Puerto Ricans, foreign born means island born.

### Results: Multivariate Analysis

This section presents the results of the regression analyses of education. Education (total years of education completed) is estimated as a function of four sets of exogenous variables: (1) family background, including family resources, (2) characteristics of the local community during childhood, (3) social psychological and cognitive attributes as a child, including parental socialization, and (4) immigration and generational status.

The results show that the variables which have a significant effect on education are parents' education, family income, national origin, parental expectations concerning college, occupational aspirations, cognitive ability, generational status, and recency of immigration. Local economic conditions during childhood do not add to the explanation of education.

Table 7 reports on the four specifications of the background determinants of educational attainment. Each model takes into account the additional contribution of each of four different aspects of childhood influences on educational achievement. I conducted the regression analyses in this manner to examine the appropriateness of the classic socioeconomic achievement model and explore the inclusion of variables that may more closely reflect the experience of Latinos.

Table 7

**The Effects of Family Background, Community Origins,  
Social Psychological, and Immigration Factors on Total Years  
of Schooling Completed**

	Model 1	Model 2	Model 3	Model 4
Variable	Family	Community	Individual	
Immigration	Background	Origins	Attributes	Factors
Constant	8.831 (2.585)	8.778 (2.593)	10.298 (2.320)	8.673 (2.330)
Puerto Rican	-.483 * (.272)	-.673 * (.367)	-.588 * (.324)	-.459 (.338)
Cuban	.451 (.495)	.402 (.528)	.143 (.468)	-.234 (.472)
Other Hispanic <sup>a</sup>	-.107 (.243)	-.181 (.274)	-.265 (.242)	-.239 (.240)
Age in 1988	-.034 (.087)	-.034 (.087)	-.093 (.073)	-.047 (.077)
Father's education <sup>b</sup>				
High school	.066 (.248)	.098 (.250)	-.064 (.221)	-.064 (.220)
Some college	1.037 ** (.426)	1.067 *** (.428)	.420 (.382)	.425 (.377)
College graduate	1.878 *** (.458)	1.960 *** (.464)	1.161 *** (.416)	1.112 *** (.409)
DK father's educ.	-.385 (.272)	-.342 (.276)	-.169 (.244)	-.277 (.244)
Family income (log)	.430 *** (.150)	.430 *** (.151)	.181 (.138)	.235 * (.136)
Family inc. missing	-.817 ** (.362)	-.787 ** (.369)	-.486 (.328)	-.556 * (.323)
Educ. resources	.650 *** (.246)	.633 *** (.248)	.215 (.223)	.172 (.226)
Family structure <sup>c</sup>				
Single mother	-.010 (.256)	-.043 (.261)	-.194 (.232)	-.151 (.232)
Other family type	-.813 * (.464)	-.873 * (.467)	-.417 (.418)	-.131 (.422)
Siblings	-.115 *** (.035)	-.114 *** (.035)	-.015 (.032)	-.023 (.032)
Region <sup>d</sup>				
Northeast	.330 (.344)	.385 (.345)	.393	(.388)
Other region		.031 (.289)	.123 (.258)	.190 (.255)
High unemployment		.143 (.217)	.062 (.193)	.083 (.190)
Occup. aspiration <sup>e</sup>				
Nonprofessional			-.831 *** (.201)	.817 *** (.204)
Don't know			-.675 *** (.267)	-.643 ** (.265)

Table 7, continued

	Model 1	Model 2	Model 3	Model 4
Variable	Family	Community	Individual	
Immigration	Background	Origins	Attributes	Factors
AFQT score			.041 *** (.005)	.040 *** (.005)
College expectations <sup>f</sup> Parents expect col.			.601 ** (.260)	.552 ** (.257)
Other influence			.386 (.271)	.203 (.271)
Generational status <sup>g</sup> First — recent immigrant				-.995 ** (.459)
First — early immigrant				.512 ** (.253)
Second				.707 *** (.259)
R <sup>2</sup>	.225	.229	.414	.440
Adjusted R <sup>2</sup>	.199	.197	.380	.401
Signif. F. change	.568	.000	.002	

Number of observations = 419  
Mean of dependent variable: 11.914

Source: Computations with the 1979 to 1989 waves of the National Longitudinal Survey of Youth for Latino men aged 14 to 17 in 1979.

