Latino Immigrants and the U.S. Racial Order: How and Where Do They Fit In?

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Abstract: According to recent population projections, the non-Hispanic White population will no longer constitute the majority of Americans in the near future. These forecasts have touched off a series of debates over the definition of Whiteness and the future of the U.S. color line. In the context of a shifting U.S. racial landscape, this paper addresses a two-part question regarding racial boundaries and the place of the Latino immigrant population therein. The first part of the question investigates where Latino immigrants place themselves along the U.S. color line in terms of racial self-identification. The second part of the paper evaluates the way the U.S. color line affects outcomes of Latino immigrants. Using data from the New Immigrant Survey (NIS), we find that while Latinos do not conceptualize racial categories in terms of skin color alone, they do suffer an earnings penalty for darker skin. These findings suggest that even if Latino immigrants are challenging the supremacy of racial phenotype in terms of how they racially self-identify, the prevailing U.S. racial order based on skin color is still exerting powerful effects on their outcomes.

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In reference to the intractable divide separating the lives of White and Black Americans, W.E.B Du Bois famously proclaimed at the turn of the last century:, "the problem of the twentieth-century is the problem of the color-line" (Du Bois 1903: 3). At the start of the twenty-first century, scholars have revisited the issue of the U.S. color line and labeled it this century's biggest puzzle, indicating its persisting importance in U.S. society (Lee and Bean 2007a; Lee and Bean 2007b; Lewis, Krysan, and Harris 2004). Over the last 50 years, the arrival of unprecedented numbers of immigrants from Latin America, in particular from Mexico, has radically changed the racial/ethnic mix of the United States and has challenged the continued relevance of the traditional Black/White model of race relations.

Today's Latino immigrants, who display a wide range of racial phenotypes, complicate the Black/White portrait of America and raise the question of whether the historic color line will be changed and, if so, in what ways. According to one prediction, "Mexican-Americans, who have already confounded the Anglo American racial system, will ultimately destroy it, too" (Rodriguez 2007: xvii). Others argue that, far from destruction, the Black/White divide will remain, with the definition of Whiteness expanded to include new non-Black Latino immigrants (Gans 1999; Lee and Bean 2004; Lee and Bean 2007a; Yancey 2003). Still others believe that a more complex system of racial stratification will emerge, characterized by a "pigmentocracy;" a rank ordering of groups and members of groups by skin color (Bonilla-Silva 2004). Which of these predictions will ultimately prevail is an empirical question that the present analysis begins to address.

Previous studies on the future relevance of the Black/White divide have typically focused on children of immigrants, in particular on patterns of intermarriage and the multiracial identification of children from these unions (Qian 2004; Qian and Cobas 2004; Qian and Lichter 2007). An equally important question concerns how immigrants map themselves onto the U.S. color line (Itzigsohn, Giorguli-Saucedo, and Vazquez 2005). Many immigrants, and Latino immigrants in particular, feel that the existing U.S.

racial categories do not fit them well (Kusow 2006; Rodriguez 2000). In the case of Latinos, federal policy and accepted social science say that they do not constitute a separate race and therefore should choose the race that best describes them (Tafoya 2005). According to results from the 2000 Census, close to half of those who identified as Latino failed to choose a specific race, instead opting for the "Some other race" option (Tafoya 2005). The large number of Latinos who do not describe themselves in prescribed U.S. racial terms suggests that more attention be given to the racialization process for Latino immigrants. Only by first understanding how the foreign-born population navigates the decision of racial self-identification will we begin the process of ascertaining whether and where the color line will ultimately be redrawn.

Racial identification constitutes a two-sided process that involves not only choice but also constraint (Lee and Bean 2007b; Nagel 1996). How immigrants racially self-identify is influenced by the existing U.S. racial order and its effect on their opportunities and life chances (Feagin 2004). Accordingly, a two-part question emerges with respect to racial boundaries and the place of the Latino immigrant population therein. The first part asks how Latinos racially identify, i.e. how do Latino immigrants fit themselves into the present racial landscape and which factors influence their decision? The second part of the question addresses the degree to which Latino immigrants are influenced by the existing system of racial stratification that characterizes U.S. society. This part of the question asks whether Latino immigrants are impacted by the U.S. color-based system of stratification, even though they themselves may not readily identify with a particular racial group.

The paper uses a boundary centered framework and data from the New Immigrant Survey (NIS) to investigate how Latino immigrants map themselves onto existing racial categories as well as how the existing racial order influences their outcomes. These issues speak directly to the question of the durability of the U.S. racial order and will also shed light on the incorporation experiences of America's newest immigrant groups.

With respect to the first part of our question, our analysis suggests that a constellation of factors influences *how* Latinos fit themselves in the U.S. racial order. Suggesting a shift away from the traditional U.S. system of racial classification, we find that skin color does not wholly determine racial identification among Latinos.

Sociodemographic factors such as origin country, marital status, socioeconomic status and acculturation level also contribute to this decision. In answer to the second part of the question regarding the effect of the U.S. racial stratification system on Latinos, we observe a penalty for darker skin in the case of earnings among Latino immigrants. These findings suggest that even if Latino immigrants are challenging the supremacy of racial phenotype in terms of how they self-identify, the prevailing U.S. racial order based on skin color is still exerting powerful effects on their outcomes. Taken together, the two main findings point to possibility that the racial boundary surrounding Latinos in the U.S. is in flux and potentially being contested.

DYNAMICS OF RACIAL TRANSFORMATION

In investigating the puzzle of the U.S. color line and the place of Latinos therein, we follow the tradition of Fredrik Barth (1969) and more recently Wimmer (2008b). These scholars suggest that racial/ethnic boundaries are not given divisions of human populations to which all members of society ascribe. Racial/ethnic divisions are conceptualized as products of classificatory struggles in which, "individuals and groups struggle over who should be allowed to categorize, which categories are to be used, which meanings they should imply and what consequences they should entail" (Wimmer 2007: 11). In a boundary focused framework, racial/ethnic divisions are understood to be relative and, importantly, capable of change.

The potentially transitory nature of racial boundaries is a difficult point to grasp in the context of the U.S. where the color line separating Blacks and Whites is sharply drawn and has been relatively inflexible over time.² The U.S. racial order has its roots in the one-drop rule of hypodescent which dictates that any Black ancestry makes a person racially Black (Davis 1991). This system stands out cross-nationally as one with a high degree of social closure, meaning that most Americans conceptualize themselves as belonging to mutually exclusive racial categories largely defined by skin color.³ The nearly universal acceptance of skin color as a racial boundary marker in the U.S. belies the relative nature of ethnic boundary markers in general. For example, for certain African-born black immigrant groups in the U.S. skin color as a basis of social differentiation lacks intuitive meaning. For instance, in the case of Somali immigrants,

cultural identities are primarily defined by clan allegiances. The analogous nature of clan boundaries and U.S. racial boundaries was not lost on one Somali immigrant who, confronting U.S. racial categories for the first time, related it to the situation in Somalia by noting, "We never had anybody who was superior or inferior in terms of colour. But if you think about ethnicity in terms of tribes, we had that problem, but not colour" (Kusow 2006: 541-542).

The relative nature of boundary markers extends to the case of Latin America where the primacy of skin color as a racial demarcation is not as strong as in the United States. In Latin America, race operates on something of a sliding scale with the concept embodying additional factors such as occupation, education and socioeconomic status, which can influence the whitening or darkening process (Rodriguez and Cordero-Guzman 1992). In Brazil, for example, the rules parents use to assign racial status to their children vary by socioeconomic status (Schwartzman 2007). This phenomena has been labeled "blanqueamiento" or social whitening, a process whereby an individual's racial status is whitened by virtue of improvements in socioeconomic status (Montalvo and Codina 2001). Absent the high degree of social closure surrounding racial boundaries in the U.S., there is more room in Latin American countries for exercising discretion in the selection of racial identities. One of the foci of the present analysis is to examine the ways in which this discretion functions within the U.S., a country that in the past has shown little room for racial ambiguity.

The high degree of social closure around the one drop rule of hypodescent in the U.S. may give the false impression that racial boundaries in the U.S. have been indurate throughout time. Although the dichotomous conceptualization of a Black/White racial order has proven persistent, the boundaries around the White category have in fact expanded in the past to incorporate new non-Black immigrant groups. Studies have shown evidence of White ethnics, who were once considered phenotypically ambivalent and probably even belonging to separate races, becoming White over time (Alba 1985; Brodkin 1999; Ignatiev 1995; Jacobson 1998; Roediger 2005). Whether Whiteness will expand again to incorporate the newer Latino immigrant groups remains an unanswered question. The non-White racial appearance of many Latino immigrants raises some doubts that the process of racial boundary shifting that occurred in the past will occur

again (Alba 2005). To date, we know little about the social role of phenotypic differences among Latinos and what they could mean for the future of the U.S. color line. The question for the present analysis is whether U.S. racial boundaries are being redrawn in the contemporary period as a result of the influx of Latino immigrants.

