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Annual Income, Hourly Wages, and Identity Among Mexican-Americans and Other Latinos

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This article examines heterogeneity and income inequality among Hispanic Americans. Two processes that influence Hispanic heterogeneity include acculturation and labor market discrimination because of skin shade/phenotype. I focus on Hispanics because of their variation in phenotype, color, nativity, and language usage and also because of their recent large-scale integration into a society that historically has been characterized by bipolar racial categories that are putatively based on phenotype. This process provides a natural experiment for appraising the relative importance of acculturation, discrimination, and income inequality. I use data from two periods, 1979 and 1989, to determine the stability of identity formation among Mexican-Americans and other Hispanics. I find strong incentives favoring acculturation among Mexican- and Cuban-Americans. Americans of Mexican and Cuban descent but less so Puerto Ricans are able to increase annual income and hourly wages by acculturating into a non-Hispanic white racial identity. However, neither the abandonment of Spanish nor the abandonment of a specifically Hispanic racial self-identity is sufficient to overcome the penalties associated with having a dark complexion and non-European phenotype.

Standard econometric analysis incorporates racial classification as an exogenous binary variable. However, econometric specification of racial identity by a simple binary variable masks differences in the meaning and use of racial/ethnic identity among Hispanics. A white/brown dichotomous variable in the earnings equation is clearly inappropriate because a large fraction of Hispanics either self-identify as white (regardless of how they are seen by others) or have physical features that are indistinguishable from non-Hispanic whites (although they may self-identify as brown). Even a Hispanic/non-Hispanic dichotomous variable is problematic

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because many Hispanics do not read, write, speak, or understand Spanish; some may not even self-identify as Hispanic.

This article examines heterogeneity and income inequality among Hispanic Americans. Two processes that influence Hispanic heterogeneity include acculturation and labor market discrimination because of skin shade/phenotype. I focus on Hispanics because of their variation in phenotype, color, nativity, and language usage and also because of their recent large-scale integration into a society that historically has been characterized by bipolar racial categories that are putatively based on phenotype. This process provides a natural experiment for appraising the relative importance of acculturation, discrimination, and income inequality. I use data from two periods, 1979 and 1989, to determine the stability of identity formation among Mexican-Americans and other Hispanics.

Literature Review: Identity Formation Among Latinos

Telles and Murguia (1990) reported that males with darker complexions/Indian features received lower earnings, whereas those with lighter complexions/European features had higher earnings.[1] Davila and Bohara (1992) challenged these results, arguing that Telles and Murguia's results were not robust with respect to functional form.[2]

Rodriguez (1992) and Rodriguez-Morazzani (1998) suggested that in the process of acculturating to American society African-featured Hispanics may experience a lower race penalty than English-speaking blacks by identifying as "other," whereas European-featured Hispanics may avoid the penalty by identifying as white. Interestingly, Hispanics classify themselves differently than do white Census takers and interviewers (Rodriguez 1992).

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[1] Keith and Herring (1991) initiated a series of papers that have found similar skin-shade effects among African-Americans.

[2] Both studies included industry variables and employment status variables as explanatory variables in the earnings equation. To the extent that earnings differences occur because of skin-shade differentials in access to industries and employment, the inclusion of these variables creates a bias against finding a statistically significant effect associated with phenotype. Also, Bohara and Davila had 226 observations, whereas Telles and Murguia had 253 observations. Bohara and Davila deleted from their sample persons who reported their income as "other." For the Chicano National Survey, "other" is not synonymous with "missing" or "don't know." Rather, "other" means that $\$1 \leq$ annual income $\leq \$999$. Dark/Indian phenotype persons of Mexican heritage represent 39 percent of the individuals in the lowest-earning category. Further, Bohara and Davila collapsed the 29 earnings categories of the raw data into 14 categories, thereby reducing the variation in the dependent variable by more than 50 percent and (once again) creating a methodologic bias against finding a phenotype effect when they estimated an ordered probit specification of the earnings equation.

In this study, I use phenotype to capture how Hispanics are seen by non-Hispanics, and I use own-color descriptors to capture an individual's racial self-identity.

Hurtado and Arce (1987) empirically validated the scholarly literature's focus on nativity and language as consequential factors in intragroup variation among persons of Mexican descent. Similarly, Davila, Bohara, and Saenz (1993) showed that whether or not individuals possess a Spanish accent is a crucial source of inequality among Mexican-Americans. Accordingly, this article examines the impact of acculturation and phenotype discrimination on income inequality among Hispanic Americans.

Identity and Income

The relationship between identity and income depends on the prevailing social norm (Darity, Mason, and Stewart 2000). In an acculturationist equilibrium, Hispanic acculturation will increase the income of persons of Mexican descent (PMDs). However, establishing a unique racial identity, e.g., "Chicano," will lower the income of PMDs. In this case, the earnings equation is

$$Y_i = Y_i(Acculturate_i|\{Acculturation,\ Accept\},\ Chicano_i|\{Acculturation,\ Accept\},\ dark\ skin\ color/non\text{-}European\ phenotype_i,\ X_i)$$

where $\partial Y_i/\partial Acculturate_i > 0$, $\partial Y_i/\partial Chicano_i < 0$, and $\partial Y_i/\partial(dark/non\text{-}European_i) < 0$.

Alternatively, when a racial identity norm prevails, establishing a "Chicano" or other unique Hispanic racial identity will lower PMD income because non-Hispanic whites discriminate against PMDs. Yet, in this instance, acculturation has an additional negative impact on the income PMDs because acculturationists' individual identity actions are outside the social convention. Hence, when a racial identity norm prevails, the earnings equation is

$$Y_i = Y_i(Acculturate_i|\{Chicano,\ Discriminate\},\ Chicano_i|\{Chicano,\ Discriminate\},\ dark\ skin\ color/non\text{-}European\ phenotype_i,\ X_i)$$

where $\partial Y_i/\partial Acculturate_i < 0$, $\partial Y_i/\partial Chicano_i < 0$, and $\partial Y_i/\partial(dark/non\text{-}European_i) < 0$.

