Complicating Colorism:
Race, Skin Color, and the Likelihood of Arrest

Amelia R. Branigan
Cornell Population Center, Cornell University

Christopher Wildeman
Department of Policy Analysis and Management, Cornell University

Jeremy Freese
Department of Sociology, Northwestern University

Catarina I. Kiefe
Department of Quantitative Health Sciences,
University of Massachusetts Medical School

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ABSTRACT

Both conventional public beliefs and existing academic research on colorism presuppose that skin color predicts social outcomes only among minorities, while Whites enjoy a categorical advantage of lighter skin but no consequence of variation within that category. We test this assumption in a sample of White and Black American men by considering the relationship between skin color and the likelihood of arrest, using a continuous measure of color as the percentage of light reflected off the skin. Contrary to findings for longer-term socioeconomic outcomes, we find that Black men’s probability of arrest remains constant across the spectrum of skin color, while White men’s probability of arrest decreases continuously with lighter skin. Beyond posing an exception to the modern conception of colorism, our results have implications for efforts to ameliorate the epidemic of incarceration among Black men, as well as for understanding how elements of visible phenotype may serve as a unique category of predictors in models of social inequality.
The descriptive “person of color” makes explicit the common understanding that racial and ethnic minorities have skin color, while White people do not. From a literal standpoint, this distinction is of course false, as individuals identifiable as White do have a skin color. But the popular conception that White individuals are colorless has important implications for stratification research, as it begs the question of whether color predicts social outcomes only as a categorical indicator of race, or as a separate continuous quantity operating also within racial designations.

Both constructions of color—the categorical and the continuous—present plausible hypotheses regarding how skin color may operate as a determinant of social outcomes. Prior research on the socioeconomic consequences of skin color have found that color does indeed operate as a continuous predictor within-race in a variety of contexts, ranging from wages (Goldsmith, Hamilton, and Jr. 2006; Goldsmith, Hamilton, and Darity Jr 2007; Keith and Herring 1991) to education (Branigan et al. 2013; Hersch 2006; Keith and Herring 1991; Hunter 2002) to the marriage market (M. Hughes and Hertel 1990; Udry, Bauman, and Chase 1971; Goering 1972). In contrast, a categorical construction of skin color would imply that color is relevant only in its association with a racial group identity that is associated with differences in a given outcome, while variation in skin color within race is not associated with differences in that outcome. This would be the case if, for example, dark-skinned Black men are not arrested more frequently than are light-skinned Black men, even though it is well established that Black men are arrested at a far higher frequency than are Whites (Federal Bureau of Investigation 2014). The vast majority of inequality research implicitly assumes such categorical construction by controlling for race without additional measures of skin color.
That color is so rarely considered separately from race in models of social stratification leaves gaps in our understanding of when color does function only as an indicator of race, versus when it is associated with variation in social outcomes even within a single racial group. This omission becomes practically important when attempts are made to ameliorate a racial disparity—such as in the probability of arrest—without interrogating the extent to which the observed inequity is one of race versus also of color. Indeed, despite the extensive public and academic discourse surrounding the disproportionate arrest and incarceration rates of Black Americans (Dumont et al. 2012; Federal Bureau of Investigation 2014), research on the relationship between skin color and interactions with the criminal justice system remains limited. The small body of research on this topic has typically found evidence for the continuous relevance of skin color: lighter-skinned minorities are sentenced less severely than are darker-skinned minorities (Viglione, Hannon, and DeFina 2011; Burch 2015). Color may affect likelihood of incarceration, although King and Johnson (2015) found evidence of a consistent relationship only among darkest-skinned Black arrestees. To our knowledge, no research to date has investigated the relationship between skin color and the likelihood of arrest.

The traditional understanding of colorism would suggest that skin color should operate continuously within-race in predicting a given social outcome among minorities, while variation in skin color within-race should not be associated with differences in that outcome among Whites (e.g. Pearce-Doughlin, Goldsmith, and Hamilton 2013; Darity Jr., Dietrich, and Hamilton 2005; Hochschild and Weaver 2007). Here we draw on social psychological research on stereotyping to suggest that for quick low-information decisions, such as an arrest (Smith 1986), the opposite may be true. Individuals have been repeatedly found to perceive more physical variation among social categories of which they are members than among categories to which
they do not belong (Linville, Fischer, and Salovey 1989; Quattrone and Jones 1980); termed the “out-group homogeneity effect,” this phenomenon describes the bias expressed in phrases such as “they all look alike, but we don’t” (Quattrone and Jones 1980:142). Arrest likelihood stands as a unique outcome relative to all others thus far considered in the colorism literature in that an arrest is a binary decision, made by single (or few) individuals during short interactions. By comparison, long-term socioeconomic outcomes—such as educational attainment, income, occupation, or marital choices—all reflect an accumulation of complicated interactions and decisions, both by the individual and an array of relevant gatekeepers, such as teachers, employers, and potential mates. Even sentencing outcomes involve a range of gatekeepers, such as judges and juries, carefully considering a detailed battery of background information on the individual being sentenced. The comparative lack of opportunity to exchange individuating information on a potential arrestee can be expected to exacerbate the extent to which group stereotypes become relevant for decision making (Ostrom and Sedikides 1992).