RACIAL SELF-IDENTIFICATION

One of the central preoccupations of this paper is what happens when newcomers confront a racial boundary for the first time—how do they understand it and what constraints does it place on them? A boundary centered framework suggests that actors may pursue several options in reaction to existing racial boundaries (Wimmer 2008a). We begin by evaluating these options from the perspective of racial self-identification.⁵

One possible reaction to an existing racial boundary is to reject the available choices and instead promote other non-racial modes of classification and social practice (Kusow 2006; Wimmer 2008a). This process, labeled "boundary contraction," has been observed in the case of West Indian immigrants who have made concerted efforts to resist the U.S. racialization process by stressing their cultural/national identity (Foner 1987). A study of Dominican immigrants showed that, given a choice of racial categories with which to identify, one-fifth eschewed the customary labels and instead reported that their racial identity was best described as "indio/a" (Itzigsohn, Giorguli-Saucedo, and Vazquez 2005). By asserting an alternative identity not recognized in the U.S., they attempt to position themselves in an intermediate racial category between the binary U.S. categories of Black and White. Similarly, one Mexican immigrant man's response to his race as "campesino," reflects an attempt to dis-identify with the racial definition assigned by outsiders and re-cast racial identity in terms not recognized by the U.S. system of skincolor based racial identification (Dowling 2004: 91). Doing so may offer a degree of protection by distancing immigrants from the racial discrimination reserved for racialized minorities in the U.S.⁶

Another possible option for immigrants is to racially identify in a way that challenges the existing racial boundaries. Many researchers have interpreted the high number of Latino respondents in the 1990 and 2000 census that marked "Some other race" as a blurring of existing racial boundaries (Wimmer 2008b). Logan (2003) argues

that while Latinos are undoubtedly aware of the Black-White color line in the U.S., they are asserting a distinct Hispanic racial identity by marking "Some other race" on the census. According to one Mexican-American respondent interviewed on the subject of U.S. census racial categories: "I think we are big enough to be our own race, especially now that we are growing" (Dowling 2004: 101).⁸

Other researchers have focused less on the large number of Other race Latinos in the U.S. census and instead have studied the slightly larger number of Latino respondents who select White as their race. Instead of attempting to modify the topography of racial boundaries by expanding existing options, as in the case of Other race Latinos, the choice of White may reflect a process whereby the meanings associated with particular racial boundaries are modified. Historically, many European immigrant groups, including Irish, Jewish and Italian immigrants, were originally seen and treated as non-White (Roediger 2005). However, over time they succeeded in expanding the boundary of Whiteness to include their own ethnic origin groups. A similar re-positioning into the White racial category may be occurring among contemporary Latino groups. An illustrative quote comes from a Mexican-American woman living in Texas who, when asked which race she chose on the U.S. census form, responded: "'White...There's no such thing as a brown race. They call Hispanic people brown, right? But we are White...Ignorance is the only thing that would cause anybody to check anything else but White, because that's what we are....There is not such thing as brown...We've been here too long. We're just Americans'" (Dowling: 92)

A study of the 2000 census found a distinct pattern among Latino respondents who chose White as their race, including higher rates of political participation, higher incomes and higher education levels (Tafoya 2005). These patterns have led some to conclude that Latinos see race as a measure of belonging and Whiteness a measure of perceived inclusion. It suggests that Latinos' choice to identify as White may not be restricted to exclusively permanent markers such as skin color but may also include individual characteristics that are amenable to change.

The possibility that individual traits, such as education level, may enable a dark-skinned Latino immigrant to cross the White racial boundary is particularly significant for the U.S. racial order, where the phenotypic marker of skin color historically has been

the racial boundary marker of choice and has been characterized by a high degree of social closure (Herring 2004). To date, however, this possibility has not yet been tested as the census includes no information on skin color. Another limitation of past studies on racial identity among Latinos is the possibility that self-classification is influenced by experiences of skin color-based discrimination. Furthermore, past studies have focused primarily on the native-born population which means that we know less about how the foreign-born population will set the stage for negotiating racial boundaries in future generations (Montalvo and Codina 2001).

Whether a boundary can be crossed, altered or re-defined depends not only on those attempting to re-negotiate the boundary but also on those actors on the other side of the boundary who may reject the newcomers. Too much emphasis put on the ideological construction of racial self-identification ignores the corollary to this process which is the concrete effects of the prevailing racial classification system on immigrants and their descendents (Feagin 2004). A comprehensive assessment of Latinos and the U.S. racial structure would encompass both racial self-identification patterns as well as the material consequences of existing racial boundaries. In the next section we review the evidence for the consequences of racial stratification, focusing specifically on discrimination and skin color among Latinos. This review moves towards the second part of the question to be evaluated in the analysis: if Latinos have distinctive views on race, are they succeeding in altering the way that the nation manages this fundamental social divide?

RACIAL DISCRIMINATION AND LATINOS

Beyond the question of how Latino immigrants interpret U.S. racial boundaries, a related issue concerns the effects of existing racial boundaries on contemporary Latino immigrants. The bulk of existing research that empirically evaluates the relationship between racial boundary markers, i.e. racial phenotype in the U.S. case, and individual outcomes has focused on the African-American population (Gullickson 2005; Herring 2004; Hersch 2006; Keith and Herring 1991; Krieger, Sidney, and Coakley 1998). To date, there are considerably fewer empirical studies that have quantified the influence of racial boundaries on the outcomes of Latinos.

One approach to quantifying racial discrimination among Latinos has been to distinguish the Latino population by self-reported race and evaluate differences between self-identified Black Latinos and self-identified White Latinos. The bulk of the evidence suggests that those Latinos who self-identify as Black have poorer outcomes across a range of variables, including higher prevalence of hypertension, a worse profile of selfrated health, higher levels of segregation and lower incomes (Alba, Logan, and Stults 2000; Borrell 2005; Borrell 2006; Borrell and Crawford 2006; Denton and Massey 1989). These patterns have been taken as evidence that race matters in the lives of Latinos such that those Latinos who classify themselves as "Black" suffer poorer outcomes due to higher levels of discrimination. However, this conclusion is limited by several methodological issues. Because the aforementioned studies have no direct measures of objective racial boundary markers (i.e. skin color) they must rely on self-reported race. Self-reported racial identity contains a subjective component that may bias the results if those Latinos who identify as Black do so precisely because they are experiencing poorer outcomes. A lack of direct discrimination measures also threatens the validity of the projected causal relationship between self-reported race, discrimination and any outcome measure.

A second approach to estimating the effects of discrimination among Latinos overcomes one of these methodological issues by including objective markers such as racial phenotype in the analysis (Landale and Oropesa 2005). One of the first to do so used data from a 1979 study of the Mexican-Origin population (the National Chicano Survey) and found that respondents with darker skin had lower levels of education and income (Arce, Murgia, and Frisbie 1987). A follow-up study using the same data attributed nearly all the difference in income between dark and light skinned Mexican respondents to discrimination, although a subsequent re-analysis questioned the strength of this conclusion (Bohara and Davila 1992; Telles and Murguia 1990; Telles and Murguia 1992). Another contribution to the debate over evidence of skin color-based discrimination among Latinos was conducted in the context of occupational status using data from the 1990 Latino National Political Survey (LNPS) (Espino and Franz 2002). The analysis indicated that darker skinned Mexicans and Cubans have significantly lower occupational prestige scores than their lighter skinned counterparts. In the case of Puerto

Ricans and Dominicans in the Northeast, a study of the relationship between skin color and income found similar results with dark skinned men earning significantly less than light skinned respondents (Gomez 2000). Another analysis using the same data as the current study, focused on immigrants more generally and found that, among newly legalized immigrants, darker skin color and lower stature are significantly associated with lower wages (Hersch 2008).

Taken together, these studies suggest that skin color stratification exists within the Latino population (Allen, Telles, and Hunter 2000; Mason 2004). But the veracity of this conclusion has been threatened by methodological concerns. Past analyses of racial phenotype and human capital outcomes have often suffered from the fact that many of the control variables are not exogenous to the process of discrimination, i.e. they are likely to have been influenced by discrimination in the U.S., potentially biasing any purported causal relationship between skin color, discrimination and the outcome variable under study. Additionally, many of the control variables (ethnicity, national origin, self-reported race) are also highly correlated with skin color, raising the problem of multicollinearity and the resulting imprecision of the estimate linking skin color and wages. To date, the possibility that discrimination on the basis of skin color affects outcomes among Latino immigrants in the U.S. has awaited a more robust statistical test. Doing so will inform our understanding of how racial boundaries are being drawn around contemporary Latino immigrants.

DATA

To carry out this analysis, we use data from the New Immigrant Survey (NIS) 2003 cohort. The survey was originally pilot tested with a 1996 sample cohort of immigrants. The sampling frame for the NIS 2003 was immigrants aged 18 and older who were granted legal permanent residency between May and November of 2003. The response rate was 69 percent (Jasso, Massey, Rosenzweig, and Smith Forthcoming). Interviews were conducted in the language of the respondent's choice as soon as possible after legal permanent residency was granted. Individuals who were new arrivals to the U.S. as well as those who had adjusted their visa status were included in the sample. The NIS data are particularly well suited to answer the questions posed in the current study because the

data include each respondent's own racial classification and an interviewer's assessment of their skin color. Additionally, the data contain a sufficient number of Latinos to permit an exclusive focus on this population.