I use a series of variables to capture the identity actions of individual Latinos: English fluency, Spanish fluency, Spanish accent, skin color and phenotype, specific Latino self-identification, and specific racial-color identification. Except for English fluency, none of these variables affects individual productivity; hence the null hypotheses are that these variables are

individually and collectively insignificant. I turn now to evaluate each of these hypotheses and their sensitivity to differences in nativity and gender.

Data

Data are taken from 1979 Chicano National Survey (CNS), the 1990 Latino National Political Survey, and the 1990 Latino National Political Survey/Panel Study on Income Dynamics Early Release File. Observations from the latter data sets are combined into a single sample.

The Mexican-origin population of the United States may have grown by as much as 93 percent during 1970–1980, rising from 4,530,000 to 8,740,000 (Bean and Tienda 1987). Hence the 1979 Chicano National Survey provides an excellent opportunity to examine the impact of identity formation within an emerging social group that has grown into a sizable fraction of the total U.S. population. The 1979 Chicano National Survey is a random probability sample of American households limited to persons of Mexican descent (Arce 1997). In addition to information on such variables as annual income, education, and geographic location, the survey also asked a series of questions related to the construction of social identity.

Spanish fluency (as a separate variable in addition to English fluency) is used as a proxy variable for acculturation. Racial/ethnic identifiers include Mexican, Mexican-American, American-Mexican, Hispanic, Indian, Latino, Cholo, Chicano, La Raza, Mestizo, and American. These are not mutually exclusive categories; e.g., 72 percent of PMDs self-identify as Mexican and 52 percent self-identify as American. Large percentages of the sample also select other social identities: Hispanic (47 percent), Latino (46 percent), Chicano (38 percent), and La Raza (44 percent).

Own-color identity also defies standard American classification. A total of 17 and 46 percent self-identify as white and brown, respectively, but 15 percent self-identify as both white and brown, whereas 23 percent self-classify as neither white nor brown. The survey instrument indicates that the racial/ethnic, color, and other social identifiers were determined by giving the respondent a set of cards with social identity descriptors written on them. Respondents were asked to "Look at each one, and keep all the cards that describe how you think about yourself. Give the card back to me if you don't think of yourself in that way." Own-color identity was determined from the respondent's acceptance or rejection of the white and brown social identity cards.

The phenotype variable was determined by combining the interviewer's observations on the PMD's skin color and physical features. Specifically, the

interviewer was required to assess the respondent's skin color on a scale from 1 (very light) to 5 (very dark). Also, the interviewer assessed the respondent's physical features on a scale from 1 (European looking) to 5 (Indian looking). The survey team then combined these two observations into a single scale. All persons who received either a 4 or 5 for skin color and a 4 or 5 for physical features were considered dark/Indian phenotype. Similarly, all persons who received either a 1 or 2 for skin color and a 1 or 2 for physical features were considered light/European phenotype. A small number of very light persons with missing values for physical features, and persons with physical features assessed as 1 or 2 but with missing skin color values also were coded as light/European. All other PMDs were labeled medium.

Twenty-eight percent of PMDs are dark-skinned persons with Indian features. Light-complexioned PMDs with European features represent 26 percent of the sample. Eight percent of dark PMDs self-identify as white versus 20 percent of light and medium PMDs. Forty-six percent of PMDs self-identified as brown, with the native-born population more likely to select brown (49 percent) than immigrants (40 percent) and dark PMDs more likely to select brown (54 percent) than their light and medium counterparts (42 percent).

I also use data merged from the 1989–1990 Latino National Political Survey and the 1990 Latino National Political Survey/Panel Study on Income Dynamics Early Release File (LNPS/PSID) (Duncan et al. 1992). Both are random probability samples. Unlike the CNS, the LNPS/PSID data do not include information on whether an individual speaks with a Spanish accent. Furthermore, the regressions obtained from the LNPS/PSID data do not include "Chicano." Unlike the CNS, the LNPS's identity categories are mutually exclusive. Thus, for example, persons of Mexican descent who expressed a preferred identity as "Mexican" or "Mexican-American" could not simultaneously self-identify as "Chicano." Accordingly, for each of the three major Latino subgroups, relatively few individuals selected an identity category different from their national origin.

However, the LNPS does include a distinctly Latino race variable. This variable was constructed from the following question:

> Do you consider yourself:
>
> 1 = white
> 2 = black
> 3 = or something else? (specify)
> 4 = "Spanish" label, i.e., Hispanic, Latino, Mestizo, Latin American, etc.

5 = "color-oriented" label, i.e., Moron, Trigueno, brown, olive, tan, café, etc.
6 = "race" label, i.e., Mulatto, Native American, Indian
7 = refused
8 = don't know
9 = no answer

Five racial categories were constructed from this variable: white, black, mulatto (race = 3, 6, 7, 8, and 9), Spanish, and color.[3] Consistent with the national origins of Latinos, the construction of this question and the resulting racial categories obtained from it merge skin color, ethnicity, and culture into a variety of racial categories.

The CNS's "dark/Indian" variable consisted of individuals with both dark skin and Indian phenotypic features. The LNPS skin-color variable refers only to skin shade. Interviewers placed individuals in one of five categories: very dark, dark, medium, light, or very light. Because of limited variation in the data, I collapsed the LNPS's very dark and dark categories into a single "dark" variable.

