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With longitudinal data, this article extends to the 1990s research on minority educational achievement and emphasizes the experiences of Puerto Ricans. The authors' results suggest that compared with whites, blacks, and Mexicans, Puerto Ricans exhibit the lowest high school graduation rates and that their educational disadvantage is unique. Even if Puerto Ricans assumed the attributes of whites, they would graduate at lower rates than the latter. This finding, which has serious implications, deserves priority in the agendas of scholars and policy specialists alike.

Traditional indicators of educational achievement indicate that Puerto Ricans in the United States are a disadvantaged group. They display lower educational attainment and higher rates of school delay and noncompletion than any other group.[1] Although prior research suggests that both ethnicity and socioeconomic status shape the educational trajectories of Puerto Rican youth, policymakers have been unable to decide exactly how schools should form programs to improve performance.

Like many others, we believe that Puerto Ricans' low attainment levels are problematic for two reasons. First, their disadvantage persisted while the educational achievements of the total population were increasing.[2] Second, it is strongly linked to declines in economic status, as evidenced in the mid-1980s by the high unemployment and poverty rates and low labor-force participation rates of Puerto Ricans.[3] As a result, the educational crisis of Puerto Ricans stretches well beyond school corridors.

The objective of our study is to extend to the 1990s research that has documented ethnic-group differences in educational achievement, emphasizing the experiences of Puerto Ricans. We therefore evaluate whether and how this population is worse off relative to other groups and if their disadvantage remains after we apply controls for two sources: family background and ethnic status. We begin our study with a review of prior research, following with a description of our data and testable propositions about the influence of these two sources. Using longitudinal data, we subsequently describe our empirical results, finally discussing the policy issues implied by these findings.

Our study suggests that the educational disadvantage of Puerto Ricans is unique. Even if they assumed the attributes of whites, they would still graduate at lower rates than whites. In this scenario, however, the situation for blacks would improve. A prior

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study showed that if blacks were armed with the characteristics of whites, their educational achievement would be comparable to that of whites.[4] Therefore, because of its serious implications, the Puerto Rican educational disadvantage deserves priority in the agendas of researchers and policy specialists alike.

Lessons from Previous Studies

Past studies have established that educational attainment is determined by characteristics related to family background, immigration status, schools, and communities.[5] Although each represents a constellation of variables appearing in a multitude of studies, together they comprise the factors influencing educational attainment. Their use in models of educational attainment yields interesting twists that differentiate race and ethnic groups.

For example, family background affects the educational experiences of Puerto Ricans and blacks differently from the ways it affects Mexicans.[6] Like many U.S. blacks, Puerto Ricans are more apt than whites to live with many siblings in a large family headed by a single parent and with parents who did not graduate from high school. Mexicans live in families with different structures. Although they usually have many siblings and parents who did not complete high school, Mexicans are far more apt than Puerto Ricans or blacks to live in two-parent families, which average higher graduation rates than single-parent families.

Despite the poor outcomes of Puerto Ricans documented in the 1980s, we know of no study that has explicitly focused on differences between Puerto Ricans and other groups. This is especially surprising because what is remarkable about Puerto Ricans, compared with all other race and ethnic groups, is the ambivalence surrounding their immigration status to the U.S. mainland.[7] Unlike that of Mexicans, Cubans, and many others, Puerto Ricans' decision to migrate involves little risk, because as U.S. citizens they may cross the border freely. Moving to the mainland, therefore, may mean something different from moving across an international border.

As a result, immigration-related attributes may have different effects for Puerto Ricans in comparison with other groups, the impact of nativity being a case in point. In general, foreign birth depresses the educational levels of Hispanics, especially those of Mexicans, who register next to the lowest high school graduation rates.[8] Although at face value this is a straightforward effect, it is less so for Puerto Ricans born on the island. Despite past efforts to stimulate development, economic marginality is a way of life for many of them.[9] With migration to the mainland, such marginality subsequently shifts and becomes reinforced where, as citizens, Puerto Ricans live in one of the wealthiest nations in the world but often in the most socially disorganized, inner-city neighborhoods.[10] Therefore, understanding how nativity operates to influence Puerto Rican educational outcomes is part of a larger story about how birthplace differentiation has changed over time.