Note: Numbers in parentheses are the estimates of the standard errors of the regression coefficients. Notation for significance levels: \*p <.10, \*\*p <.05, \*\*\*p <.01.

- <sup>a</sup>Reference category is Mexican-American.
- <sup>b</sup>Reference category is father has less than high school education.
- <sup>c</sup>Reference category is two-parent family.
- <sup>d</sup>Reference category is Southwest.
- <sup>e</sup>Reference category is aspires to a professional occupation.
- <sup>f</sup>Reference category is parents do not expect college.
- <sup>g</sup>Reference category is third-plus generation.

**Model 1: Family Background and Resources**

In this model, education is estimated as a function of family background, which includes parental education, family resources, and family structure. Family background variables explain 22.5 percent of the variance in educational achievement among Latino men. As shown in Table 7, column 1, the results indicate that all factors but one have a statistically significant effect on education. Latino men’s years of schooling increase consistently with the level of the father’s education. However, the effect is significant only if the father had a college-level education. Father’s education did not predict the education of Latinos whose fathers had only up to a high school–level education. Because of the high correlation between father’s and mother’s education ( $r = .598$ ),



both variables were not included simultaneously in the equation. However, a separate analysis, not shown here, revealed that substituting mother's education in the equation yielded almost identical results.

Family resources had an important influence. First, the higher the parents' family income during childhood, the higher the ultimate educational level achieved later in life by Latino men. For each \$1,000-unit increase in the log of family income, education increased by .430 year. Second, the availability of magazines, newspapers, or library cards in the home resulted in .650 additional year of schooling.

Factors that decrease the level of educational attainment are number of siblings and Puerto Rican origin. For each additional sibling, years of schooling obtained decreases by slightly over one-tenth of a year. In addition, men of Puerto Rican origin obtained, on average, half a year less schooling.

On the other hand, according to this analysis, controlling for other family background factors, growing up in a female-headed family does not place Latino men at an educational disadvantage in comparison with men who grew up in two-parent families. While this variable has a negative effect, it is very small ( $b = -.01$ ) and not statistically significant.

### ***Model 2: Community Origins***

Adding measures of the economic environment in the area of residence during late childhood did not explain any further variance in the model (Table 7, column 2). None of the variables representing economic structure had a significant effect on the level of education completed by Latino men. Growing up in areas of high unemployment did not deter them from getting an education. In a separate analysis, an interaction term for high unemployment and child poverty was included to determine whether having grown up poor had an effect that depended on labor-market conditions in the area. The interaction was found not to be significant.

In addition, the inclusion of labor-market variables resulted in little change in the size of the other estimated coefficients. The one exception is Puerto Rican origin. Controlling for region and high unemployment in the local labor market causes Puerto Rican ethnicity to result in a greater negative effect, increasing from -.483 in Model 1 to -.673 in Model 2.

Given the results, it is likely that economic opportunities have a direct effect on the economic well-being — income — of the parents, which in turn directly influences the educational outcomes of children. On the other hand, economic conditions may need to be measured in terms that more directly affect the educational opportunities of youth, such as city-level and school-level racial segregation, area tax base, neighborhood deterioration or prosperity, and the availability of job opportunities, which can serve as an alternative to continued schooling.

### ***Model 3: Social Psychological, Cognitive, and Socialization Factors***

Taking into account the effect on educational attainment in adulthood of the social psychological, cognitive, and socialization characteristics of individuals assessed during late childhood has a dramatic effect (see Table 7, column 3). Adding this set of variables contributes a great deal to the difference explained in educational outcomes: the  $r^2$  increases to 41.4 percent. What is more important is that these effects occur net of family background variables, including parents' education.