In the United States today, 75% of law enforcement officers are White (Reaves 2010); in our sample from the mid-1980s, three-quarters of respondents lived in cities where over 95% of law enforcement officers were White.¹ The decision to make an arrest will thus be overwhelmingly made by White officers, who may, as per the out-group homogeneity effect, simply perceive less physical variation among individuals who are not also White. As such, continuous variation in skin color may well predict White men’s probability of arrest, as White officers may be more likely to perceive physical differences between same-race others even in a short interaction. Within-race variation in skin color may be less relevant among Black men, whom White officers may be more likely to perceive as physically homogenous.

¹ More detail on the relative percent of White police in the cities in our sample at the time of data collection is presented in the methods and analysis section.
Using data from the Coronary Artery Risk Development in Young Adults Study (CARDIA), we find that the probability of arrest is indeed constant across skin color among Black men, while it varies continuously by skin color among White men. This finding poses an exception to the standard expectations regarding how colorism functions, and suggests a need to interrogate basic assumptions about how, for whom, and in what contexts skin color becomes socially relevant. From a practical standpoint, our results have potential implications for efforts to address the incarceration epidemic among Black men, as they may suggest a disparity in how White versus Black individuals are perceived by gatekeepers in the critical decision-making moments that make up a criminal record. Finally, as measurable aspects of the body are becoming increasingly common in models of social stratification, this finding demonstrates a need to consider how visible phenotypic characteristics may operate differently from more traditional predictors of socioeconomic outcomes, as the physical body need only be perceived by others to be socially meaningful.²

**Background**

While the material advantages of skin lightness during slavery undoubtedly had lasting effects on the legacy of American colorism (Myrdal 1944; Franklin 2000; Hill 2000), preference for particular skin coloration is far from unique to the U.S. context (van den Berghe and Frost 1986). Anthropologists have observed skin color valuation in societies ranging across all inhabited continents, with great variation in cultural practices, level of development, and colonial

² Here we differentiate measurable phenotypic characteristics, such as skin color, from social categories such as race and gender that are frequently associated with phenotypic differences, but which are not themselves defined by visible aspects of the body.
history (van den Berghe and Frost 1986). In the vast majority of cases, the social preference is for lightness (van den Berghe and Frost 1986).

Yet despite the breadth of societies in which skin color functions as a social sorting mechanism (van den Berghe and Frost 1986), the assumption of White colorlessness has been pervasive not only as conventional lay knowledge, but also within the sociological literature on skin color (Branigan et al. 2013). A small number of analyses have used White respondents as a homogenous comparison group against which to interpret the associations between color and socioeconomic outcomes among minorities (e.g. Goldsmith, Hamilton, and Darity 2006; Goldsmith, Hamilton, and Darity 2007), but the majority of studies that consider skin color differences simply omit White respondents altogether.\(^3\) The rationale for this omission is rooted in key assumptions regarding how colorism operates. As per Hochschild and Weaver (2007), colorism is when people “attribute higher status and grant more power and wealth to one group, typically those designated as white… [and then] attribute higher status and grant more power and wealth to people of one complexion, typically light skin, within the groups designated as non-white” (646). Goldsmith, Hamilton and Darity (2007) similarly describe a “preference for whiteness,” in which minorities are differentially advantaged by the extent to which they visibly resemble the White in-group. In sum, existing research suggests that first we stratify skin color categorically by race; then we sort continuously, but only among non-Whites (Hochschild and Weaver 2007).