For example, one study documents three patterns of nativity differentials in education among Hispanics during the years 1960 to 1980.[11] For Mexicans, the authors observed widening nativity differentials. Among other Hispanics and Cubans, however, the median education gap between the foreign born and U.S. born has converged. In this context, the birthplace effects for Puerto Ricans were unusual; the median education gap between those born on the island and mainland rose in the 1960s, but dropped back to its 1960 level by 1980. On the basis of prior research,[12] the authors speculated that the pattern derived from "the interaction of rising education levels on both the island and mainland (albeit at different rates), coupled with changes over time in the selectivity of return and first-time migrants."[13]

These nativity patterns set the context for understanding differences in the educational outcomes between Puerto Ricans and others in the 1990s. Together they suggest a strong birthplace effect for Mexicans, weaker effects for Puerto Ricans and other Hispanics, and little or no effect for Cubans. In addition, they imply differences in other immigration-related characteristics, such as language, especially among recent immigrants.[14]

Data and Methods

The source of our data is the National Longitudinal Survey of Youth, which is based on a national probability sample of men and women first interviewed in 1979 when they were between the ages of 14 and 21, then every year thereafter. To ensure wide representation and adequate sample sizes, the cross-sectional sample was supplemented with subsamples of groups with typically low representation in national surveys: minorities, economically disadvantaged non-Hispanic whites, and persons in the military.

The survey is a rich source of information about the labor force and the educational transitions of young adults as they move into adulthood. In addition, it has an excellent response rate. Excluding the military subsample, approximately 90 percent of respondents interviewed in 1979 were interviewed again in 1988.[15] For our study, we use data on non-Hispanic whites, blacks, Mexicans, and Puerto Ricans from the cross-sectional sample and the black and Hispanic supplemental subsamples from the 1979 through 1990 waves of the survey.

Measurement

We focus on high school graduation because it provides the basic skills necessary for full-time employment. Although only one of several educational transitions, it is also where much of the inequality in educational outcomes first appears.[16] We use maximum likelihood logistic regression procedures to predict the dichotomous dependent variable, high school graduation. We coded respondents as 1 if they completed 12 years of school by age 25, 0 otherwise. The age restriction is necessary to accommodate the many Puerto Ricans and other Hispanics who graduate at older ages. Moreover, to avoid imprecisely measuring the dependent variable, high school graduates do not include persons who received a general equivalency degree.

Our independent variables include race and ethnicity, nativity, and family structure. We measure race and ethnicity using survey information about a respondent's origin and descent. When more than one origin was mentioned, we used the origin with which respondents reported identifying most closely. Therefore, Puerto Ricans and Mexicans are persons of Puerto Rican or Mexican heritage either by birth or by ancestry.

To create the nativity variable, we used information from respondents about whether they were born in the United States. For those born in the United States or its territories, we were able to identify those of Puerto Rican origin who were born in Puerto Rico. We also include two variables closely related to nativity. One is whether a foreign language was spoken at home during the respondent's childhood. By including this variable in the analysis, we assess the degree to which nativity captures the effects of weaker English language skills. The second variable is residence at age 14, which allows us to consider the extent to which the nativity effect is a factor of growing up in nations where dropping out of school at young ages may occur more often than in the United States. Because a precise measure of length of U.S. stay is not part of the survey, residence at age 14 also provides a rough control for the length of time respondents have been in the United States. Finally, we include family structure, sibling size,

and parental education in our models because these variables strongly influence high school completion.

Data Analysis

Our analysis begins with a description of differentials in high school graduation among Puerto Ricans, Mexicans, blacks, and non-Hispanic whites. Its focus is on the relation of educational achievement to group differences in social and economic composition. These tabulations provide the foundation for comparing effects derived from subsequent analyses.