First, cognitive ability in childhood has a powerful effect on educational achievement by the time Latino men have reached the ages of 23 to 27. Based on a 105-point scale of verbal and mathematical skills, the unit increase in years of education is .041, which means that holding all other variables constant, someone falling within the average score of 55 gains an additional two and a quarter years of education —  $(.041) \times 55.223$ . Someone who falls one standard deviation above the mean gains a total of about three years of schooling owing to his test scores.

Similarly, the occupational aspirations of Latino youth early on are reflected in the amount of education they secure later as they make the transition to adulthood. Both individuals who aspired to no more than a nonprofessional occupation and those who were unsure of their occupational goals curtailed their education — by close to a year — compared with those whose aspirations involved a professional career.

The expectations of parents regarding higher education for their child or children also played a key role in how much education Latino men obtained. Latinos who grew up perceiving that their parents expected them to attend college obtained .601 year more schooling than those who did not.

At the same time, controlling for individual-level factors results in a number of family background variables becoming less important predictors. The number of siblings in the family and the educational resources in the home no longer have a significant effect on the educational outcomes of Latino men. Father's education also becomes less of an influence when adjusted for personal qualities and aspirations.

Family income has a positive effect over and beyond social psychological, cognitive, and socialization facets of the individual, but the effect is also smaller and insignificant, dropping from .430 to .181. On the other hand, even when controlling is done for these characteristics, Puerto Ricans obtain less education than other ethnic groups.

#### ***Model 4: Immigration and Generational Status (Full Model)***

In the final model (Table 7, column 4), factors associated with immigration history and generational status are introduced. As expected, the results suggest that educational achievement cannot be compared across different Latino groups without also taking into account their individual and generational tenure in the United States.

Timing of immigration and generation play a most important role in predicting educational attainment. In the NLSY sample, 21.7 are first generation; of these, 4.5 percent are recent immigrants and 17.2 percent immigrated after age 14. The proportion of second-generation Latinos (sons of immigrants) is 14.8 percent, and the remaining 61.1 percent are third-plus-generation Latinos. (Generation was not determined for the remaining .024 percent, because they were unable to provide information on their father's place of birth, and a dummy variable for missing values is included in the equation.)

According to the findings, respondents who were not living in the United States by age 14 completed a full grade less than third-generation men, while both first-generation early immigrants and second generations achieve more years of schooling than third-plus-generation Latinos. The advantage of second generations over men of third generations and beyond is three-quarters of a grade, and their advantage over early immigrants is half a grade.

Overall, the full model explains 44 percent of the variance in highest grade completed by young Latino men. While the inclusion of immigration results in some important effects, the coefficients for the other factors remain robust. Specifically, family income has a positive effect on education within all the alternative specifications. The same is



true for the effect of father's education. Finally, all the coefficients of the social psychological, cognitive, and socialization factors are also quite strong. The one exception is the effect of Puerto Rican origin. Once immigration factors are controlled, there is no longer a statistically significant difference in the years of schooling obtained by different Latino subgroups. However, the difference is still large: Puerto Ricans complete close to half a year less schooling than Mexican-American men.

Table 8

**Regression Analysis Accounting for the Migration/Generational Status of Puerto Ricans within the Continental United States**

Variable	b	Standard Error
Constant	8.541	2.301
Puerto Rican	-.985 ***	.326
Cuban	-.338	.469
Other Hispanic	-.261	.237
Age in 1988	-.048	.076
Father's Education		
High school	-.043	.217
Some college	.434	.373
College graduate	1.144 ***	.406
DK father's educ.	-.286	.242
Family income (log)	.261 **	.135
Family inc. missing	-.554 *	.319
Educ. resource	.067	.224
Family structure		
Single mother	-.157	.229
Other family type	-.108	.416
Siblings	-.030	.032
Region		
Northeast	.313	.345
Other region	.174	.253
High unemployment	.106	.188
Occupational Aspiration		
Nonprofessional	-.824 ***	.201
Don't know	-.596 **	.263
AFQT score	.041 ***	.005
College Expectations		
Parents expect col.	.480 *	.255
Other influence	.144	.269
Generational Status		
First — recent immigrant	-1.146 ***	.436
First — early immigrant	.636 ***	.235
Second	.737 ***	.231
R2	.451	
Adjusted R2	.413	
Number of observations = 419		

Source: Computations with the 1979 to 1989 waves of the National Longitudinal Survey of Youth for Latino men aged 14 to 17 in 1979.