Table 1 contains the variable means for the Mexican-American, Cuban-American, and Puerto Rican subsamples, respectively. Only 3 percent of native-born PMDs speak mostly or only Spanish, whereas 52 percent of native-born men and 42 percent of native-born women speak mostly or only English. Eleven percent of immigrants speak mostly or only Spanish, and 49 percent speak mostly or only English. Hence PMDs exhibit a clear pattern of language of acculturation. Just over 1 in 5 Mexican-Americans are described as dark, but only 6 of 1000 identify themselves as black. Thirty-six percent of Mexican-Americans are light or very light skin in color, although 45 percent identify as white. Most PMDs (55 percent) describe themselves by a nonwhite racial identity.

There is much less language acculturation among Cuban-Americans. Nearly half are bilingual, whereas 39 percent speak mostly or only English. However, Cuban-Americans are nearly completely acculturated into a white racial identity. Eighty-seven percent describe themselves as white, and 72 percent have light or very light skin color. Only 2 percent (none of them native-born) describe themselves as black, even though 7 percent have dark or very dark skin color.

Puerto Rico is a U.S. territory, and hence all Puerto Ricans are American citizens. In this article, so-called immigrant Puerto Ricans are merely

[3] Mulatto is used here as residual statistical category and, accordingly, does not represent the historical-social category of persons classified as mulatto.

TABLE 1

DESCRIPTIVE STATISTICS: CNS AND LNPS AND PSID/LNPS

	Chicano National Survey	Latino National Political Survey and Panel Study on Income Dynamics/Latino National Political Survey Early-Release File		
	Mexican-American	Puerto Rican	Cuban-American	Mexican-American
N	634	319	426	1307
Annual income	$9356	$20,144	$18,933	$16,948
Log hourly wage	n.a.	2.23	2.11	2.00
Texas	0.353	n.a.	n.a.	n.a.
Southwest	0.1739	n.a.	n.a.	n.a.
Northwest	0.0611	n.a.	n.a.	n.a.
Northeast	n.a.	0.6533	0.1053	0.0034
Northcentral	n.a.	0.1658	0.0193	0.1318
West	n.a.	0.1131	0.0601	0.6446
Male	0.5007	0.5517	0.5499	0.5872
American education	7.23	8.13	5.04	6.87
Prior education	1.85	3.43	7.11	3.29
American experience	17.51	10.94	13.18	11.40
American experience^2	488.10	197.52	279.38	223.09
Prior experience	3.47	1.40	7.03	2.48
Prior experience^2	62.85	14.05	134.80	28.91
Married	0.7899	0.6275	0.6151	0.6854
Limited Spanish proficiency	0.5222	n.a.	n.a.	n.a.
Limited English proficiency	0.4264	n.a.	n.a.	n.a.
No Spanish accent	0.4849	n.a.	n.a.	n.a.
Mostly or only English	n.a.	0.3903	0.3871	0.4768
Mostly or only Spanish	n.a.	0.0409	0.106	0.069
Unionized job	0.2133	0.2665	0.1238	0.2339
Immigrant	0.3416	0.6561	0.7813	0.4987
Veteran	0.1745	n.a.	n.a.	n.a.
Chicano	0.38	n.a.	n.a.	n.a.
Dark/Indian phenotype	0.2807	n.a.	n.a.	n.a.
Brown	0.4547	n.a.	n.a.	n.a.
Both brown and white	0.1526	n.a.	n.a.	n.a.
Neither brown nor white	0.2258	n.a.	n.a.	n.a.
Dark skin color	n.a.	0.1575	0.0695	0.2102
Light skin color	n.a.	0.2659	0.4717	0.2429
Very light skin color	n.a.	0.112	0.2435	0.1122
White	n.a.	0.566	0.8744	0.4512
Black	n.a.	0.0519	0.0197	0.0062
Spanish	n.a.	0.2328	0.063	0.2704
Color	n.a.	0.0895	0.0279	0.1858
Mulatto	n.a.	0.0599	0.015	0.0865
Job hindrances	0.2563	n.a.	n.a.	n.a.
Spouse employed	0.4906	n.a.	n.a.	n.a.

NOTE: For 1979 Chicano National Survey, earnings are measured in $1979. For 1989–1990 merged of Latino National Political Survey and 1990 Latino National Political Survey/Panel Study of Income Dynamics Early Release File, earnings are measured in $1989.

persons born on the Island, whereas native-born Puerto Ricans are those born on the American mainland. Puerto Ricans, like Cuban-Americans, are predominantly bilingual (57 percent). Also, Puerto Ricans are heavily acculturated into white skin color identity. A total of 16 and 38 percent, respectively, of Puerto Ricans have dark or very dark skin color or light or very light skin color; yet only 5 percent self-identify as black, whereas 57 percent self-identify as white.

The descriptive data suggest that regardless of national origin, many Latinos reject a black identity category in favor of a relatively whiter identity category.[4]

Model and Initial Results

Following the debate between Telles and Murguia (1990) and Bohara and Davila (1992), Table 2 contains three specifications of the following equation:

$$\text{Annual earnings} = \beta_0 + \textit{Acculturation}*\beta_1 + \textit{Color/phenoptype}*\beta_2 + X*\beta_3 + \varepsilon$$

where X is a vector of income covariates, ε is an error term, and the model is alternatively specified as a linear, logarithmic, and ordered probit equation (see Table 2).[5] For the latter specification, the annual earnings data of the CNS has 29 categories ranging from the lowest earnings category of \$1000–\$1999 (earnings = 1) to the highest category of greater than or equal to \$30,000 (earnings = 28).[6] Additionally, some individual's earnings category simply was given as "other" (earnings = 97), an earnings category that is distinguishable from observations with missing data or where the response is "don't know." Thus "other" represents income less than \$1000.