This understanding of colorism is self-reinforcing in the academic literature, as the few social surveys that have collected information on respondent skin color have almost exclusively relied on interviewer coding scales that functionally preclude within-race analyses of White

\(^3\) For two recent exceptions, see Branigan et al. (2013) and King and Johnson (2015).
respondents. White Americans have only about half the variance in skin color (at least in terms of percent reflectance) as do Black Americans (Branigan et al. 2013), and all color-coding instruments thus far employed have required interviewers to code all respondents on a single scale. The comparatively limited variance among Whites, combined with the small number of coding categories, results in little variation being actually captured: across all available data sources using categorical interviewer coding, the vast majority of White respondents consistently fall into the lightest one or two color categories. Although other critiques have been leveled at interviewer-coded color ratings—for example, concern that subjective factors other than a respondent’s skin may also be captured in the color measurement (Hill 2002; Caruso, Mead and Balcetis 2009)—a critical constraint of interviewer-coded color scales lies in their construction around a presupposition that skin color is only socially relevant for minorities. To avoid that presupposition, here we use a data source with a mechanical reading of skin color (skin reflectance), which captures enough variation among White respondents for separate analysis by self-reported race to be feasible.

Limiting research on the relationship between skin color and social outcomes to minorities is problematic not only in that it renders colorism invisible among Whites, but also because comparing patterns of association between-race may help better contextualize findings within-race. Branigan et al. (2013), for example, found an association between skin lightness and

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4 Surveys in which interviewer-coded color data has been used to investigate socioeconomic disparities by color include the National Survey of Black Americans (Hersch 2006; Gullickson 2005; Hill 2002; Thompson and Keith 2001; Keith and Herring 1991; M. Hughes and Hertel 1990), the Multi-City Study of Urban Inequality (Hersch 2006; Hill 2002), multiple waves of the General Social Survey (Gullickson 2005), the Detroit Area Study (Hersch 2006), and the New Immigrant Survey (Hersch 2008). The color scales contain between three and eleven categories.  
5 While the use of separate coding scales for each self-reported race would be one approach to capturing sufficient color variation regardless of between-race differences in skin color variance, to our knowledge, all interviewer-coded color data has thus far used a single scale for all respondents.
educational attainment among Black respondents of both sexes as well as among White women, but not among White men, suggesting that in the educational sphere, colorism may apply to anyone who does not occupy the dominant position at the intersection of race and sex.

Conceptualizing associations between skin color and social outcomes as comparative relationships between social groups also allows for increased engagement with related lines of social psychological research theorizing how individuals may be expected to perceive others who are more or less like themselves (“in-group” versus “out-group”).

Sociological research on how skin color is associated with socioeconomic outcomes is generally framed within more macro-level social theory—the social construction of race, how institutional dynamics produce social gradients in skin tone (e.g. Gullickson 2005; Keith and Herring 1991)—while rarely engaging more micro-level theories of when and why visible physical characteristics such as skin color might be perceived differently in one-on-one interactions (Hill 2002). Hill (2002) stands as a unique example in this respect, testing the out-group homogeneity effect in a large social survey, and finding that as predicted, both Black and White interviewers do indeed report greater physical variation among same-race respondents than other-race respondents. Mean skin color among other-race respondents was also exaggerated, such that Black interviewers perceived White individuals as much lighter than did White interviewers, while White interviewers perceived Black individuals as much darker than did Black interviewers (Hill 2002). As Hill (2002) concludes, these results suggest a problematically limited ability to distinguish physical difference among other-race persons.

Far from being a new or marginal area of research, studies of the out-group homogeneity effect and the related “cross-race effect”—the phenomenon of individuals being able to more accurately recognize same-race faces than cross-race faces (Malpass and Kravitz 1969; Young et
al. 2012)—spans over a century (Feingold 1914). This body of work offers suggestions into the characteristics of a given interaction that may affect how stereotyping is triggered: in particular, a lack of opportunity for the exchange of individuating information, such as in the time-constrained context of an arrest decision, may be expected to exacerbate the extent to which group stereotypes will be used for decision making (Ostrom and Sedikides 1992). It is on this basis that we pose arrests as a unique outcome relative to the longer-term measures typically considered in population research on colorism, and suggest the potential for color to matter quite differently in this case than in prior literature.

**METHODS AND ANALYSIS**

The Coronary Artery Risk Development in Young Adults Study (CARDIA) is a widely-used health-related cohort study collected by the National Heart, Lung and Blood Institute. Data collection has been carried out in eight waves 2 to 5 years apart, beginning in 1985 with 5115 community-dwelling non-Hispanic Blacks and Whites between the ages of 18 and 30, and continuing to the present (data is currently available through 2010-2011). A basic sociodemographic questionnaire has been administered in each wave of data collection. A “life events” questionnaire was additionally administered in the first two survey waves, including a question on whether respondents had been arrested in the year prior to the first survey wave (1985-1986); the same question was asked again in the second wave (1987-1988), but with an option to respond that an arrest had occurred but not in the previous year.  