Note: Notation for significance levels: \*p < .10, \*\*p < .05, \*\*\*p < .01. Reference categories listed in Table 7.



### ***Model Accounting for the Generational Status of Puerto Ricans within the Continental United States***

In the foregoing regression analysis, Puerto Ricans born in Puerto Rico were classified as U.S.-born, based on their legal status in this country. Likewise, those living in Puerto Rico at age 14 were classified U.S. residents. In effect, all of them were classified as third-plus generation. However, based on the literature, there is reason to believe that the migration experience between Puerto Rico and the United States may reflect the immigration and settlement experience of other Latinos.

For example, Frank Bean and Marta Tienda and Clara Rodriguez discuss in great detail the migration patterns of Puerto Ricans to the U.S. mainland and their implications for their economic well-being.<sup>34</sup> Previous status attainment research classified Puerto Ricans as foreign-born while recognizing their legal status as U.S. citizens.<sup>35</sup> In this part of the analysis, the effect of the generational experience of Puerto Ricans within the continental United States on educational attainment is investigated.

Therefore, I conducted a separate analysis, taking into account whether Puerto Rican respondents were born in the continental United States or in the island of Puerto Rico, the nativity status of their parents, and the U.S. residence status at age 14 of migrants to the continental United States. As displayed in Table 8, this reveals some striking results. The findings show that, controlling for tenure in the continental United States and holding all other variables constant, Puerto Rican origin has a huge negative effect, decreasing grades completed by one year ( $b = -.985$ ) relative to Mexican-Americans. Thus, the coefficient for Puerto Rican origin increased by over half a year from .459 in the original specification. These results indicate that the generational status of Puerto Ricans within the continental United States is a strong predictor of educational achievement. In effect, when one compares Puerto Ricans and Mexicans of the same generation, Puerto Ricans fare worse than Mexicans. (When one compares both groups in general, Puerto Ricans still achieve less schooling, but there is less of a disparity.)

---

### **Discussion**

My study extends earlier work on the effect of socioeconomic background and achievement on Latino educational attainment. While some prior studies incorporated Latinos, the availability of the National Longitudinal Survey of Youth allowed for a more detailed and up-to-date analysis. On the whole, the results are consistent with previous research on Latinos and the general population, but they also add new insights.

The educational achievement of young Latino men is explained by key factors associated with social origins, including family background. However, social psychological characteristics, cognitive ability, parental socialization, and immigration factors also play an important role. In terms of family background, family income is the most important predictor of educational attainment among young Latino men, all other factors remaining constant. Social psychological characteristics and cognitive capacity also play an important role in determining how much education Latino men obtain. In contrast, the economic milieu in which the youth grow up (level of unemployment rate and region) does not translate into differences in school success.

Finally, factors associated with immigration indicate that comparing the educational status of all Latinos without taking into account the timing of immigration and genera-

tion is misleading. First, respondents who had moved to the United States by age 14 received more schooling. Second, educational attainment does not follow the pattern expected from an assimilationist perspective. Assimilation theory predicts that first-generation Latinos would do worse than subsequent generations, but that educational attainment would improve with every new generation in this country. Since assimilation implies a two-way process, this theory argues that subsequent generations would adopt mainstream ways of life and that opportunities would increasingly open up for them.

However, what this regression analysis shows is that third-generation Latino men are worse off than all other Latino men except recent immigrants. Sons of immigrants excel in terms of educational attainment in comparison with early immigrants or men of third or subsequent generations. But it is likely that the factors contributing to the low educational achievement of recent immigrants and third-plus generations are quite different. That is, while the educational achievement of recent immigrants is probably largely influenced by the structure of opportunity in their countries of origin and by their immigration experience (e.g., legality of entry, language problems), that of sons of U.S.-born parents is shaped by the structure of opportunity in the United States. It is important to note that this study compares the educational achievement of different generations at one point in time. With the future availability of longitudinal data on Latinos, we will be able to contrast the educational progress of Latinos by tracking the children of the sample respondents over time, namely, correlating how sons, fathers, and grandfathers fare at various historical eras.