Regardless of specification, there is a sizable earnings penalty for having a dark/Indian phenotype. Persons of Mexican descent with a dark complexion and Indian features earn \$921 less annual income than light- and medium-complexioned PMDs with European features. Also, functional form has no impact on the sign of any of the earnings covariates; however, the logarithmic regression has many fewer statistically significant variables than either the linear or ordered probit specifications. The close similarity of the qualitative

[4] Landale and Oropesa (2002) have shown that island residents are more likely to accept a black racial identity than mainland Puerto Ricans.

[5] I present a more parsimonious specification of the earnings equation than Telles and Murguia (1990) and Bohara and Davila (1992); hence I exclude fewer observations and thereby have a sample of 634 observations—more than $2^1/_2$ times as large as either of the previous studies.

[6] The linear and logarithmic specifications require a continuous measure of annual earnings. I follow a procedure suggested by Ligon (1994) to convert earnings from a categorical variable to a continuous variable.

TABLE 2

ALTERNATIVE SPECIFICATIONS OF EARNINGS EQUATION

	Linear		Logarithm		Ordered Probit		
Dependent variable	$9356		8.94		n.a.		
R^2	0.40		0.22		n.a.		
Adjusted R^2	0.38		0.20		n.a.		
F-statistic	20.42		8.84		n.a.		
χ^2	n.a.		n.a.		316		
N	634		634		634		
Variable	Beta	t-Stat.	Beta	t-Stat.	Beta	t-Stat.	Mean
Constant	2188.33	1.83	8.1961	40.54	0.3957	1.25	1.00
Texas	–930.07	–2.36	–0.0540	–0.81	–0.2437	–2.37	0.35
Southwest	–1038.49	–2.15	–0.0407	–0.50	–0.2534	–1.84	0.17
Northwest	108.55	0.15	0.1524	1.25	0.0967	0.42	0.06
Male	3562.76	8.71	0.3329	4.82	0.9135	8.61	0.50
American education	312.50	4.29	0.0346	2.81	0.0709	3.78	7.23
Mexican education	289.25	3.06	0.0281	1.76	0.0738	2.92	1.85
Mexican experience	177.07	2.26	0.0217	1.64	0.0468	1.84	3.47
Mexican experience^2	–3.41	–1.64	–0.0004	–1.09	–0.001	–1.18	62.85
American experience	181.42	4.46	0.0161	2.35	0.0458	4	17.51
American experience^2	–2.95	–3.84	–0.0003	–2.23	–0.0008	–3.58	488.10
Married	246.74	0.49	0.0629	0.74	0.0749	0.53	0.79
Limited Spanish proficiency	970.66	2.61	0.1221	1.95	0.2077	2.14	0.52
Limited English proficiency	–802.60	–1.48	–0.1399	–1.53	–0.277	–1.89	0.43
No Spanish accent	1093.97	2.20	0.1150	1.37	0.3094	2.26	0.48
Unionized job	2639.05	6.24	0.3540	4.96	0.6604	5.42	0.21
Immigrant	218.19	0.27	0.0511	0.37	0.0282	0.11	0.34
Veteran	1091.06	2.16	0.0895	1.05	0.2244	1.74	0.17
Dark/Indian phenotype	–920.51	–2.47	–0.1226	–1.95	–0.1987	–2.06	0.28
Job hindrances	–666.37	–1.68	–0.0695	–1.04	–0.2353	–2.16	0.26
Spouse employed	–686.12	–1.67	–0.1272	–1.83	–0.1788	–1.67	0.49

NOTE: Data are taken from 1979 Chicano National Survey. Earnings are measured in $1979.

results of the linear and ordered probit models suggests that either would be an appropriate specification.

There is an unambiguous premium for acculturation, i.e., abandoning a distinctive Hispanic identity. PMDs who speak without a Spanish accent receive an $1100 earnings premium. Limited English fluency is significant only in the ordered probit model. English fluency is self-reported, whereas the survey interviewer reports whether the individual has an accent. Perhaps the absence of an accent is both a measure of English language fluency and acculturation.

PMDs who are not fluent in Spanish receive an annual premium of $971. Since both English fluency (as determined by the respondent) and the ability

TABLE 3

Specifications of Earnings Equation with Chicano Variable: Selective Results

	Linear		Logarithm		Ordered Probit	
	Beta	*t*-Statistic	Beta	*t*-Statistic	Beta	*t*-Statistic
Limited Spanish proficiency	1008	2.713	0.1289	2.055	0.2180	2.259
Limited English proficiency	–774	–1.430	–0.1347	–1.474	–0.2707	–1.821
No Spanish accent	1087	2.192	0.1137	1.359	0.3080	2.254
Dark/Indian phenotype	–914	–2.460	–0.1213	–1.935	–0.1976	–2.036
Self-identify as Chicano	–680	–1.926	–0.1232	–2.066	–0.1749	–1.853

Note: Data are taken from 1979 Chicano National Survey. Earnings are measured in $1979.

to speak English without an accent (as determined by the interviewer) are included as explanatory variables, language acculturation increases income independently of English language skills that may increase workplace productivity.

Hurtado et al. (1993) suggest that self-identification as Chicano is antithetical to acculturation into non-Hispanic white society. Table 3 shows that establishing a Chicano identity lowers annual income by $680 without affecting the size or statistical significance of the other variables in the model.