We then formally test for significant group differences, predicting the probability of high school graduation as a function of family background and immigration status. The first model takes the following form:

$$HSG = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon \qquad (1)$$

where

HSG = the probability of graduating from high school;
X_1 = a vector of dummy variables for race and ethnicity. Persons who were, either by birth or ancestry, Puerto Rican were placed in the reference category; persons reporting Mexican birth or ancestry were coded as 1, otherwise as 0; those reporting black birth or ancestry were coded as 1, otherwise as 0; and non-Hispanic whites were coded as 1, otherwise as 0.
X_2 = a dummy variable for the sex of respondent (1 = female, 0 = male); and
ε = a disturbance term.

This model allows us to evaluate overall race and ethnic differences in the chances of completing high school. To determine whether nativity and cultural status are sources of group differences, we introduce in the first model the following variables:

$$HSG = \alpha + \beta_1 X_1 + \beta_2 X_2 + \ldots + \beta_6 X_6 + \varepsilon \qquad (2)$$

where

HSG, X_1, and X_2 are defined as in the prior equation; and
X_3 = a dummy variable for whether Puerto Ricans were island born or other respondents were foreign born (1 = yes, 0 otherwise);
X_4 = a dummy variable for whether respondents spoke a foreign language at home (1 = yes, 0 otherwise);
X_5 = a dummy variable for whether respondents resided in the United States at age 14 (1 = yes, 0 otherwise);
X_6 = a dummy variable for the sex of respondent (1 = female, 0 = male); and
ε = a disturbance term.

To determine whether and how family background characteristics comprise an alternate source of observed group differences, we then include the following variables in a third model:

$$HSG = \alpha + \beta_1 X_1 + \beta_2 X_2 + \ldots + \beta_9 X_9 + \varepsilon \qquad (3)$$

where

HSG and X_1–X_6 are defined as in the prior equation; and
X_7 = a dummy variable for whether respondents lived with only one parent at age 14 (1 = yes, 0 otherwise);
X_8 = a dummy variable representing whether respondents lived in large families with at least four siblings (1 = yes, 0 otherwise);
X_9 = a dummy variable representing whether parents did not graduate high school (1 = yes, 0 otherwise); and
ε = a disturbance term.

This final equation is the baseline model for our analysis of interactions. It indicates whether and how group differences change after we introduce controls for family background and immigration status.

Overall, we expect Mexicans, blacks, and whites to have higher rates of high school graduation than Puerto Ricans. Furthermore, we expect the sources of group differences to vary depending on the two groups being compared. For example, we expect that the underlying reason why blacks have higher high school completion rates than Puerto Ricans is because blacks are less likely to have the immigration attributes of Puerto Ricans. On the other hand, we expect whites to maintain their advantage over Puerto Ricans because whites are less likely to have disadvantaged family characteristics associated with lower educational achievement. Finally, on the basis of the nativity trends outlined earlier, we hypothesize that birthplace accounts for less of the educational difference between Puerto Ricans and Mexicans than the differences between Puerto Ricans and other groups.

Because these results suggest that Puerto Rican heritage yields a unique disadvantage, the second part of our analysis tests whether the process of educational inequality for Puerto Ricans is really different from that of other groups. To do this, we first assess whether the effects of each of the independent variables differ among race and ethnic groups, test to see exactly which of the differences are significant. To determine whether the effect of nativity, for example, differs among race and ethnic groups, we introduce in the baseline model interaction terms between two nativity types and the four ethnic groups:

$$HSG = \alpha + \beta_1 X_1 + \beta_2 X_2 + \ldots + \beta_9 X_9 + \beta_{10} X_1 X_2 + \varepsilon \qquad (4)$$

Equation 4 indicates whether educational returns to nativity differ according to race and ethnicity.

We follow by estimating similar models with interactions between each group and each value of an independent variable, then test for the significance of all the differences using the -2 log likelihoods between the baseline and each interaction model. We expect to reject the null hypothesis that there is no significant difference between the baseline and interaction models. Finally, to provide further information about exactly which differences are significant, we present the interaction coefficients for those sets of interactions which significantly improved the fit of the model.