The strength of the status attainment model lies in its adequacy in measuring structural factors that shape the opportunities of individuals as far as the socioeconomic position of the family of origin is concerned. But this is not to dismiss the significance of other structural explanations of achievement, such as discrimination and housing segregation, some of which require a variety of methodologies.

According to the literature, a major structural impediment to the education of Latinos is related to the resources of the school. For example, the Latino Policy Development Project *Make Something Happen: Latino and Urban School Reform* lists a number of characteristics of the school environment that affect attendance and retention of Latino students: poorly equipped and overcrowded schools, lower per-pupil expenditures, and schools that have limited basic resources and are sometimes understaffed.<sup>36</sup>

The Children's Defense Fund report *Latino Youth at a Crossroads* provides evidence concerning the consequences for Latinos of being increasingly concentrated in segregated schools, which are found primarily in low-wealth districts.<sup>37</sup> Briefly stated, in those schools the quality of the teachers is lower, for example, they have less experience and education, and fewer resources, such as equipment and facilities, are available.

To be sure, the socioeconomic status of a child's family influences whether he or she will attend schools of poor quality, and to that extent captures some of the environmental factors discussed above. Nevertheless, the integration of research addressing the independent effect of these structural forces on the educational achievement of Latinos with status attainment research is needed.

Social psychological, cognitive, and socialization factors also play an important role in predicting education over and above family background. These findings are impor-



tant in light of the fact that both parental expectations concerning college attendance and an individual's occupational aspirations are only weakly correlated with family income or parental education ( $r < .20$ ).

A key finding of this study concerns the dramatically lower figure for educational attainment of Puerto Ricans that emerges in the regression analysis. As the descriptive tables show, according to census data, when comparing groups of Latino men of the same age on the basis of ethnicity, the educational achievement of Puerto Ricans appears to far exceed that of Mexican-origin men. While only one-half of Mexican men complete four years of high school or more, a full three-quarters of Puerto Ricans do so. Even comparing only those men who resided in the United States by at least age 17, there is virtually no difference in the high school completion rates of these two groups. However, when Puerto Ricans and Mexicans are compared controlling for generational status in the continental United States in addition to other socioeconomic indicators, Puerto Rican men actually obtain a full year less schooling.

In sum, the model in this study effectively captures the structural opportunities and constraints faced by Latino men insofar as their socioeconomic background is concerned. In addition, it sheds some light on the processes that mediate the influence of family background on educational attainment, namely, social psychological attributes, cognitive skills, parent socialization, and timing of immigration and generational status. At the same time, it motivates many questions about other social structural dynamics that operate to shape the education of Latinos. ■

*This research was partially supported by grants from the Ford and Rockefeller foundations to the University of Michigan and my fellowship from the Social Science Research Council. I thank Sheldon Danziger, Mary Corcoran, Reynolds Farley, and William Frey for their comments on earlier versions of this article. However, the opinions expressed are mine alone.*

---

## Notes

1. Howard N. Fullerton, Jr., "The American Work Force, 1992–2005: Another Look at the Labor Force," *Monthly Labor Review* 116, no. 11 (November 1993): 31–40; U. S. Department of Labor, Bureau of Labor Statistics, *The American Work Force: 1992–2005*, Bulletin No. 2452 (Washington, D.C.: Government Printing Office [hereafter GPO], April 1994).
2. U.S. Bureau of the Census, *The Hispanic Population in the United States: March 1989*, Current Population Reports, Series P-20, No. 444 (Washington, D.C.: GPO, May 1990).
3. Reynolds Farley, "Blacks, Hispanics, and White Ethnic Groups: Are Blacks Uniquely Disadvantaged?" *American Economic Review* 80, no. 2 (1990): 237–241.
4. Gregory Acs and Sheldon Danziger, "Educational Attainment, Industrial Structure, and Male Earnings through the 1980s," *Journal of Human Resources* 28, no. 3 (1993): 618–648.
5. Sandra K. Danziger and Sheldon Danziger, "Child Poverty and Public Policy: Toward a Comprehensive Antipoverty Agenda," *Daedalus* 122, no. 1 (Winter 1993): 57–84; Aletha C. Huston, Vonnice C. McLoyd, and Cynthia Garcia Coll, "Children and Poverty: Issues in Contemporary Research," Special Issue: "Children and Poverty," *Child Development* 65, no. 2 (April 1994): 265–282; Christopher Winship, "Race, Poverty, and 'The American Occupational Structure' (Symposium)," *Contemporary Sociology* 21, no. 5 (1992): 639–643.