The total number of NIS respondents who self-identified as Latino is 2,729. A total of 1,605 observations are available for the first part of the analysis predicting racial identification. The remaining 1124 were lost due to missing information on the skin color chart, primarily associated with interviews done over the phone and therefore precluding an interviewer assessment of skin color. The NIS skin color scale, developed by Massey and Martin (2003), instructs interviewers to rate the respondent's skin color as closely as possible to the shades shown in an array of ten progressively darker hands (a value of one is lightest and ten is darkest). ¹² In the second part of the paper our dependent variable is annual earnings. For this analysis we restrict the sample to those Latinos who are members of the labor force and who have valid skin color information (n=954).

Part I: Racial Self-Identification

METHODS AND MEASUREMENT

The first part of the analysis is focused on evaluating how immigrants perceive existing U.S. racial boundaries in the context of racial self-identification. We are primarily interested in how Latino immigrants' responses to the racial identity question reflect their understandings of existing racial boundaries and which individual-level factors are related to this identification choice.

Our measure of racial self-identification is constructed from the following series of questions: "What race do you consider yourself to be? Select one or more of the following: American Indian or Alaska Native? Asian? Black, Negro, or African American? Native Hawaiian or other Pacific Islander? White?" We trichotomize the answers in response to these questions. The first category consists of all respondents who reported that their race was "White." The second category combines the responses of "Native American/Alaska Native," "Black," "Asian," and "Native Hawaiian/Pacific Islander." The majority of the respondents in this category choose "Native-American" (67 percent) or "Black" (16 percent). For descriptive purposes in the analysis we refer to this category as "Black/Native American." The third category consists of all respondents

who refused to answer to the racial identification question. We conceive of this category as partially analogous to the Census choice "Some other race" in the sense that, in the absence of a racial category that fit their self-identity, they chose not to answer the question.

In order to evaluate the role of phenotype in racial self-identification among immigrants we include a measure of skin color. In the NIS, skin color is reported by the interviewer. Although the interviews were carried out by trained professionals at the National Opinion Research Center at the University of Chicago, it is possible that bias was introduced in their evaluation of the respondents (Hersch 2008). While the NIS skin color scale has not been externally validated with the use of a spectrophotometer, which measures reflected light, we justify the use of this measure in the following ways. First, the work of Hill suggests that skin color evaluations done by interviewers of the same race as the respondent are generally superior to those of different race interviewers (Hill 2002). Seventy-two percent of our sample completed their interview in Spanish. Although interview administration in Spanish does not preclude the possibility that the interviewer is not Latino, it does increase the likelihood of a co-ethnic interviewer. Second, in the recent work of Hersch (2008) using the NIS skin color scale, the author finds a high degree of concordance between the NIS skin color measures for the whole sample and spectrophotometer results reported elsewhere for nine overlapping NIS countries (Jablonski and Chaplin 2000). Third, classical measurement error would result in a downward bias of the effect of skin color on earnings (Hersch 2008). Thus, we proceed with skin color as a continuous variable in the first part of the analysis.

Notwithstanding our decision to conduct a cohesive analysis of all Latino immigrants in the context of racial identity, it is important to account for the considerable diversity that exists within the Latino immigrant population with regard to national-origin differences. In all of our analyses we sub-divide the range of origin countries into four categories reflecting similar systems of racial classification systems. They include:

Mexico, Cuba, Dominican Republic, Central America and South America. The majority of Latino respondents from these four countries/regions gained residency status through family preference categories. Given the low level of variability on this measure, we do not include a control for class of admission.

Other demographic control variables include age, sex, marital status, and a dichotomous indicator of whether there are children in the household. Past research has shown that older Latino immigrants are more likely to select a White racial identity and younger respondents are associated with higher odds of choosing "Some other race" as their racial identity, with the age gap larger in the 2000 census than in the 1990 census (Rodriguez 2000; Tafoya 2005). With regard to gender differences, an analysis of the 2000 Census suggests that Mexican-Origin men are slightly more likely than women to identify as White than as "Some other race" (Dowling 2004).

Marital status has also been linked with racial self-identity in past analyses (Tafoya 2005). In the case of the Mexican-Origin population, individuals married to a non-Latino White spouse were more likely to identify as White while individuals married to a non-Latino non-White spouse were more likely to identify as "Some other race." These contrasts hold across both the 1990 and 2000 Census (Dowling 2004). The influence of a spouse on racial identification potentially works through an increased awareness of racial boundaries as a result of the socially influenced process of mate selection. Our measure of current marital status distinguishes between those who are currently married and all others. Similar to the relationship between marital status and racial identity, it is also expected that having children will influence racial self-identity via increased awareness of racial boundaries and the placement of offspring therein. We include a measure of whether there are any children in the household to account for the possibility that children influence racial self-identification.

Prior research has hypothesized that socioeconomic status is associated with a White racial identity to the degree that greater educational attainment and income reflect higher rates of assimilation (Tafoya 2005). But other studies have suggested that a more complicated relationship exists between income and racial identity (Montalvo and Codina 2001). Data from the 2000 Census show that, among the Mexican-Origin population, both those individuals in the lowest and highest income quintiles are more likely to identify as White (Dowling 2004). The reasoning follows that in the highest income quartile and at high levels of educational attainment, identification as White may reflect increased levels of assimilation and a social whitening process linked to increased status attainment. At the lower levels of income, however, a different process may be occurring

whereby those in most vulnerable positions claim a White identity in response to a desire to be accepted by the dominant society and move up economically. The NIS includes a comprehensive set of questions on socioeconomic status. We construct three measures including occupational prestige as measured by the International Socioeconomic Index, educational attainment, and earnings (Akresh 2008; Ganzeboom, Graaf, and Treiman 1992; Ganzeboom and Treiman 1996).

Exposure to U.S. racial boundaries may directly affect individual racial selfidentification by increasing the likelihood that Latinos accept these boundaries and identify themselves accordingly. If this is the case, we would expect increased time in the U.S. and English proficiency to increase the odds of identifying with a racial group, in particular one that is closely linked to individual racial phenotype. Results from the 2000 Census indicate that Latinos who are citizens and who spend more time in the U.S. are more likely to racially identify as White than to not racially identify with any listed race (Tafoya 2005). With regard to English language use, results from the Mexican-Origin population suggest that those who speak only English are more likely to identify as White (Dowling 2004). Alternatively, increased exposure to the U.S. system of racial classification could indicate increased exposure to racial discrimination which may be associated with a lower likelihood of identifying with a U.S. racial group, in particular one that does not coincide with one's racial phenotype. A better understanding of the U.S. system of racial stratification may also indicate an awareness of the lower levels of flexibility in choosing a racial category in the U.S. If this is the case, we would expect those with higher levels of acculturation to be less likely to choose a racial identity that does not correspond to their racial phenotype. The analysis includes two measures of acculturation, English proficiency and years in the U.S.

The analysis consists of five multinomial regression models whereby we predict the odds of either a "White" racial self identification or a "Black/Native American" identification as compared to not choosing any racial identification category. We add the variable sets sequentially and all models are estimated using Stata 9.2.

Descriptives. Table 1 presents the percentage distribution of selected variables by selfreported race among the Latino respondents in the sample. The majority of the sample identified as White (79%), with a much smaller percentage identifying as Black/Native American (7.7%). Around thirteen percent of the sample did not identify with any of the listed races. The percentage of the sample that refused to racially identify is considerably smaller than the percent in the 2000 census that chose "Some other race" (Tafoya 2005). These differences are likely related to differences in the question construction. On the Census "Some other race" is one of the choices to the racial identity question whereas in the NIS questionnaire there is no such option. In the NIS the respondent had to refuse to answer the question if they decided none of the given racial categories described their racial identity adequately. Another consideration concerns the nature of the NIS sample which consists of newly legalized immigrants. If the choice of a racial identity among immigrants is positively influenced by a sense of a U.S. national identity, as some researchers have argued in the past, then we would expect higher rates of racial identification in a sample made up of newly legalized immigrants (Dowling 2004; Tafoya 2005).

The differences in racial identification by skin color operate in the expected direction so that those who self-identified as White have a lower mean on the skin tone scale (lower mean indicates lighter skin) than those who identify as either Black/Native American or do not racially identify.

There are considerable national origin differences in who identifies with which racial group. Cubans and South Americans are disproportionately located in the White racial category. Dominicans are more likely to not choose any racial identification category than either White or Black/Native American. Mexicans are more highly represented in the White category than in the Black/Native American category but they are also highly represented among those who did not racially identify. Whether the national origin differences are due to variation in racial phenotypes by national origin group or to differences in how Latino immigrant sub-groups interpret U.S. racial boundaries is addressed in the next section.