Descriptive Analysis

Graduation Rates

Consistent with previous findings, our results in Table 1 show that Puerto Ricans have the lowest high school graduation rates. Approximately 58 percent graduated from high school compared with 63 percent of Mexicans, 75 percent of blacks, and 85 percent of whites. Furthermore, as expected, being foreign born, speaking a foreign language, and residing outside the United States lowered the chances of graduating from high school.

Table 1

Unweighted Frequency and Percentage of High School Graduates

	Frequency	Percentage[a]
Race/Ethnicity		
Puerto Rican	245	58.0
Mexican	959	63.1
Black	2,290	75.0
Non-Hispanic white	4,145	85.2
Nativity		
U.S. born	7,156	83.1
Foreign born	483	68.3
Foreign Language		
No	6,111	83.5
Yes	1,528	73.9
Residence at Age 14		
In United States	7,493	82.8
Outside United States	146	60.4
Family Structure		
Two parents	5,456	86.4
Single/stepparent	2,183	68.8
Siblings		
0–3	4,172	86.3
4 or more	3,467	75.9
Parent(s) High School		
Graduate	5,090	88.0
Nongraduate	2,549	63.1
Sex		
Male	3,745	80.7
Female	3,894	84.4
Total	7,639	82.6

[a] Percentages are calculated from sample weights.

Of the family background characteristics, the largest graduation gap is found for parental education. Fully 88 percent of respondents whose parents completed high school did so themselves, compared with 63 percent of respondents whose parents did

not. In addition, respondents living in a single-parent household with many siblings produced lower graduation rates than their counterparts.

Distributions

Table 2 reveals that Puerto Ricans, in comparison with whites, are more likely to have background characteristics that have traditionally led to lower educational achievement. For example, Puerto Ricans are more likely than other groups to be born off the mainland, speak a foreign language, and live in single-parent families as children. However, with respect to other background attributes, Puerto Ricans are better off than other groups. Thus, Mexicans are much more likely to live in large families and have parents who did not graduate from high school. Furthermore, even though Mexicans are the most likely to have lived outside the United States at age 14, far more Puerto Ricans than whites or blacks report such residence.

Table 2

Percentage Distribution for Background Variables by Race/Ethnicity

	Puerto Rican	Mexican	Black	White
Nativity				
U.S. born	65.5[a]	75.7	97.9	97.4
Foreign born	34.5	24.3	2.1	2.6
Foreign Language				
No	4.8	7.9	98.3	91.6
Yes	95.2	92.1	1.7	8.4
Residence at Age 14				
In United States	94.4	90.9	99.6	99.1
Outside U.S.	5.6	9.1	0.4	0.9
Family Structure				
Two parents	53.1	76.3	54.7	82.6
Single/stepparent	46.9	23.7	45.3	17.4
Siblings				
0–3	45.7	36.4	42.5	69.4
4 or more	54.3	63.6	57.5	30.6
Parent(s) High School				
Graduate	39.1	31.9	58.4	84.5
Nongraduate	60.9	68.1	41.6	15.5
Sex				
Male	50.0	46.5	48.2	50.2
Female	50.0	53.5	51.8	49.8
Total	245	959	2,290	4,145

[a] Percentages are calculated from sample weights.

Although these differences may suggest considerable diversity between the two Hispanic groups, the distributions also show considerable heterogeneity between whites

and blacks. Whites are more likely than blacks to speak a foreign language, whereas blacks are much more likely than whites to live in families with single heads, many children, and parents who never finished high school. Their disadvantaged family backgrounds, in terms of structure and sibling size, are roughly comparable with those of Puerto Ricans, but disproportionately more blacks had parents who completed high school.

Multivariate Analysis

The Puerto Rican Disadvantage

Table 3 reveals race and ethnic differentiation in high school graduation. We begin by describing the group effects found in Model 3.1. Comparing the probability of high school graduation for different groups without including the relevant controls, we find that Mexicans, blacks, and whites have significantly higher chances than Puerto Ricans of finishing high school, and women have better chances than men of doing so.