Rather than the premiums associated with acculturation and the penalty associated with phenotype discrimination, there is an alternative hypothesis that might account for both outcomes: Spanish accent, Spanish proficiency, Chicano identity, and dark/Indian phenotype are indicators of lower (unobserved) social capital; i.e., some combination of individual behaviors, family values, and childhood neighborhood attributes yield dysfunctional market behaviors and lower-quality skills, which, in turn, lower individual income. If the social-capital hypothesis is true, my results thus far do not reflect the benefits of acculturation or the negative effects of racial discrimination; rather, my results simply show that persons with lower-quality or a lower quantity of marketable skills have lower earnings.

In a series of regressions that are not presented here, I reestimated the linear regression of Table 2 but used father's occupational prestige at ages 6 and 16 and mother's and father's education to capture the individual's social capital. Occupational prestige is a metric that increases with the mean earnings of the occupation and the mean level of education of the workers within the occupation. One approach to measuring occupational prestige uses only male workers, whereas a second approach uses all workers within an occupation. In order to preserve observations, I estimate a modified zero-order regression. The occupational status and education variables received a value of 0 when there was a missing value, and simultaneously, a

corresponding dummy variable equals 1 when there is a missing observation, and it equals 0 for complete values.[7]

Father's occupation has a positive correlation with individual earnings, but it is statistically insignificant in each equation. Parental education has a positive and significant impact on individual earnings, especially mother's education. The coefficients on limited Spanish proficiency, no accent, dark/Indian phenotype, and Chicano decrease in absolute value. This indicates that parental education has a positive correlation with limited Spanish proficiency and no accent, but it has a negative correlation with dark/Indian phenotype and self-identification as Chicano. The reductions in the absolute value of these coefficients are consistent with the social-capital hypothesis; however, because each of these variables remains statistically significant, we may reject the social-capital hypothesis.

Racial Color Self-Identity and Market Segmentation. I further extend the empirical model in two directions. First, I examine the impact of racial color self-identification. PMD color self-identification defies the standard American bipolarization. Some PMDs self-identify as brown, whereas others self-identify as white, even when they do not differ by phenotype. Moreover, a large fraction of PMDs do not identify as either brown or white, whereas some identify as both brown and white. Adding these variables allows us to determine the impact of nonwhite self-identity on annual income. Second, I estimate separate income equations by gender, nativity, and phenotype. These equations will allow us to determine if the earnings process differs by demographic group.

For six or the seven regressions, color self-identity (white, brown, both white and brown, neither white nor brown) has no impact on annual earnings. Color self-identity appears to matter only among immigrants, where those who self-identify as both brown and white (16 percent of immigrant PMDs) earn nearly $1700 more per year than those who self-identify solely as white. I note, however, that this coefficient has only a 10 percent level of significance. Fifteen percent of native-born PMDs self-identify as both brown and white, but the income coefficient is negative and insignificant.

The cost of dark skin is greater among men than women ($1860 and $0, respectively). Dark/Indian PMDs represent 28 percent of both immigrants and native-borns; there is an annual cost of $1255 for dark skin among immigrants, whereas there is a $925 penalty among the native-born. Neither

[7] This procedure does not improve estimation of the slope coefficients, and it lowers R^2. Dropping the observations with missing values would reduce the sample size by nearly 20 percent. Thus I am trading off a slight reduction in R^2 for a substantial increase in sample size.

Spanish fluency nor English fluency has an impact on the annual income of dark/Indian PMDs, men, and immigrants. However, language acculturation and assimilation do provide a path up the economic ladder for light/European-featured PMDs, women, and native-born PMDs. For light/European-featured PMDs there is a $1220 premium for abandoning Spanish and a $1284 penalty for those who are not English proficient. Chicano identity is negatively correlated with income for all groups, but it is statistically significant only for women ($672, $t = 1.76$) and immigrants ($1717, $t = 2.39$).

Results from Latino National Political Survey

Tables 4 through 6 present annual income and hourly wage regressions for Mexican-Americans, Cuban-Americans, and Puerto Ricans from the LNPS and LNPS-PSID Early Release File. Table 4 confirms the results from the CNS data: Native-born Mexican-Americans (especially women) receive an earnings premium for abandoning Spanish.[8] Women who speak mostly or only English receive earnings and hourly wage premiums of $3833 and 17 percent, respectively, as opposed to those who have some degree of fluency in both English and Spanish. No such premium exists for immigrants or native-born Mexican-American males.

These regressions also demonstrate the importance of skin color among Mexican-Americans. Among the native-born, very-light-skin-color Mexican-Americans earn $4065 more than medium-skin-color Mexican-Americans. Among immigrants, dark individuals earn $2285 less than medium-skin-shade persons. The importance of skin color is particularly pronounced among native-born and immigrant Mexican-American males. Very-light-skin-color native-born males receive an annual earnings premium of $3947, although dark-skin-color immigrant males receive a penalty of $2084. Hourly wage skin-shade differentials occur among both native-born men and women. Dark native-born women have a 20 percent wage penalty.

Note that light Mexican-American immigrants receive a $1599 income penalty (see Table 4). Further, Mexican-American immigrants who speak mostly or only English receive an income penalty of $1385. These results appear to contradict the implications of my theoretical model and my previous statistical results. These results do not hold when I subdivide the immigrant sample into male and female immigrants. There is, however, one unexpected result; namely, light-skin-color males of native-born Mexican

[8] See Mason (2003) for the complete set of regressions.