6. Robert Aponte, "Hispanic Families in Poverty: Diversity, Context, and Interpretation," *Journal of Contemporary Human Services* 74, no. 9 (1993): 527–537; Douglas S. Massey, "Latinos, Poverty, and the Underclass: A New Research Agenda," *Hispanic Journal of Behavioral Sciences* 15, no. 4 (1993): 449–475; Joan Moore and Raquel Pinderhughes, eds., *In the Barrios: Latinos and the Underclass Debate* (New York: Russell Sage Foundation, 1993); Alejandro Portes and Zhou Min, "Gaining the Upper Hand: Economic Mobility among Immigrant and Domestic Minorities," *Ethnic and Racial Studies* 15, no. 4 (1992): 491–522.
7. Larry D. Schroeder, David L. Sjoquist, and Paula E. Stephan, *Understanding Regression Analysis: An Introductory Guide*, Sage University Paper Series on Quantitative Applications in the Social Sciences, Series No. 07-001 (Beverly Hills: Sage Publications, 1986).
8. Winship, "Race, Poverty, and 'The American Occupational Structure.'"
9. Robert D. Mare, "Social Background and School Continuation Decisions," *Journal of the American Statistical Association* 75, no. 370 (1980): 295–305; Neil Fligstein and Roberto M. Fernandez, "Educational Transitions of Whites and Mexican-Americans," in *Hispanics in the U.S. Economy*, edited by George J. Borjas and Marta Tienda (Orlando, Fla.: Academic Press, 1985); William Velez, "High School Attrition among Hispanic and Non-Hispanic White Youths," *Sociology of Education* 62 (April 1989): 119–133; Robert D. Mare and Christopher Winship, "Ethnic and Racial Patterns of Educational Attainment and School Enrollment," in *Divided Opportunities: Minorities, Poverty, and Social Policy*, edited by Gary D. Sandefur and Marta Tienda (New York: Plenum Press, 1988); Vilma Ortiz, "Generational Status, Family Background, and Educational Attainment among Hispanic and Non-Hispanic Youth," in *Latino College Students*, ed. Michael Olivas (New York: Teachers College, 1986); Gary D. Sandefur, Sara McLanahan, and Roger A. Wojtkiewicz, "Race, Ethnicity, Family Structure, and High School Graduation," Institute for Research and Poverty, Discussion Paper 893-89 (University of Wisconsin, Madison, 1989); Marta Tienda, "Sex, Ethnicity, and Chicano Status Attainment," *International Migration Review* 16, no. 2 (1982.): 435–472.
10. Anna M. Santiago, "Residential Segregation and Links to Minority Poverty: The Case of Latinos in the United States," Special Issue on Urban Poverty, *Social Problems* 38, no. 4 (1991): 492–515; Anna M. Santiago, "The Impact of Metropolitan Opportunity Structure on the Economic Status of Blacks and Hispanics in Newark," *Urban Geography* 12, no. 6 (1991): 494–507; Maria E. Enchautegui, "Geographical Differentials in the Socioeconomic Status of Puerto Ricans: Human Capital Variations and Labor Market Characteristics," *International Migration Review* 26, no. 4 (1992): 1267–1277; other research on the effects of community on earnings includes Mary Corcoran, Roger Gordon, Deborah Laren, and Gary Solon, "Effects of Family and Community Background on Economic Status," *American Economic Review* 80, no. 2 (1990): 362–366.
11. Mary Corcoran and Linda Datcher, "Intergenerational Status Transmission and the Process of Individual Attainment," in *Five Thousand American Families: Patterns of Economic Progress*, vol. 9, edited by Martha S. Hill, Daniel H. Hill, and James N. Morgan (Ann Arbor: Institute for Social Research, University of Michigan, 1981).
12. Russell W. Rumberger, "Dropping Out of High School: The Influence of Race, Sex, and Family Background," *American Educational Research Journal* 28, no. 4 (1983): 199–220.
13. Christopher Jencks et al., *Who Gets Ahead? The Determinants of Economic Success in America* (New York: Academic Press, 1979).
14. Mare, "Social Background."