Consistent with the

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6 The life events questionnaire includes an additional question asking whether respondents had been to jail in the year prior to the first survey wave, and the few respondents who responded that they had been to jail but did not report an arrest were coded as having been arrested. Such responses are not necessarily a coding error if the respondent’s arrest preceded the one-year period evoked in the question language, but jail time extended into that one-year period.
vast gender gap in arrest and incarceration (Snyder 2011), we limit our sample to men only, due to there being too few reported arrests among women for separate analysis to be feasible.

Respondents were randomly selected after stratification by race, sex, age, and education in four US cities: Birmingham, AL, Chicago, IL, Minneapolis, MN, and Oakland, CA. The percent of White police drastically exceeded the percentage of White population in all four cities during the time period of our arrest data: police forces in the Birmingham, Chicago, and Minneapolis metropolitan areas were all over 95% White, while in the Oakland metropolitan area the police force was over 75% White (U.S. Department of Justice 2012).

The skin color measure in CARDIA was taken in the fourth wave of data collection (1992-93) as the percent of light reflected off the skin, assessed using a Photovolt 577 spectrophotometer at the upper volar arm (the underside of the upper arm). This serves as a measure of “constitutive” skin color—baseline skin color at regions not exposed to light—which stays relatively constant in the same person over time compared to other locations on the body (Pershing et al. 2008). In contrast, “facultative” color—skin color at photo-exposed sites such as the forehead—might be a better indicator of how an individual appears to others, but would also be far more sensitive to variables such as season of measurement in a single-time-point

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7 For a detailed description of selection procedures at each site, see (G. H. Hughes et al. 1987). Sex was stratified to balance men and women; race was stratified to balance non-Hispanic Blacks and Whites; age was stratified to balance respondents ages 18-24 with respondents ages 25-30; education was stratified to balance those with a high school degree or less and those with more than a high school degree.

8 Percentages calculated using the 1987 Law Enforcement Management and Statistics (LEMAS) Survey (U.S. Department of Justice 2012). Minneapolis had the highest percentage of White police (98%), with Chicago and Birmingham close behind (95%). Oakland had the lowest percentage of White police (76%), but also has not had more than 40% White residents since the 1970s (Bay Area Census 1980).

9 See Sweet et al. (2007) on skin color and blood pressure; (Borrell et al. 2006) and (Krieger, Sidney, and Coakley 1998) on skin color and self-reports of discrimination.
Of male respondents interviewed in the fourth wave of data collection, 97 percent (1,777) have color data recorded. Respondents without recorded skin color data were excluded from the analysis. Spectrophotometer readings were taken with three filters (amber, green, and blue), but as correlations among the three sets of readings ranged from .96 to .98, we follow previous literature (e.g. Sweet et al. 2007) in using only the reading taken with the amber filter. Higher reflectance scores denote lighter skin, since lighter colors reflect more light.

While our measure of skin color was taken chronologically after collection of our arrest data, base skin color has been found to remain constant with age (Mayes et al. 2010) and should thus be thought of as a generally stable physical quantity, similar to adult height. Of greater concern is that an association between skin color and any outcome of interest associated with socioeconomic status might result partly from sociodemographic differences in tanning, either cosmetic tanning or tanning during outdoor labor, particularly among White respondents. This concern is minimized by the use of the skin color measurements collected in a physical location generally hidden from the sun; indeed, Branigan et al. (2013) report no significant differences in CARDIA skin reflectance scores by season of measurement for Black respondents, and negligible differences by season among White respondents. Furthermore, while we have no

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10 For assessing social relevance of skin color, ideally data on both constitutive and facultative color would be collected.
11 This exclusion poses a potential source of bias if we observe differential rates of arrestee attrition by race at wave 4 (Wang et al. 2014). However, both Black and White men who report an arrest record are 41% more likely to leave the sample by wave 4 than are same-race men with no reported arrest record. While we cannot directly test the possibility of differential rates of attrition in wave 4 by color within race, models estimating the relationship between skin reflectance at wave 4 and likelihood of attrition in later waves yielded no significant or substantively meaningful association.
information regarding frequency of cosmetic tanning in our sample, indoor tanning is known to be far more common among women than men (Heckman, Coups, and Manne 2008).\footnote{To ensure that estimates are not upwardly biased due to individuals who work in outdoor labor being both more tanned and more likely to have been arrested or incarcerated, we ran supplemental models excluding the 48 White men reported to be working in outdoor occupations at the survey wave in which skin reflectance was measured. With these respondents excluded, results of all models were substantively similar and the statistical significance of coefficients was the same.}