TABLE 4

ANNUAL INCOME AND LOGARITHMIC HOURLY WAGE REGRESSIONS: MEXICAN-AMERICANS, LNPS/PSID

	All				Native-Born				Immigrant			
Annual income	$16,948				$18,540				$15,347			
Log hourly wage		2.00				2.06				1.94		
R^2	0.33		0.35		0.36		0.38		0.34		0.35	
Adjusted R^2	0.32		0.33		0.35		0.37		0.32		0.33	
F-statistic	29.22		30.77		22.19		24.06		13.87		14.58	
N	1307		1307		722		722		585		585	
Variable	Beta	t-Stat.	Beta	t-Stat.	Beta	t-Stat.	Beta	t-Stat.	Beta	t-Stat.	Beta	t-Stat.
Constant	−6656.21	−4.44	0.4899	6.01	−8941.22	−4.11	0.5294	4.96	1079.63	0.53	0.9649	7.42
Northeast	5343.29	1.16	0.1091	0.44	−9256.42	−0.71	0.9517	1.49	9217.49	2.15	0.0277	0.10
Northcentral	6176.68	6.11	0.2859	5.20	8046.99	5.57	0.3967	5.61	3255.70	2.37	0.1210	1.37
West	3149.79	4.46	0.2736	7.13	2132.54	2.22	0.2738	5.81	3653.43	3.57	0.2621	3.98
Male	1758.02	3.06	0.0579	1.86	2061.88	2.44	0.1561	3.78	799.84	1.04	−0.0528	−1.07
American education	1313.86	12.05	0.0882	14.90	1192.37	6.78	0.0696	8.08	1219.20	8.91	0.0893	10.15
Mexican education	628.87	4.88	0.0373	5.34					605.04	4.61	0.0408	4.83
American experience	240.40	2.79	0.0085	1.81	448.61	3.58	0.0145	2.37	88.44	0.77	0.0326	0.44
American experience^2	−1.29	−0.52	0.0007	0.48	−5.34	−1.53	−0.0616	−0.36	−1.20	−0.33	0.0702	0.30
Mexican experience	924.89	4.96	0.0542	5.35					960.25	5.34	0.0606	5.24
Mexican experience^2	−29.85	−3.91	−0.0013	−3.13					−31.98	−4.62	−0.0146	−3.27
Married	3374.98	5.53	0.1598	4.82	3961.22	4.14	0.2043	4.36	2404.08	3.17	0.0766	1.57
Mostly or only English	814.88	1.41	0.0566	1.81	2168.57	2.48	0.1439	3.36	−1384.99	−1.77	−0.0499	−0.99
Mostly or only Spanish	−1436.83	−1.22	0.0711	1.11	−3265.59	−1.34	0.1012	0.85	−1139.08	−0.89	0.0501	0.61
Unionized job	6911.87	10.43	0.3341	9.28	8264.66	8.10	0.3240	6.48	6366.55	7.65	0.4031	7.54
Immigrant	2243.99	2.23	0.2473	4.52								
Dark skin color	−1159.41	−1.57	−0.0627	−1.57	486.95	0.43	−0.0914	−1.64	−2284.85	−2.50	−0.0483	−0.82
Light skin color	−445.80	−0.64	−0.0247	−0.65	323.66	0.31	−0.0213	−0.42	−1599.49	−1.78	−0.0305	−0.53
Very light skin color	1941.61	2.12	0.0418	0.84	4065.11	2.82	0.0914	1.29	−846.87	−0.77	−0.0766	−1.08
Black	10,491.11	3.02	0.6908	3.67	18,521.26	3.10	0.4921	1.68	5339.03	1.39	0.7464	3.02
Spanish	−1089.41	−1.62	−0.0473	−1.29	−378.56	−0.40	−0.0199	−0.43	−2810.02	−2.92	−0.1258	−2.03
Color	−984.43	−1.29	0.0201	0.48	−2020.87	−1.43	−0.0892	−1.29	−1394.10	−1.61	0.0138	0.25
Mulatto	−670.10	−0.64	0.0479	0.84	−242.72	−0.15	0.0663	0.81	−687.85	−0.53	0.0752	0.90

descent receive a 23 percent hourly wage penalty. Given that light skin color is insignificant in the full sample regression of Table 4, it is likely that its statistical significance among native-born males of Mexican descent is due to the large reduction in sample size as the number of observations declines from 1307 in the full sample to 343 in the native-born male sample.

The extremely small numbers of PMDs who racially self-identify as black (six-tenths of 1 percent) receive a rather large annual income and hourly wage premium. Otherwise, my results are similar to those obtained with the CNS data. A Spanish or color racial identity tends to lower annual income and hourly wages relative to white self-identification. For example, Spanish and color racial identity lower hourly wages by 18 and 15 percent, respectively, for native-born males, whereas Spanish racial identity lowers hourly wages by 12 and 41 percent for immigrant men and women, respectively. Further, Spanish racial identity lowers annual income for immigrant males by $3029.

On the whole, the LNPS/PSID data are consistent with the formation of an acculturationist norm among Mexican-Americans and Cuban-Americans (Table 5). For example, for all Cuban-Americans, there is an 18 percent penalty for speaking mostly or only English. However, when the native-born and immigrants are considered separately, only immigrants receive a penalty for being English speakers (20 percent), whereas native-born Cuban-Americans receive a 26 percent hourly wage penalty when they speak mostly or only Spanish. Cuban-Americans who adopt a Spanish-named racial identity do suffer sizable income and wage penalties, $9685 and 31 percent, although there are large premiums for the relatively small number of Cuban-Americans with color-named (3 percent) and mulatto racial identities. Both immigrant and native-born Spanish-named Cuban-Americans suffer large income penalties ($12,579 and $5933) and a sizable wage penalty among native-born Spanish-named Cuban-Americans (59 percent).[9] However, there are no native-born Cuban-Americans who identify in either of these two racial categories. Finally, mulatto immigrants (2 percent of all Cuban-Americans) earn a large hourly wage premium. Dark-skinned Cuban-Americans receive lower earnings and hourly wages than their medium-color counterparts, especially among immigrants. (In the full sample, light-skin-color Cuban-Americans receive a market penalty, but this penalty disappears when the sample is divided by nativity.)