There is a considerable difference in racial identity by marital status so that those who did not racially identify display lower rates of marriage than those who identified as

either White or Black/Native American. In terms of having children in the household, individuals with children are more highly represented among those who do not racially identify. Those who did not racially identify also have a higher percentage who report that they speak English well or very well. There are no significant differences in racial identity by educational level, earnings or occupational prestige score.

Multinomial Logistic Regression: Racial Self-Identification

Table 2 presents the results from the multinomial logistic regression modeling racial self-identification. Columns 1 and 2 present the estimates of choosing White or Black/Native American, respectively, as compared to not choosing a racial identity.

The first model shows the relationship between skin color and racial identification. Latino immigrants who racially identify as White have significantly lighter skin than those who do not racially identify. That is, those with lighter skin are more likely to see themselves as White than to skip the racial identification question. There are no significant differences in skin color between those who racially identify as Black/Native American and those who do not racially identify.

Model 2 accounts for national origin differences, net of skin color. Even after accounting for national-level variation in racial phenotype, significant differences in racial identity by national origin are present in the case of respondents who identify as White compared to those who do not racially identify. Cubans and South Americans are significantly more likely to identify as White than Mexican immigrants, above and beyond their skin color. Further, Mexican immigrants are one of the groups least likely to identify as White and Dominicans are the most likely to not identify with any race. There are no significant national origin differences when we compare the odds of identifying as Black/Native American and not choosing a racial identity. Additionally, there are no national origin differences when we switch the reference category and compare the odds of choosing White to the odds of identifying as Black/Native American (results not shown). These results suggest that skin color does not completely dictate how Latino immigrants racially identify across different national origin Latino sub-groups.

The possibility that national origin differences in racial identification may be explained by factors beyond skin color is evaluated in Model 3 which adds a set of

demographic variables. Controlling for age, gender, marital status and the presence of children in the household explains the higher odds of identifying as White for South Americans and the lower odds of identifying as White for Dominican immigrants. Only Cuban immigrants remain more likely to identify as White after accounting for skin color and demographic factors. Women are more likely to identify as White as are respondents who report that they are currently married. Married respondents are also more likely to identify as Black/Native American than not racially identify, indicating that the significant difference in marital status lies between those who do not choose a racial identity and those that do, regardless of whether they identify as White or Black/Native American. The presence of children in the household is associated with a significantly lower likelihood of identifying as White as compared to not choosing a racial identity.

Model 4 accounts for the role of socioeconomic factors in explaining differences in racial identification. The only significant effect is with respect to earnings for the contrast between those who racially identify as White and those who do not racially identify. Respondents with higher incomes are more likely to not report a race than to identify as White. This effect runs counter to past evidence which suggested a positive relationship between increased economic attainment and a White racial identity (Tafoya 2005). Instead, it suggests, that once the effect of skin color is netted out, those who earn more money are less likely to identify as White and more likely to refuse to racially identify. It may be that increased economic assimilation indicates an increased awareness of the U.S. racial identification system and the reality that a White racial identity is not available to many Latino immigrants. This finding supports other work that suggests a more complicated picture between socioeconomic attainment and racial identity (Montalvo and Codina 2001).

Model 5 adds in a set of acculturation measures to evaluate whether exposure to the U.S. alters one's pattern of racial identification. English proficient respondents are significantly more likely to not racially identify than to identify as White or Black/Native American. Time in the U.S. is not significantly correlated with either outcome, although it appears that this variable is highly correlated with English proficiency. If the regression is specified without English proficiency, years in the U.S. is significantly associated with a lower likelihood of reporting Black/Native American. And if we switch reference

categories and compare those who identify as White to those who identify as Black/Native American, respondents with more time spent in the U.S. are more likely to identify as White than as Black/Native American (results not shown).

Once the full set of controls are added in Model 5, the remaining predictors of a White racial identity as compared to no racial identity include Cuban or South American national origin, lighter skin tone, lower earnings, lower levels of English proficiency, having a spouse and not having children in the household. In the case of a Black/Native American racial identity, respondents who are from the Dominican Republic, who are English proficient and who are unmarried are more likely to refuse a racial identity than to choose a Black racial identity. If we conceive of the refusal to choose a racial identity as an attempt to either promote other non-racial modes of classification, i.e. "boundary contraction," or to blur existing racial boundaries by asserting a Latino racial identity, then individuals who are unmarried and who have higher levels of English proficiency are most likely to undertake this type of boundary engagement regardless of whether the comparison group is a White or Black/Native American identity.

These results suggest that the majority of Latino immigrants in the NIS sample identify as White. The choice of a White racial identity goes beyond racial phenotype. While lighter skin tone is significantly correlated with choosing a White racial identity it is far from deterministic, with several other factors also significantly related to this decision. Some of the strongest determinants of racial identification involve a respondent's national origin group. Even after accounting for differences in racial phenotype, Cubans are more likely to choose a White racial identity, Dominicans have the highest odds of not choosing a racial identity and Mexicans fall somewhere in between with higher odds of not racially identifying as compared to Cubans and South Americans.

Aside from national origin differences, the second strongest effect in determining the choice of a racial identity is marital status. The finding that either a White racial identity or a Black/Native American racial identity are equally likely in the case of married respondents as compared to not choosing a racial identity supports the role the mate selection process may play in racial identity formation. The process of finding a spouse may increase awareness of racial boundaries such that those who are married are

more likely to have conceptualized themselves in racial terms. Further, we tested if the nativity of the spouse was significant in determining individual racial identity and found no significant relationship.

Operating in the opposite direction of marital status, the presence of children in the household is associated with an increased likelihood of not choosing a racial identity when compared to choosing a White racial identity. This effect may reflect a similar pattern as suggested in the case of individuals with higher earnings and increased English proficiency. That is, having U.S.-born children may indicate an increased awareness of the U.S. racial stratification system. Part of this increased awareness may involve the knowledge that racial categories are more strictly proscribed in the U.S. than in the parent's origin country. The decision to eschew a White racial identity in favor of not choosing a racial identity may reflect an increased knowledge of the constraint involved in U.S. racial identification.

The additional role of national origin differences as well as several demographic, socioeconomic and acculturation factors in determining racial identity suggests that Latino immigrants are relying on more than simply skin tone to decide which racial identity they ascribe to, if any at all. These findings support Rodriguez's conclusion that Latinos in the U.S. understand race as representing their "nationality, culture, familial, socialization, birthplace, skin color, ethnicity, or a combination of these" (Rodriguez, 2000: 152). In doing so Latino immigrants are potentially challenging the supremacy of racial phenotype as the racial boundary marker of choice in the U.S. The next question concerns whether the ambiguity surrounding skin tone and racial identity among Latino immigrants translates into how others perceive them. If Latino immigrants do not conceive of race as being purely dictated by racial phenotype, how does racial phenotype influence their treatment once they are in the U.S.? It is to this second question that we now turn.

Part II. Propensity Score Modeling of Earned Income

METHODS AND MEASUREMENT

The second part of the analysis investigates the other side of immigrants' perceptions of racial identity categories, namely whether Latinos are subject to the effects of a racial

stratification system based on phenotype. This part of the paper also acknowledges the multi-actor reality of racial boundary formation. Not only are Latino immigrants confronting new racial boundaries for the first time but they may also be subject to the effects of the existing racial boundaries. We approach this possibility by testing whether Latino immigrants suffer the effects of discrimination based on their racial phenotype in the case of annual earnings. There are several methodological challenges that complicate such a test. Chief among these is the issue of establishing causal inference from a cross-sectional sample of observational data. Past analyses of the possibility of discrimination within the Latino population have been unable to overcome this issue, instead relying on standard regression techniques that are plagued by problems of confounding, off-support-inference, and an over-reliance on an ability to correctly specify the functional form of the relationship between various covariates and income. Those analyses that look explicitly at skin color and income differentials are also limited by a reliance on arbitrary cut-points delimiting dark or light skin as well as issues with intra-interviewer variability in skin color assessment.

We offer an alternative approach to addressing these problems with propensity score matching with doses methodology (Lu, Hornik, and Rosenbaum 2001; Rosenbaum and Rubin 1983). With propensity score matching, the analysis is based on a balanced covariate distribution rather than assuming a certain functional form of the covariates. As such, a more robust inference regarding the causal effect is possible than would be true with standard regression techniques. We use multivariate matching with doses to conduct a more thorough test of whether racial phenotype is related to earned income through the hypothesized mechanism of discrimination based on skin color. The matching method is described in further detail in the following section.

In the language of a causal framework, we conceive of our "treatment effect" as discrimination experienced in the U.S. based on skin color. This point deserves highlighting because it lies at the crux of the analysis. Past research has contended that in a counterfactual modeling framework, race cannot serve as a treatment because it is an immutable characteristic that cannot be manipulated, i.e. you are either born Black or White (Glymour 1986; Holland 1986; Kaufman and Cooper 2001). While there exists debate over the merit of this argument, we address this issue by conceiving of our

measure of racial phenotype as a measure of discrimination, an external process located outside of the individual and thus amenable to change (Kaufman and Cooper 2001; Klonoff and Landrine 2000; Krieger, Sidney, and Coakley 1998).