Table 3

Logistic Regression of High School Graduation on Race/Ethnicity and Background Variables

	Model 3.1		Model 3.2		Model 3.3	
	Coeff.	SE	Coeff.	SE	Coeff.	SE
Race/Ethnicity						
Puerto Rican	contrast		contrast		contrast	
Mexican	.346*	.145	.345*	.149	.270*	.157
Black	.894*	.137	.743*	.182	.725*	.194
Non-Hispanic white	1.457*	.135	1.316*	.175	.682*	.188
Nativity						
U.S. born	—		contrast		contrast	
Foreign born	—		−.403*	.122	.313*	.131
Foreign Language						
No	—		contrast		contrast	
Yes	—		.063	.124	.160	.133
Residence at Age 14						
In U.S.	—		contrast		contrast	
Outside U.S.	—		−1.148*	.201	−1.155*	.210
Family Structure						
Two parents	—		—		contrast	
Single/stepparent	—		—		−.738*	.063
Siblings						
0-3	—		—		contrast	
4 or more	—		—		−.432*	.062
Parent(s) High School						
Graduate	—		—		contrast	
Nongraduate	—		—		−1.009*	.065

Table 3, continued

	Model 3.1		Model 3.2		Model 3.3	
	Coeff.	SE	Coeff.	SE	Coeff.	SE
Sex						
Male	contrast		contrast		contrast	
Female	.323*	.056	.318*	.056	.373*	.059
Intercept		.007		.17		1.322
-2 log likelihood	7,902.11		7,829.69		7,309.94	
N	7,639		7,639		7,639	
DF	7,634		7,631		7,628	

*p = <.10, two-tailed test.

Race and ethnic group differences remained salient after we controlled for immigration status (see Model 3.2). For example, essentially none of the difference between Puerto Ricans and Mexicans is explained after these variables are introduced. And, although differences between Puerto Ricans and blacks and Puerto Ricans and whites narrowed when we controlled for immigration status, appreciable gaps between these groups remained. Therefore, our results suggest that Puerto Ricans differ from blacks and whites partly because they are more likely to have immigration attributes that are linked to lower educational outcomes.

Although still significantly different from Puerto Ricans, Mexicans and whites become noticeably less advantaged after we controlled for family background (see Model 3.3). Thus, much of the advantage of Mexicans and whites over Puerto Ricans is related to family attributes that lower high school achievement rather than those related to immigration status. Nonetheless, despite the power of family background, significant group differences remain after our controlling for these attributes. Furthermore, in comparison with blacks, Puerto Ricans are worse off because their ethnicity is linked to immigration-related attributes, which lower their chances of completing high school, rather than family background.

The point estimates reported in Table 3 for the controls contain few surprises. In general, foreign birth and residence outside mainland United States at age 14 reduce the probability of completing high school while being female increases the chances of graduating, which is consistent with prior studies.[17] Finally, even the effect of foreign language is not surprising. Most studies document that bilingualism does not depress educational achievement.[18] Although this effect contrasts with popular beliefs about bilingualism, other studies provide even more counterintuitive findings, suggesting that bilingualism may actually lead to higher educational attainment if it is combined with English competency.[19]

The Differential Process of Educational Inequality

So far, our multivariate analysis has assumed that the process of educational inequality is the same for all groups. Table 4 presents global tests of significance for this assumption

by presenting -2 log likelihood statistics of the baseline and interaction models. Differences between baseline and interaction models are significant for five of the seven models.

Table 4

Logistic Regressions for the Interaction of Race/Ethnicity with Other Independent Variables

			Difference from Model 3.3	
Interaction	-2 Log L	DF	-2 Log L	DF
Baseline Model	7,309.94	7,628	—	—
Nativity	7,301.43	7,625	8.51*	3
Foreign Language	7,308.56	7,625	1.38	3
Residence at Age 14	7,285.22	7,626	24.72*	2
Family Structure	7,285.57	7,625	24.37*	3
Siblings	7,309.24	7,625	0.70	3
Parent(s) High School	7,273.17	7,625	36.77*	3
Sex	7,298.07	7,625	11.87*	3

* p = <.10.