[9] Among Cuban-American women, there are no wage or income differential associated with language usage. The *F*-statistic for the Cuban-American male wage regressions shows that the results are not significant (at the 5 percent level of significance). Since nearly 80 percent of Cuban-Americans are immigrants, the data imply that acculturation increases the wages of native-born individuals more so than among immigrants.

TABLE 5

ANNUAL INCOME AND LOGARITHM OF HOURLY WAGE REGRESSIONS BY NATIVITY: CUBAN-AMERICANS, LNPS/PSID

	All				Native-Born				Immigrant			
Annual income	$18,933				$25,453				$17,109			
Log hourly wage			2.11				2.40				2.02	
R^2	0.27		0.25		0.44		0.73		0.20		0.18	
Adjusted R^2	0.23		0.21		0.32		0.68		0.15		0.13	
F-statistic	6.74		6.24		3.66*		12.72		3.85		3.50*	
N	426		426		74		74		352		352	
Variable	Beta	t-Ratio	Beta	t-Ratio	Beta	t-Ratio	Beta	t-Ratio	Beta	t-Ratio	Beta	t-Ratio
Constant	3517.41	0.93	1.3581	7.00	5795.44	0.53	1.4097	5.66	−231.18	−0.06	1.1987	5.60
Northeast	1987.10	1.00	0.0270	0.27	4117.62	0.62	0.3170	2.10	2465.11	1.01	−0.0394	−0.28
Northcentral	−9153.18	−1.90	−0.7784	−3.14					−10,175.89	−2.13	−0.8792	−3.24
West	1803.04	0.59	−0.1597	−1.02					775.52	0.26	−0.1789	−1.06
Male	2097.48	1.71	0.0889	1.41	−4614.42	−1.06	−0.2448	−2.47	3970.70	2.93	0.1284	1.66
American education	1574.99	6.56	0.0762	6.18	1269.78	1.78	0.0750	4.60	1480.28	5.85	0.0682	4.73
Cuban education	1002.51	5.03	0.0542	5.29					998.26	4.95	0.0515	4.48
American experience	99.03	0.55	0.0349	0.37	−151.61	−0.31	−0.0170	−0.15	237.62	1.18	0.0734	0.64
American experience^2	1.79	0.36	0.0101	0.39	9.11	0.65	0.0199	0.62	−3.50	−0.64	−0.0580	−0.19
Cuban experience	355.23	1.55	0.0243	2.06					355.70	1.56	0.0245	1.89
Cuban experience^2	−5.02	−0.74	−0.0485	−1.39					−5.28	−0.81	−0.0515	−1.38
Married	−586.48	−0.47	0.0168	0.26	−1856.12	−0.54	−0.2140	−2.74	−790.35	−0.57	0.0585	0.74
Mostly or only English	−2232.77	−1.65	−0.1764	−2.54	−1619.73	−0.38	−0.0812	−0.84	−2197.12	−1.48	−0.1971	−2.34
Mostly or only Spanish	−846.41	−0.41	0.0388	0.37	−6983.78	−1.14	−0.2575	−1.85	1151.23	0.52	0.1323	1.06
Unionized job	3550.54	1.93	0.2564	2.71	−2352.96	−0.38	0.1294	0.92	2924.68	1.19	0.2931	2.10
Immigrant	−2293.71	−1.20	−0.1501	−1.52								
Dark skin color	−4871.79	−1.67	−0.3094	−2.07	−368.88	−0.04	0.0583	0.27	−4991.81	−1.67	−0.3473	−2.05
Light skin color	−2607.24	−1.66	−0.1428	−1.77	4066.99	0.79	0.1041	0.88	−1727.56	−1.02	−0.1326	−1.38
Very light skin color	109.68	0.06	−0.0228	−0.25	12,371.61	1.60	0.2492	1.41	−841.45	−0.44	−0.0479	−0.44
Black	−19.75	0.00	0.1427	0.56					593.08	0.12	0.1728	0.63
Spanish	−9685.18	−3.85	−0.3146	−2.43	−12,578.99	−1.77	−0.5885	−3.63	−5932.65	−1.87	−0.1454	−0.80
Color	4502.69	1.22	0.3562	1.88					3007.34	0.83	0.3089	1.50
Mulatto	8287.73	1.43	0.8352	2.81					9040.19	1.59	0.8522	2.63

*Regression is insignificant at the 5 percent level of significance.

There is a large annual income premium for Puerto Ricans to abandon Spanish ($4572), but only the premium for immigrants is statistically significant ($7426), whereas the coefficient for native-born Puerto Ricans is not significant (Table 6).[10] Further, Puerto Rican racial self-identification as white, black, Spanish, color, or Mulatto is not a source of earnings inequality. Thus, despite the results on language acculturation among Puerto Ricans born on the island, the data do not yield definitive conclusions on the construction of Puerto Rican identity; i.e., one cannot determine whether an acculturationist or unique racial/ethnic identity norm exists.

Dark native-born Puerto Ricans earn $11,203 more in annual earnings and a 49 percent higher wage rate than medium Puerto Ricans. This is consistent with the $10,270 lower earnings among very-light-skin-colored immigrant Puerto Ricans. This result is unexpected but not unfounded in the literature. Using the LNPS, Espino and Franz (2002) also reported higher occupational prestige among dark-skin-colored Puerto Ricans. My sample includes 109 native-born Puerto Ricans, and 13.51 percent (about 15 persons) have dark skin color. Hence I do not know if the positive coefficient for native-born Puerto Ricans is robust with respect to an expansion in sample size.