Another important component of the analysis is the understanding that any observed effect of racial phenotype on earned income in the U.S. is due to discrimination experienced once in the U.S. and not due to racial discrimination experienced in the origin country prior to migrating to the U.S. Key to this assumption is the understanding that racial stratification in Latin America is not based solely on racial phenotype but rather a complex mix of socioeconomic and familial characteristics (Rodriguez 2000). In the balancing exercise described below, we include a large number of pre-migration characteristics to minimize the effects of any pre-migration experiences on the post-migration outcome observed in the U.S.

Analytical Strategy

Propensity score matching with ordinal dose groups was first introduced by Lu et al. (2001) to analyze observational data from a nationwide media campaign. Matching with doses differs from the conventional form of matching with treated subjects and untreated controls because all subjects are exposed to treatment but the doses vary. It is particularly useful in practical scenarios when there are no clearly defined dichotomous treatment and control groups. Instead, the participants are exposed to the treatment at numerous levels. In the NIS-2003 data, skin color was recorded on a 1-to-10 scale, from the lightest to the darkest. Because the skin color code was determined by the interviewers, a two group comparison with a single fixed cutoff point is not appropriate due to the variability among interviewers. We overcome this issue by classifying the skin color scale into four dose groups of comparable size and focus on the comparison between relatively lighter groups and relatively darker groups.

Because we have multiple ordinal dose levels, we use an ordinal logit regression model to estimate the propensity score. A propensity score represents the conditional probability of membership in a dose group given a vector of observed covariates. Once estimated, the propensity score is used to compare individuals from groups who are similar in terms of the observed characteristics. In our case, relatively lighter and darker

skinned individuals with the same observed characteristics would have the same propensity score, indicating an adequate match with which to make comparisons. The eighteen covariates included in the propensity score model are listed in Table 3 and consist of all those measured characteristics that are potentially predictive of earnings but are not affected by discrimination once in the U.S., i.e. characteristics that are measured prior to U.S. residence. In the ordinal logit model, the distribution of doses, Z_i , given observed covariates \mathbf{x}_i , is modeled as:

logit[
$$P(Z_i \le j | \mathbf{x}_i)$$
] = $\alpha_j + \beta^T \mathbf{x}_i$, for j distance = 1, 2, 3

where the linear component of covariates, $\beta^T \mathbf{x}_i$, is used as the balancing score and does not depend on the dose level.

In the context of matching with doses, any individual could potentially be matched to any other individual as long as they are not in the same dose group. The goal of matching with doses is to identify pairs that are similar in terms of observed covariates but different in terms of doses. Similar subjects with highly disparate dose exposures are more likely to show significant differences if the treatment has any effect. An optimal nonbipartite matching algorithm is used to create 477 pairs between four dose groups (Lu, Greevy, and Xu 2008). Within each pair, the subject with a higher larger skin color code is classified into a relatively darker skin group and the subject with a lower skin color code is classified into a relatively lighter skin group. The particular distance between two subjects x_i and x_j is:

$$\Delta(x_{i}, x_{j}) = \frac{(\hat{\beta}^{T} x_{i} - \hat{\beta}^{T} x_{j})^{2}}{(Z_{i} - Z_{j})^{2}}$$

where
$$\Delta(x_i, x_j) = \infty$$
 if $Z_i = Z_j$

The final sample consists of all respondents who were in the labor market at the time of the survey and who have valid information on skin color, the included covariates and an imputed income variable. Income was imputed using information on the individual's age, sex, country of origin, years of education abroad, years of U.S. education, years of U.S. experience, and English proficiency. Twenty-five percent of the sample had imputed income values. The total sample size is 954 respondents.

RESULTS

Table 5 shows the balance on the 18 covariates after matching, providing a check on how well the fitted propensity scores work in terms of creating comparable groups. Means and percentages are presented for the high- and low category subjects which correspond to the darker and lighter skin contrasts. Overall, the high- and low dose groups of Latino immigrants look fairly comparable. Comparing the two columns using a two sample t-test or Pearson's chi-square test, none of the 18 test statistics is larger than one in absolute value, meaning that there is more balance on the observed covariates than one would expect in a randomized experiment. After matching the groups are similar with respect to the covariate distribution but, importantly, the actual levels of skin color are considerably different.

Table 6 presents the results from the post matching analysis. In this portion of the analysis earned income is compared across the matched pairs. We find an average difference in earned income between lighter and darker skinned individuals of \$2,435.62. This difference can be interpreted to mean that, after accounting for relevant differences between any two dose groups, Latino immigrants with darker skin earn, on average, twenty-five hundred dollars less than their lighter skinned counterparts. We also explored the possibility that there is dose response relationship but did not find evidence that the relationship was associated with dose. Instead, it appears that it is the relative nature of racial phenotype that is important, i.e. relatively darker individuals earn less than relatively lighter skinned individuals. To the extent that this difference represents an actual difference in earnings by racial phenotype, net of measured pre-migration differences, it suggests that skin color is related to earnings via discrimination against Latino immigrants once they arrive in the U.S.

SUMMARY AND LIMITATIONS

This analysis aimed to answer a two-part question related to the placement of the U.S. color line in light of a significant increase in the Latino population. First, we asked how Latino immigrants react to contemporary racial boundaries and second, we evaluated how they are treated based on their racial phenotype as measured by skin color. The results suggest that Latino immigrants confronting the U.S. racial classification system are challenging some of its central tenets, specifically the supremacy of skin color in the choice of racial identity. This finding confirms what other studies have suggested, but have not been able to test due to a lack of information on both racial phenotype and racial identity. The finding that significant national-origin differences in racial identity persist, net of skin color, suggests that Latino immigrants confronting U.S. racial boundaries for the first time continue to be influenced by the racial classification systems in their countries of origin.

An additional challenge posed to the existing U.S. racial boundaries concerns the evidence that some Latinos refused to racially identify. The failure to choose a racial identity may represent a process of boundary contraction, i.e. failure to choose a racial identity as a way of emphasizing other non-racial ways of belonging. Alternatively, it could also be a form of boundary blurring, i.e. emphasizing an alternative racial identity such as a Latino racial identity. In the context of the NIS survey, the respondents were circumscribed by the bureaucratically defined identification choices available to them in the survey. These choices are important in and of themselves because bureaucratic categories often form the basis of popular perception and are linked to economic resources and political power through the construction of individual and collective identification (Itzigsohn, Giorguli-Saucedo, and Vazquez 2005). At the same time, a restriction to these bureaucratic categories precludes us from making more fine-tuned statements about the type of racial boundary redefinition that is occurring.

While we may not be able to determine the type of boundary redefinition, the analysis does provide some clues concerning which groups are engaging in racial boundary change. Individuals with darker skin, with children, who are wealthier, who are not married and who speak English fluently were all more likely not to choose a racial

identity than to choose a White racial identity, or in the case of Dominicans, a Black racial identity. These patterns suggest that those groups who are more aware of the U.S. racial stratification system, either by having children, being more socially integrated, or having higher levels of economic assimilation, are more likely to opt for no racial identity than to choose a racial identity that does not fit them well or is stigmatized. In failing to choose a racial identity, Latino immigrants from these groups may be indicating an awareness of the lack of flexibility in choosing among existing U.S. racial categories.

According to Nagel (1996), an individual's racial/ethnic identity lies at the intersection of individual self-definition and collective attribution. Essentially, self-identity is the result of a dialectical process between internal identification and external ascription. In our analyses we were forced to artificially divorce these two processes of self-identification and external ascription and as such were unable to capture the simultaneity of the processes, i.e. the reality that how one identifies is affected by how one is treated (Jensen, Cohen, Toribio, De Jong, and Rodriguez 2006; Ono 2002). We indirectly address the *effects* of external ascription in second part of the paper but were not able to determine the extent that racial identity choices are influenced by treatment by others.

Our findings suggest that while Latino immigrants have distinctive views on race, these views have not yet translated into altering the way in which the nation currently manages the fundamental racial divide. At least at present, the evidence that Latino immigrants are subject to racial discrimination based on skin color in the case of annual earnings suggests less evidence for change in how the U.S. color line operates. Whether this will continue to be true in the future is unclear. Our data come from one point in time and do not allow for feedback effects between the processes of racial identification and racial discrimination (Jiminez 2008). It remains possible that the more Latino immigrants challenge the role of skin color in demarcating existing racial boundaries, the less of a role skin color may play in determining patterns of discrimination.

The finding from the second half of the paper that social structure is potentially exerting powerful effects on Latino immigrants based on skin color rests on a more robust statistical test than has been undertaken in the past. The use of propensity score matching with doses permits a more valid causal inference regarding the relationship

between skin color and income among Latino immigrants. As is true with all propensity score based analyses, the matching method is able to balance the observed covariates but it has no control over the unobserved ones. It is possible that the observed treatment effect could change if additional important pretreatment variables were left out.