These findings therefore reveal that ethnic-specific returns to education vary significantly by nativity, residence at age 14, sex, family structure, and parental education. Even though ethnic-specific returns do not vary by foreign language and sibling size, the findings suggest that educational inequality for race and ethnic groups is considerable across the other dimensions.

Uniqueness of Puerto Ricans

To provide further information about how differences in the process of educational inequality operate, Table 5 presents coefficients for those sets of interactions which significantly improved the fit of our model. Overall, they document the difference between the process of educational attainment for Puerto Ricans and the experience for other groups. With respect to nativity, for example, Puerto Ricans are similar to blacks and whites; the difference between those who are foreign and U.S. born has no effect on their educational outcomes. It is significant, however, for Mexicans, for whom foreign birth lowers the chances of high school graduation.

Table 5

Logistic Regression Coefficients for the Effects of Selected Independent Variables by Race/Ethnic Group

	Coefficient	SE
Nativity		
Puerto Rican	–.196	.286
Mexican	–.604*	.175
Black	–.581	.494
Non-Hispanic white	–.003	.294

Table 5, continued

	Coefficient	SE
Residence at Age 14		
Puerto Rican	−1.521*	.624
Mexican	−1.953*	.315
Non-Hispanic white/black	.287	.482
Family Structure		
Puerto Rican	−.571*	.275
Mexican	−.325*	.164
Black	−.533*	.099
Non-Hispanic white	−1.091*	.095
Siblings		
Puerto Rican	−.843*	.301
Mexican	−.770*	.169
Black	−.634*	.100
Non-Hispanic white	−1.441*	.096
Sex		
Puerto Rican	.534*	.277
Mexican	.116	.144
Black	.632*	.101
Non-Hispanic white	.259*	.087

*p = <.10.

In contrast, Puerto Ricans are similar to Mexicans in that differences between residence and nonresidence in the United States at age 14 are extremely important in explaining their lower completion rates.[20] Furthermore, Puerto Ricans are comparable to Mexicans, as well as to blacks and, to some extent, to whites in the degree to which differences in family structure and sibling size reduce high school graduation rates. However, the effects are especially large for whites, for whom they represent major disadvantages that lower the probability of their graduating from high school.

Being female safeguards graduation from high school among Puerto Ricans, blacks, and whites. Black and Puerto Rican women in particular gain the most, relative to their male counterparts. For Mexicans, however, women's completion rates comparable with those of men.

Discussion

Using longitudinal data, we have documented the extent to which Puerto Ricans are disadvantaged with respect to graduating from high school and therefore obtaining the basic skills necessary for full-time employment. Relative to whites, blacks, and Mexicans, Puerto Ricans have the lowest high school graduation rates. Moreover, these differences are sustained net of relevant controls.

In a prior study on Hispanic educational achievement, we explained the disappearance of differences between whites and blacks in high school and college graduation rates after we controlled for family background.[21] These findings suggest that if blacks had the characteristics of whites, their educational achievement would be comparable to that of whites. However, findings from this study suggest the Puerto Rican disadvantage

is unique. Even if Puerto Ricans assumed the attributes of whites, their high school graduation rates would remain lower than those of whites.

These findings are provocative. They convey a mandate for future research and innovative public policy. Researchers face the challenge of unraveling exactly what accounts for the unusual disadvantage Puerto Ricans experience. One crucial explanation may lie in the quality of the schools they attend and another in the stability of their families. We suspect that both are linked to the concentration of Puerto Ricans in inner-city neighborhoods in the Northeast, Chicago, and Florida. Most Puerto Ricans, unlike blacks and Mexicans, face the extreme social ills of the urban ghetto daily. These areas offer little protection against family instability and school decline, and one consequence may be poor educational outcomes.