Conclusion

This study has evaluated the relationship between identity and earnings among Hispanic Americans. I find strong incentives favoring acculturation among Mexican-Americans and Cuban-Americans. Americans of Mexican and Cuban descent but less so Puerto Ricans are able to increase annual income and hourly wages by acculturating into a non-Hispanic white racial identity. However, neither the abandonment of Spanish nor the abandonment of a specifically Hispanic racial self-identity is sufficient to overcome the penalties associated with having a dark complexion and non-European phenotype.

The data used in this study were from 1979 and 1989–1990. Both labor market discrimination and acculturation remain important issues for

[10] There are also gender differences, with Puerto Rican males receiving a $6825 annual income premium and Puerto Rican females receiving annual income and hourly wage penalties of $4659 and 19 percent, respectively, for speaking only or mostly English. There are also income and wage penalties for Puerto Rican men with Spanish-named racial identities, $6976 and 33 percent. These results suggest a pattern of acculturation among Puerto Rican men and immigrants but not among women. Black male Puerto Ricans have an 82 percent wage penalty, whereas black female Puerto Ricans have wage and income premiums of 29 percent and $8135. Light-skinned males receive a premium of $6577.

TABLE 6

ANNUAL INCOME AND LOGARITHMIC WAGE REGRESSIONS BY NATIVITY: PUERTO RICANS, LNPS/PSID

	All				Native-Born				Immigrant			
Annual income	$20,144				$20,228				$20,099			
Log hourly wage			2.23				2.22				2.23	
R^2	0.28		0.26		0.60		0.56		0.29		0.28	
Adjusted R^2	0.22		0.21		0.52		0.47		0.21		0.20	
F-Statistic	5.14		4.76		7.44		6.41		3.57		3.47	
N	319		319		109		109		210		210	
Variable	Beta	t-Ratio	Beta	t-Ratio	Beta	t-Ratio	Beta	t-Ratio	Beta	t-Ratio	Beta	t-Ratio
Constant	984.33	0.17	1.3202	5.84	16,214.26	2.13	1.1080	3.67	256.54	0.03	1.5143	5.07
Northeast	1657.19	0.55	0.0579	0.49	−2813.21	−0.91	−0.1037	−0.84	3044.87	0.69	0.1222	0.69
Northcentral	−3861.90	−1.14	−0.1139	−0.85	−15,201.48	−3.73	−0.4116	−2.56	−858.77	−0.18	−0.0396	−0.02
West	−4481.62	−1.20	0.1882	1.28	−5540.32	−1.63	−0.1064	−0.79	−6262.75	−0.76	0.6531	2.00
Male	2597.72	1.50	−0.0588	−0.86	686.06	0.35	−0.0936	−1.19	1555.19	0.62	−0.0541	−0.54
American education	601.39	1.69	0.0447	3.16	139.46	0.26	0.0947	4.42	760.71	1.57	0.0334	1.73
Puerto Rican education	−268.59	−0.76	−0.0494	−0.35					−37.09	−0.08	−0.0129	−0.72
American experience	586.29	2.12	0.0240	2.19	−1144.24	−2.06	−0.0228	−1.04	701.95	2.02	0.0243	1.76
American experience^2	−13.20	−1.50	−0.0358	−1.03	79.47	3.28	0.0166	1.73	−19.47	−1.82	−0.0441	−1.04
Puerto Rican experience	66.19	0.09	0.0813	2.78					−197.78	−0.21	0.0458	1.23
Puerto Rican experience^2	−15.12	−0.35	−0.0484	−2.81					−0.83	−0.02	−0.0286	−1.37
Married	10,852.01	6.03	0.2638	3.70	10,725.59	4.90	0.0432	0.50	11,205.67	4.23	0.3591	3.42
Mostly or only English	4571.71	2.46	0.0217	0.30	2351.06	1.14	−0.0356	−0.44	7425.81	2.59	0.1370	1.21
Mostly or only Spanish	2035.19	0.53	−0.1185	−0.78	2438.39	0.30	0.2624	0.81	4098.92	0.88	−0.0910	−0.49
Unionized job	312.95	0.18	0.2008	2.87	3867.39	1.49	0.4871	4.73	−91.68	−0.04	0.1494	1.61
Immigrant	3277.68	1.56	0.2224	2.67								
Dark skin color	868.93	0.35	0.0243	0.24	11,203.20	3.21	0.4884	3.54	−3483.28	−1.02	−0.1678	−1.24
Light skin color	−20.46	−0.01	−0.1215	−1.58	−3313.59	−1.38	−0.0598	−0.63	2595.24	0.95	−0.0924	−0.85
Very light skin color	−7121.83	−2.76	−0.0576	−0.56	460.06	0.14	−0.0136	−0.10	−10,270.40	−2.73	−0.1152	−0.77
Black	5312.17	1.34	−0.0481	−0.31	3868.60	0.72	−0.1349	−0.63	5260.59	1.02	−0.0344	−0.17
Spanish	−497.10	−0.25	−0.0572	−0.71	627.87	0.25	−0.0247	−0.25	1812.80	0.59	0.1483	1.22
Color	−1890.26	−0.66	0.0792	0.07	−3693.90	−1.02	0.0630	0.44	−1131.59	−0.28	0.0203	0.13
Mulatto	−1690.30	−0.51	−0.0989	−0.76	−2931.12	−0.54	−0.1812	−0.85	−687.98	−0.17	−0.0519	−0.32

Hispanic Americans. However, the relative importance of these phenomena may have changed; hence it would be helpful for policy formulation to have additional studies using data from the current period.

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