Moreover, the test is limited by what it cannot show. We attribute the penalty for darker skin to racial discrimination. This is a residual hypothesis that is not directly tested in the model. Our framework proposes a role for the boundary marker of racial phenotype in the U.S. system of social stratification, which provides a conceptual basis for the conclusion that the penalty of darker skin is due to racial discrimination. But the results remain suggestive with regard to the causal role of discrimination.

CONCLUSION

The findings presented in this paper suggest that the racial boundary surrounding Latinos may be in flux as there is a clear disjuncture between how Latinos classify themselves and how they are treated according to their racial phenotypes. In the language of a boundary centered framework, a social boundary of any kind occurs when two different schemas, one categorical and the other behavioral, coincide (Wimmer 2008b). From an individual perspective, the categorical dimension divides the world into social groups—into "us" and "them." In the case of classification, as measured in our analysis by racial self-identification, Latino immigrants are using markers beyond skin color to determine their racial identity. In doing so, they are challenging the supremacy of skin color as the boundary marker of choice in the U.S. racial hierarchy. A smaller percentage is actively refusing to choose a racial identity, a choice that is partly determined by national origin group and degree of integration into U.S. society.

The behavioral component of a social boundary involves the everyday scripts of action that dictate how individuals interact with those labeled as "us" and "them." The second part of the analysis revealed considerably less evidence for change with regard to social behavior. The analysis of skin color and earned income illustrates that Latino immigrants are still powerfully marked by racial phenotype. The cumulative findings suggest that there is a disconnect in the way that the racial boundary is forming around Latinos. The evidence suggesting a move away from a color-based system of racial

boundary creation on behalf of Latino immigrants is counterbalanced by evidence suggesting that dark skin continues to evoke a considerable penalty in the realm of individual earnings.

One possible outcome of the struggle of racial boundary construction around Latinos is that the color line will solidify only for some Latino immigrants, i.e. those with darker skin. For light skinned Latinos, the racial boundary may indeed be flexible and can be expanded to include them (Alba 2005). If this is the case, it will mean that the burden of race does not fall equally on all members of the Latino population. The next question regarding the degree that the racial boundary will become stabilized and institutionalized over time is necessarily left for the future. While foreign-born immigrants inevitably set the stage for determining how the U.S. boundary will be redrawn to fit Latinos, it is the native-born offspring of immigrants who will ultimately set the future course.

1 There has been considerable debate in the literature concerning the distinction between race and ethnicity and whether they are phenomena of a different order (Bonilla-Silva 1999; Loveman 1999; Omi and Winant 1994; Wimmer 2008a). In the U.S. context, the focus of this paper, racialized boundaries are understood to have originated in slavery and have proven to be more exclusionary than boundaries between ethnic groups. Because this paper is focused on the U.S. context, we maintain the distinction between race and ethnicity and focus on the relevance of the U.S. racial boundary for Latinos. When we are speaking cross-nationally, we refer more broadly to ethnic divisions/boundaries.

2 Change in racial/ethnic boundaries does occur. An illustrative example comes from Puerto Rico where, in the intercensal period 1910-1920, over 100,000 Puerto Ricans "became" White. The expansion of Whiteness to include previously non-White Puerto Ricans likely was caused by the fact that Puerto Ricans were allowed to become U.S. citizens in 1917, thereby increasing the perceived and actual costs of being seen by Americans as non-White (Loveman 2007).

- 3 Skin color is given primacy in distinguishing between racial groups in the U.S. but other co-determined phenotypic traits are also considered including hair texture, eye color and other phenotypical features (Herring 2004).
- 4 We recognize that there are differences across Latin American countries in racial boundary construction. A discussion of these differences is beyond the scope of this paper (e.g. see Appelbaum et al. 2007).
- 5 We recognize that self-identification is but one component of racial boundary construction (Wimmer 2008b). The second half of the paper begins to account for the multi-actor nature of racial boundary construction by evaluating the responses of other actors in the context of skin-color based income discrimination.
- 6 The success of racial boundary contraction as a method of avoiding the U.S. racialization process in the case of Black ethnics has not yet proven sustainable. Most studies of U.S.-born children of Black immigrants shows them squarely aligned with African-Americans in terms of their racial identity (Waters 1999).
- 7 In the 1990 census 43 percent of Hispanics selected "Other race." In 2000, 42 percent of Hispanics chose "Some other race" (Rodriguez 2000; Tafoya 2005).
- 8 Historically, "Mexican" was a racial option on the U.S. census until 1930 when campaigning by Mexican-American civil society succeeded in its removal (Dowling 2004).
- 9 According to results from the 1990 census, 52 percent choose "White" and in 2000 48 percent choose "White" as their racial category (Rodriguez 2000; Tafoya 2005).
- 10 Refer to http://nis.princeton.edu for additional information on the sample.
- 11 The sampling design dictates that undocumented migrants and others without legal permanent residency status are not eligible for inclusion.
- 12 The scale is based on a chart available at http://nis.princeton.edu/downloads/NIS-Skin-Color-Scale.pdf. Although the chart arrays hands from one to ten, less than 3 percent of the sample was given a skin color code of zero. We interpret this to be a skin color lighter than that indicated by 1 and include these cases in the analysis.
- 13 Of course, randomization also balances on unobserved covariates, whereas matching generally does not.

- Akresh, Ilana Redstone. 2008. "Occupational Trajectories of U.S. Immigrants: Downgrading and Recovery." *Population and Development Review* 34:435-456.
- Alba, Richard. 1985. *Italian Americans: Into the Twilight of Ethnicity*. Englewood Cliffs: Prentice-Hall.
- —. 2005. "Bright vs. blurred boundaries: Second-generation assimilation and exclusion in France, Germany, and the United States." *Ethnic & Racial Studies* 28:20-49.
- Alba, Richard D., John R. Logan, and Brian J. Stults. 2000. "The Changing Neighborhood Contexts of the Immigrant Metropolis." *Social Forces* 79:587.
- Allen, Walter, Edward Telles, and Margaret Hunter. 2000. "Skin Color, Income and Education: A Comparison of African Americans and Mexican Americans." *National Journal of Sociology* 21:130-180.
- Appelbaum, Nancy P., Peter Wade, and Karin Alejandra Rsemblatt. 2003. *Race and Nation in Modern Latin America*. Chapel Hill: The University of North Carolina Press.
- Arce, C.H., E. Murgia, and W. Parker Frisbie. 1987. "Phenotype and Life Chances among Chicanos." *Hispanic Journal of Behavioral Sciences* 9:19-22.
- Barth, Fredrik. 1969. "Introduction." Pp. 9-38 in *Ethnic Groups and Boundaries: the Social Organization of Culture Difference*, edited by F. Barth. London: George Allen & Unwin.
- Bohara, Alok K. and Alberto Davila. 1992. "A Reassessment of the Phenotypic Discrimination and Income Differences among Mexican Americans." *Social Science Quarterly* 73:114-119.
- Bonilla-Silva, Eduardo. 1999. "The Essential Social Fact of Race." *American Sociological Review* 64:899-906.
- —. 2004. "From Bi-Racial to Tri-Racial: Towards a New System of Racial Stratification in the USA." *Ethnic & Racial Studies* 27:931-950.
- Borrell, Luisa N. 2005. "Racial Identity Among Hispanics: Implications for Health and Well-Being." *American Journal of Public Health* 95:379-381.
- —. 2006. "Self-Reported Hypertension and Race among Hispanics in the National Health Interview Survey." *Ethnicity and Disease* 16:71-77.
- Borrell, Luisa N. and Natalie D. Crawford. 2006. "Race, Ethnicity, and Self-Rated Health Status in the Behavioral Risk Factor Surveillance System Survey." *Hispanic Journal of Behavioral Sciences* 28:387-403.
- Brodkin, Karen. 1999. *How Jews Became White Folks and What That Says about Race in America*. Rutgers: Rutgers University Press.
- Davis, F. James. 1991. Who is Black?: One Nation's Definition. State College: Pennsylvania State University Press.
- Denton, Nancy A. and Douglas S. Massey. 1989. "Racial Identity among Caribbean Hispanics: the Effect of Double Minority Status on Residential Segregation." *American Sociological Review* 54:790-808.
- Dowling, Julie Anne. 2004. "The Lure of Whiteness and the Politics of "Otherness": Mexican American Racial Identity." Dissertation Thesis, Sociology, University of Texas at Austin, Austin.
- Du Bois, W.E.B. 1903. The Souls of Black Folk. New York: Barnes and Nobles Classics.