15. Velez, "High School Attrition."
16. Aponte, "Hispanic Families"; Massey, "Latinos, Poverty, and the Underclass"; Moore and Pinderhughes, *In the Barrios*; Portes and Zhou, "Gaining the Upper Hand."
17. Velez, "High School Attrition"; Rumberger, "Dropping Out of High School."
18. Jorge Chapa, "The Myth of Hispanic Progress: Trends in the Educational and Economic Attainment of Mexican Americans," *Harvard Journal of Hispanic Policy* 9 (1990); Ortiz, "Generational Status."
19. Chapa, "The Myth of Hispanic Progress."
20. Ortiz, "Generational Status."
21. Harriet Romo, "Contrasting Perceptions of Schooling among the Mexican Origin Population," in *Mexican Immigrants and Mexican Americans: An Evolving Relation*, edited by Harley L. Browning and Rodolfo O. de la Garza (Austin: University of Texas Press, 1986).
22. Lloyd H. Rogler and Rosemary Santana Cooney, *Puerto Rican Families in New York City: Intergenerational Processes* (Maplewood, N.Y.: Waterfront Press, 1984), 141.
23. Center for Human Resource Research, *The NLS Handbook, National Longitudinal Surveys of Labor Market Experience* (Columbus: Ohio State University, Center for Human Resource Research, 1991).
24. Ronald R. Rindfuss, "The Young Adult Years: Diversity, Structural Change, and Fertility," *Demography* 28, no. 2 (1991): 493-512.
25. Duane F. Alwin and Arland Thornton, "Family Origins and the Schooling Process: Early versus Late Influence of Parental Characteristics," *American Sociological Review* 49 (December 1984): 784-802).
26. Telephone conversation with Dr. Greg Duncan, Institute for Social Research, University of Michigan, July 11, 1992.
27. U.S. Bureau of the Census, *Educational Attainment in the United States*, Current Population Reports, Series P-20, No. 451 (Washington, D.C.: GPO, 1991).
28. U.S. Bureau of the Census, *The Hispanic Population*, May 1990 (see note 2).
29. George J. Borjas, *Friends or Strangers: The Impact of Immigrants on the U.S. Economy* (New York: Basic Books, 1990).
30. Vilma Ortiz, "Changes in the Characteristics of Puerto Rican Migrants 1955 to 1980," *International Migration Review* 20, no. 3 (1986): 612-628.
31. Clara E. Rodriguez, *Puerto Ricans Born in the U.S.A.* (Boulder, Colo.: Westview Press, 1991).
32. Ortiz, "Changes in the Characteristics of Puerto Rican Migrants."
33. Chapa, "The Myth of Hispanic Progress."
34. Frank D. Bean and Marta Tienda, *The Hispanic Population of the United States* (New York: Russell Sage Foundation, 1987); Rodriguez, *Puerto Ricans Born in the U.S.A.*

35. David L. Featherman and Robert M. Hauser, *Opportunity and Change* (New York: Academic Press, 1978).
36. Angela L. Carrasquillo, *Hispanic Children and Youth in the United States: A Resource Guide* (New York: Garland Publishing, 1991), 99.
37. Children's Defense Fund, *Latino Youths at a Crossroads*, an Adolescent Pregnancy Prevention Clearinghouse Report, ISSN: 0899-5591 (Washington, D.C., 1990).