Residential segregation patterns of Puerto Ricans and Mexicans may also account for differences in the rates of high school completion for the two groups. However, no matter what the reason for the problem, it deserves priority in the agendas of social researchers because its implications are serious. Only with a better understanding can policymakers design multifaceted solutions to eradicate the severe educational disadvantages of Puerto Ricans. ❧

Notes

1. National Council of La Raza, *The Decade of Hispanics: An Economic Retrospective* (Washington, D.C.: National Council of La Raza, 1990); Robert D. Mare and Christopher Winship, "Ethnic and Racial Patterns of Education 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), 173–194; Frank D. Bean and Marta Tienda, *The Hispanic Population of the United States* (New York: Russell Sage, 1987).

2. D. J. Carter and R. Wilson, *10th Annual Status Report of Minorities in Higher Education* (Washington D.C.: American Council on Education, 1992); Bean and Tienda, *The Hispanic Population*.

3. Rebecca Morales and Frank Bonilla, *Latinos in a Changing U.S. Economy: Comparative Perspectives on Growing Inequality* (Newbury Park, Calif.: Sage Publications, 1993); Marta Tienda and Katharine M. Donato, "Labor Market Activity of Minority Men: 1960–1980," 1993; Marta Tienda, Katharine M. Donato, and Hector Cordero-Guzmán, "Schooling, Color, and the Labor Force Activity of Women," *Social Forces*, no. 71 (1992): 365–398; Marta Tienda and Leif Jensen, "Poverty and Minorities: A Quarter-Century Profile of Color and Socioeconomic Disadvantage," in Sandefur and Tienda, *Divided Opportunities*, 23–62.

4. Roger A. Wojtkiewicz and Katharine M. Donato, "Hispanic Educational Attainment: The Effects of Family Background and Nativity," Louisiana State University, 1993.

5. Ibid.

6. Ibid; Sara McLanahan and Larry Bumpass, "Comment: A Note on the Effect of Family Structure on School Enrollment," in Sandefur and Tienda, *Divided Opportunities*, 194–202; Mare and Winship, "Ethnic and Racial Patterns."

7. Bean and Tienda, *The Hispanic Population*.

8. Mare and Winship, "Ethnic and Racial Patterns."

9. Operation Bootstrap, implemented in 1948-1965, was designed to modernize the plantation economy but failed to produce industrial development and employment (see Moralez and Bonilla, *Latinos in a Changing U.S. Economy*).

10. Douglas S. Massey and Nancy Denton, *American Apartheid: Segregation and the Making of the Underclass* (Cambridge, Mass.: Harvard University Press, 1993).

11. Bean and Tienda, *The Hispanic Population.*

12. Wilma Ortiz, "Changes in the Characteristics of Puerto Rican Migrants from 1955 to 1980," Educational Testing Service, Princeton, 1985.

13. Bean and Tienda, *The Hispanic Population*, 237.

14. Ibid.

15. Center for Human Resource Research, *NLS Handbook 1991* (Columbus, Ohio: Center for Human Resource Research, 1991).

16. McLanahan and Bumpass, "Comment," 194–202; Robert D. Mare, "Change and Stability in Educational Stratification," in *American Sociological Review*, no. 46 (1981): 72–87.

17. Bean and Tienda, *The Hispanic Population.*

18. Neil Fligstein and Roberto M. Fernandez, "Hispanics and Education," in *Hispanics in the United States*, edited by Pastora San Juan Cafferty and William C. McCready (New Brunswick, N.J.: Transaction, 1985), 113-146.

19. Marta Tienda, "Sex, Ethnicity and Chicano Status Attainment," in *International Migration Review*, no. 16 (1982): 435–472; Alberto Lopez, "The Puerto Rican Diaspora," in *Puerto Rico and Puerto Ricans*, edited by Alberto Lopez and James Petras (Cambridge, Mass.: Schenkman, 1974).

20. We collapsed whites and blacks because not enough blacks lived out of the country at age 14 to allow us to estimate a separate effect for them.

21. Wojtkiewicz and Donato, "Hispanic Educational Attainment."

"Latino families negotiate the ordinary changes of the family life cycle along with many additional stresses of economic hardship, cultural dislocation, and discontinuity. At the same time, the challenge of collaboratively integrating a complex, culturally diverse life experience can lead to creative adaptive strategies featuring a more perspectivistic or complex view of self and others."

— Ester R. Shapiro