- Espino, Rodolfo and Michael M. Franz. 2002. "Latino Phenotypic Discrimination Revisited: The Impact of Skin Color on Occupational Status." *Social Science Quarterly* 83:612-623.
- Feagin, Joe R. 2004. "Toward and Integrated Theory of Systematic Racism." Pp. 203-223 in *The Changing Terrain of Race and Ethnicity*, edited by M. Krysan and A. E. Lewis. New York: Russell Sage Foundation.
- Foner, Nancy. 1987. "The Jamaicans: Race and Ethnicity among Migrants in New York City." Pp. 195-217 in *New Immigrants in New York City*, edited by N. Foner. New York: Columbia University Press.
- Gans, Herbert J. 1999. "The Possibility of a New Racial Hierarchy in the Twenty-first Century United States." Pp. 371-390 in *The Cultural Territories of Race*, edited by M. Lamont. New York: Russell Sage Foundation.
- Ganzeboom, Harry B. G., Paul M. De Graaf, and Donald J. Treiman. 1992. "A Standard International Socioeconomic Index of Occupational Status." *Social Science Research* 21:1-56.
- Ganzeboom, Harry B. G. and Donald J. Treiman. 1996. "Internationally Comparable Measures of Occupational Status for the 1988 International Standard Classification of Occupations." *Social Science Research* 25:201-239.
- Glymour, Clark. 1986. "Comment: Statistics and Metaphysics." *Journal of the American Statistical Association* 81:964-966.
- Gomez, Christina. 2000. "The Continual Significance of Skin Color: An Exploratory Study of Latinos." *Hispanic Journal of Behavioral Sciences* 22:94.
- Gullickson, Aaron. 2005. "The Significance of Color Declines: A Re-Analysis of Skin Tone Differentials in Post-Civil Rights America." *Social Forces* 84:157-180.
- Herring, Cedric. 2004. "Race and Complexion in the "Color-Blind" Era." Pp. 1-21 in *Skin Deep: How Race and Complexion Matter in the "Color-Blind" Era*, edited by C. Herring, V. M. Keith, and H. D. Horton. Chicago: University of Illinois Press.
- Hersch, Joni. 2006. "Skin-Tone Effects among African-Americans: Perceptions and Reality." *American Economic Review* AEA Papers and Proceedings 251-255.
- —. 2008. "Profiling the New Immigrant Worker: the Effects of Skin Color and Height." *Journal of Labor Economics* 26:345-386.
- Hill, Mark E. 2002. "Race of the Interviewer and Perception of Skin Color: Evidence from the Multi-City Study of Urban Inequality." *American Sociological Review* 67:99-108.
- Holland, Paul W. 1986. "Statistics and Causal Inference." *Journal of the American Statistical Association* 81:945-960.
- Ignatiev, Noel. 1995. How the Irish Became White. New York: Routledge.
- Itzigsohn, Jose, Silvia Giorguli-Saucedo, and Obed Vazquez. 2005. "Incorporation, Transnationalism, and Gender: Immigrant Incorporation and Transnational Participation as Gendered Processes." *International Migration Review* 39:895-920.
- Jablonski, Nina G. and George Chaplin. 2000. "The Evolution of Human Skin Coloration." *Journal of Human Evolution* 39:57-106.
- Jacobson, Matthew Frye. 1998. Whiteness of a Different Color: European Immigrants and the Alchemy of Race. Cambridge: Harvard University Press.

- Jasso, G., D.S. Massey, M.R. Rosenzweig, and J.P. Smith. Forthcoming. "The U.S. New Immigrant Survey: Overview and Preliminary Results Based on the New-Immigrant Cohorts of 1996 and 2003." in *Longitudinal Surveys and Cross-Cultural Survey Design*, edited by B. M. a. B. Nicholson. London: UK Immigration Research and Statistics Service.
- Jensen, Leif, Jeffrey H. Cohen, Almeida Jacqueline Toribio, Gordon F. De Jong, and Leila Rodriguez. 2006. "Ethnic Identities, Language, and Economic Outcomes Among Dominicans in a New Destination." *Social Science Quarterly* 87:1088-1099.
- Jiminez, Tomas R. 2008. "Mexican Immigrant Replenishment and the Continuing Significance of Ethnicity and Race." *American Journal of Sociology* 113:1527-1567.
- Kaufman, Jay S. and Richard S. Cooper. 2001. "Commentary: Considerations for Use of Racial/Ethnic Classification in Etiologic Research." *American Journal of Epidemiology* 154:291-298.
- Keith, Verna M. and Cedric Herring. 1991. "Skin Tone and Stratification in the Black Community." *American Journal of Sociology* 97:760.
- Klonoff, Elizabeth A. and Hope Landrine. 2000. "Is Skin Color a Marker for Racial Discrimination? Explaining the Skin Color-Hypertension Relationship " *Journal of Behavioral Medicine* 23:329-338.
- Krieger, Nancy, Stephen Sidney, and Eugenie Coakley. 1998. "Racial Discrimination and Skin Color in the CARDIA Study: Implications for Public Health Research." American Journal of Public Health 88:1308-1313.
- Kusow, Abdi. 2006. "Migration and Racial Formations Among Somali Immigrants in North America." *Journal of Ethnic & Migration Studies* 32:533-551.
- Landale, Nancy S. and R. S. Oropesa. 2005. "What Does Skin Color Have to Do With Infant Health? An analysis of low birth weight among mainland and island Puerto Ricans." *Social Science & Medicine* 61:379-391.
- Lee, Jennifer and Frank D. Bean. 2004. "America's Changing Color Lines: Immigration, Race/Ethnicity, and Multiracial Identification." *Annual Review of Sociology* 30:221-242.
- —. 2007a. "Redrawing the Color Line?" City & Community 6:49-62.
- —. 2007b. "Reinventing the Color Line Immigration and America's New Racial/Ethnic Divide." *Social Forces* 86:561-586.
- Lewis, Amanda E., Maria Krysan, and Nakisha Harris. 2004. "Assessing Changes in the Meaning and Significance of Race and Ethnicity." Pp. 1-10 in *The Changing Terrain of Race and Ethnicity*, edited by M. Krysan and A. E. Lewis. New York: Russell Sage Foundation.
- Logan, John. 2003. "How Race Counts for Hispanic Americans." Lewis Mumford Center.
- Loveman, Mara. 1999. "Is "Race" Essential?" American Sociological Review 64:891-898.
- Lu, Bo, Robert Greevy, and Xinyi Xu. 2008. "Optimal Nonbipartite Matching and its Statistical Applications." *Working Paper. Department of Biostatistics. The Ohio State University*.

- Lu, Bo, Robert Hornik, and Paul R. Rosenbaum. 2001. "Matching with Doses in an Observational Study of a Media Campaign Against Drug Abuse." *Journal of the American Statistical Association* 96:1245-1253.
- Mason, Patrick L. 2004. "Annual Income, Hourly Wages, and Identity among Mexican-Americans and Other Latinos." *Industrial Relations* 43:817-834.
- Massey, D.S. and Jennifer Martin. 2003. "The NIS Skin Color Scale. Office of Population Research, Princeton University."
- Montalvo, Frank F. and G. Edward Codina. 2001. "Skin Color and Latinos in the United States." *Ethnicities* 1:321-341.
- Nagel, Joane. 1996. American Indian Ethnic Renewal. Oxford: Oxford University Press.
- Omi, Michael and Howard Winant. 1994. *Racial Formation in the United States: from the 1960s to the 1990s*. New York: Routledge.
- Ono, Hiromi. 2002. "Assimilation, Ethnic Competition, and Ethnic Identities of U.S.-Born Persons of Mexican Origin." *International Migration Review* 36:726-745.
- Qian, Zhenchao. 2004. "Options: Racial/Ethnic Identification of Children of Intermarried Couples." *Social Science Quarterly* 85:746-766.
- Qian, Zhenchao and Jose Cobas. 2004. "Latinos' Mate Selection: National Origin, Racial, and Nativity differences." *Social Science Research* 33:225.
- Qian, Zhenchao and Daniel T. Lichter. 2007. "Social Boundaries and Marital Assimilation: Interpreting Trends in Racial and Ethnic Intermarriage." *American Sociological Review* 72:68-94.
- Rodriguez, Clara E. 2000. *Changing Race: Latinos, the Census, and the History of Ethnicity in the United States*. New York: New York University Press.
- Rodriguez, Clara E. and Hector Cordero-Guzman. 1992. "Placing Race in Context." *Ethnic and Racial Studies* 15:523-542.
- Rodriguez, Gregory. 2007. *Mongrels, Bastards, Orphans, and Vagabonds*. New York: Pantheon Books.
- Roediger, David R. 2005. Working Toward Whiteness: How America's Immigrants

 Became White: the Strange Journey from Ellis Island to the Suburbs. New York:

 Basic Books.
- Rosenbaum, P.R. and D. B. Rubin. 1983. "The Central Role of the Propensity Score in Observational Studies for Causal Effects." *Biometrika* 70:41-55.
- Schwartzman, Luisa Farah. 2007. "Does Money Whiten? Intergenerational Changes in Racial Classification in Brazil." *American Sociological Review* 72:940-963.
- Tafoya, Sonya M. 2005. "Shades of Belonging: Latinos and Racial Identity." *Harvard Journal of Hispanic Policy* 17:58-78.
- Telles, Edward E. and Edward Murguia. 1990. "Phenotypic Discrimination and Income Differences among Mexican Americans." *Social Science Quarterly* 71:682-696.
- —. 1992. "The Continuing Significance of Phenotype among Mexican Americans." *Social Science Quarterly* 73:120-122.
- Waters, Mary C. 1999. *Black Identities. West Indian Immigrant Dreams and American Realities*. Cambridge: Harvard University Press.
- Wimmer, Andreas. 2007. "How (Not) to Think about Ethnicity in Immigrant Societies." *Oxford Centre on Migration, Policy and Society Working Paper Series* 07-44:1-38.

- —. 2008a. "Elementary Strategies of Ethnic Boundary Making." *Ethnic & Racial Studies* 31.
- —. 2008b. "The Making and Unmaking of Ethnic Boundaries: A Multilevel Process Theory." *American Journal of Sociology* 113:970-1022.
- Yancey, George. 2003. Who is White? Latinos, Asians, and the New Black/Nonblack Divide. Boulder: Lynne Rienner.

Table 1. Sample Characteristics by Racial Identity

1	White	Black/Native	No	Sig. Diff ^a
	(1)	American	Racial	C
	. ,	(2)	Identity	
		. ,	(3)	
Skin Color (Light→	4.096	4.895	4.818	F=25.44***
Dark)	(1.696)	(2.197)	(1.537)	
Cuba	0.066	0.032	0.014	$X^2=10.86***$
	(0.249)	(0.016)	(0.118)	
Dominican Republic	0.051	0.056	0.098	$X^2=7.36**$
	(0.221)	(0.232)	(0.298)	
Central America	0.295	0.306	0.360	$X^2 = 3.61$
	(0.456)	(0.463)	(0.481)	_
South America	0.164	0.121	0.089	$X^2=9.06**$
	(0.371)	(0.327)	(0.019)	
Mexico	0.413	0.331	0.439	$X^2 = 4.03$
	(0.493)	(0.472)	(0.497)	
Age	38.875	38.065	37.472	F=1.20
	(13.082)	(12.788)	(12.421)	•
Female	0.548	0.516	0.495	$X^2 = 2.29$
	(0.498)	(0.502)	(0.501)	2
Married	0.670	0.677	0.547	$X^2=12.64***$
	(0.470)	(0.469)	(0.499)	•
Any in Household	0.605	0.677	0.706	$X^2=9.62***$
under 18	(0.489)	(0.469)	(0.457)	
Earnings	20350	20383	19872	F=0.06
	(18770)	(18157)	(15970)	
Occupational	32.676	32.863	32.893	F=0.03
Prestige (16 to 90)	(13.258)	(13.145)	(14.008)	
Years of Education	10.197	10.258	10.005	F=3.85
	(4.609)	(4.461)	(4.790)	2
Speaks English	0.323	0.306	0.416	$X^2=7.59**$
Well/Very Well	(0.468)	(0.463)	(0.494)	2
Years of U.S.	7.845	6.554	8.123	$X^2 = 2.01$
Experience	(7.382)	(6.993)	(7.247)	
Percent of Sample	78.9	7.7	13.3	
(N)	(1267)	(124)	(214)	

^{*}Note: Origin distributions do not add to 100 because [1] rounding and [2] there are some self identified Hispanics who are not from any of the identified places.

a Significance tests are from F-tests (ANOVA) and X² tests for a significant difference across the three

groups. All tests have two degrees of freedom.

Table 2. Multinomial Regression Predicting Racial Self-Identification as White or Black/Native American compared to None

[No Racial Id.]		odel 1		del 2		del 3		del 4		del 5
. ,	White	Black/NA								
Skin Color, 1-	-0.25***	0.03	-0.22***	0.04	-0.22***	0.05	-0.22***	0.05	-0.23***	0.04
10,Light→Dark	(0.04)	(0.07)	(0.05)	(0.07)	(0.05)	(0.07)	(0.05)	(0.07)	(0.05)	(0.07)
Cuba [Mex.]		, ,	1.47**	0.76	1.52**	0.83	1.54**	0.77	1.48**	0.53
			(0.60)	(0.78)	(0.60)	(0.78)	(0.61)	(0.79)	(0.61)	(0.80)
D.R.			-0.55**	-0.67	-0.39	-0.47	-0.43	-0.54	-0.48	-0.83*
			(0.28)	(0.47)	(0.29)	(0.48)	(0.29)	(0.48)	(0.30)	(0.50)
C. America			-0.15	-0.26	-0.05	-0.16	-0.04	-0.15	-0.08	-0.03
			(0.17)	(0.26)	(0.17)	(0.26)	(0.17)	(0.26)	(0.18)	(0.27)
S. America			0.49*	0.24	0.47*	0.27	0.49*	0.21	0.48*	0.09
			(0.27)	(0.38)	(0.27)	(0.39)	(0.28)	(0.40)	(0.28)	(0.41)
Age					0.01	-0.00	0.00	0.00	0.00	-0.00
					(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Married					0.55***	0.57**	0.56***	0.57**	0.52***	0.53**
					(0.16)	(0.25)	(0.16)	(0.25)	(0.16)	(0.25)
Female					0.27*	0.13	0.19	0.07	0.16	0.01
					(0.15)	(0.23)	(0.16)	(0.24)	(0.16)	(0.24)
HH <18					-0.51***	-0.24	-0.50***	-0.22	-0.51***	-0.18
					(0.17)	(0.25)	(0.17)	(0.26)	(0.17)	(0.26)
Earnings							-0.13*	-0.12	-0.13*	-0.08
(logged)							(0.07)	(0.10)	(0.07)	(0.10)
Occ. Prestige							-0.00	-0.00	-0.00	0.00
							(0.01)	(0.01)	(0.01)	(0.01)
Yrs of Educ.							-0.00	0.02	0.01	0.03
							(0.02)	(0.03)	(0.02)	(0.03)
Yrs in U.S.									0.01	-0.03
									(0.01)	(0.02)
English									-0.44**	-0.54*
Proficient									(0.19)	(0.29)
Constant	2.89***	-0.68**	2.74***	-0.67*	2.35***	-0.99*	3.77***	-0.05	3.79***	-0.02
	(0.22)	(0.35)	(0.24)	(0.37)	(0.36)	(0.55)	(0.79)	(1.13)	(0.80)	(1.14)
Observations	1605	1605	1605	1605	1605	1605	1605	1605	1605	1605

Standard errors in parentheses. * significant at 10%; ** significant at 5%; *** significant at 1%

Table 3. Covariates Balance in 477 Matched Pairs of a Low-Dose and High-Dose Immigrant

Covariate Covariate	Low Dose	High Dose
Age (Years)	36.4	37.1
Number of HH Members	3.9	4.0
Total Years in the U.S.	8.8	8.9
Age at First U.S. Trip	27.6	28.0
Sex (0=Male, 1=Female)	40.9%	51.9%
Married (0=No, 1=Yes)	66.7%	62.1%
Occupational Prestige Score of Last Job Abroad		
No Prior Job Abroad	46.3%	47.2%
1=Low Prestige	24.7%	27.7%
2=High Prestige	28.9%	25.2%
Harm Outside U.S. (0=No, 1=Yes)	7.1%	8.0%
Sponsor (0=No, 1=Yes)	60.4%	55.8%
U.S. Region Green Card Sent To (0=Non-South, 1=South)	21.4%	24.5%
Relative Family Income when Respondent was 16 (0=Below		
Average, 1=Average or Above Average)	57.0%	57.0%
Rural Residence at Age 10 (0=No, 1=Yes)	42.1%	44.4%
Worked for Pay Prior to Entering U.S. (0=No, 1=Yes)	53.7%	52.8%
Spouse Born in the U.S. (0=No, 1=Yes)	12.4%	11.1%
Visa Admission Category		
1=Immediate Relative	32.1%	31.4%
2=Family Preference	19.1%	22.0%
3=Employment	12.2%	7.3%
4=Diversity/Other	3.6%	2.3%
5=Refugee	33.1%	36.9%
Region of Origin		
1=Mexico	34.4%	40.3%
2=Central/South America	50.9%	47.8%
3=Other	14.7%	11.9%
Health While Growing Up		
1=Excellent	56.4%	52.4%
2=Very Good	24.9%	22.9%
3=Good	12.2%	18.0%
4=Fair	5.5%	5.7%
5=Poor	1.0%	1.0%
Years of Education Abroad		
1=≤9 yrs	50.9%	56.6%
2=10-12 yrs.	26.6%	22.9%
$3=\geq 13$ yrs	22.4%	20.5%
, and the second		

Table 4. Post Matching Analysis of Earned Income and Skin Tone among 477 Matched Pairs of Latino Immigrants

Group	Observations	Mean Income
Low Dose	477	\$22,294.29
		(20,738.48, 23,850.10)
High Dose	477	\$19,858.66
		(18,329.94, 21,387.38)
Lighter Skin-Darker	954	\$2,435.63
Skin Contrast		(257.22, 4614.03)