The distribution of skin reflectance readings are similar between Black and White men who do and do not report having been arrested (figure 1). The overlap in reflectance between self-reported White and Black men in the full sample is 3%, and the overlap among respondents with a reported arrest history is approximately identical: only 2% of White men who report an arrest record are below a skin reflectance of 36 percent, while for Black men with an arrest record, only 2% are above a skin reflectance of 36 percent. The variance in skin reflectance among Black men is approximately double the variance among White men, both in the full sample and among those with arrest records (figure 1).

Our outcome variable of interest is a binary measure of whether a respondent reports having been arrested on either of the life events questionnaires. Given the age range of CARDIA respondents, this measure will include arrest events that occurred when respondents were at maximum 32 years old. Among Black men for whom skin color data was recorded, 20% report having been arrested in one of the first two survey waves; Among White men for whom skin color data was recorded, 8% report having been arrested in one of the first two survey waves.

Race was self-reported as non-Hispanic White or Black, and 14 individuals who self-reported as Hispanic in the initial telephone interview were dropped from the sample. The 93 respondents who reported having been born outside of the U.S. were also dropped. Respondents reported the race of their mother and father, and we include a variable indicating whether either
parent was reported as belonging to a racial group other than the respondent’s own. We include fixed effects on birth year, as well as for the four data collection sites from which the respondent pool was drawn. A count of biological siblings is coded as per respondent report in the first wave of data collection, as higher sibship size is associated with lower individual receipt of parental resources (Jaeger 2008; Downey 1995).

Our measure of education is taken from the first wave of data collection, assessed as a scale ranging from 0 to 20 years of education, with 20 or more years coded as 20. Educational attainment for both parents were also reported by the respondent, again measured as the number of years completed from 0 to 20. Additional categories were provided for respondents who reported that they did not know their parent’s education, and we coded these responses to zero and included a dummy variable indicating replacement. Occupation for both parents was coded as a socioeconomic index (SEI) score based on the three-digit 1980 Census occupational code. Parents who were reported as being unemployed or with occupations that do not correspond to a prestige score (such as homemakers) were coded to zero, with a dummy variable indicating replacement. Respondents providing no codable information on parental occupation were also coded to zero.

While an alternative approach to handling missingness on parental occupation and education data would be multiple imputation (Rubin 1987), the decision not to impute was based on concern that values are quite plausibly not missing at random (Allison 2000). The vast

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13 All models were also estimated with a continuous measure of birth year. Results were substantively similar and the statistical significance of coefficients was the same.
14SEI scores for occupations were those used by the General Social Survey 1980 (Davis, Smith, and Marsden 2009), with a scale running from zero through 100. In the few cases where the occupation of a “responsible adult” was reported in lieu of a parent, we coded the data provided.
15 Supplemental analyses omitted cases with no codable information; results were substantively similar and the statistical significance of coefficients was the same.
majority of “missing” data, particularly in the case of parental education, resulted from respondents reporting that they “did not know” the educational attainment of their parent. If the mechanisms through which one is unable to report basic SES information about a parent—such as parental absenteeism—are associated with lower true values of parental education and SEI scores, then basic assumptions necessary for imputation are violated. Unfortunately, parental absenteeism is not directly queried in the CARDIA data.

Of the 1,065 White men and 957 Black men who were not foreign born and responded to the arrest questions in waves 1 or 2 of CARDIA, 915 White men and 729 Black men have a skin reflectance reading. Our analytical sample includes the 887 White men and 691 Black men who also have codable parental SES data, as per the exclusion criteria detailed above. Summary statistics on all variables are presented in table 1.

**Analytic Strategy**

To address the question of whether skin color is associated with likelihood of arrest, we employ the logistic regression written

\[
\ln \left( \frac{p_i}{1-p_i} \right) = \beta_0 + \beta_r r_i + \beta_p P_i + \beta_C C_i + \beta_B B_i + \beta_S S_i + \epsilon_i
\]

in which \(p_i\) is the probability that individual \(i\) will be arrested. The spectrophotometer reflectance score for each individual \(i\) is denoted by \(r\), with higher reflectance scores signifying lighter skin.\(^{16}\) \(P\) is a vector of family background measures, including education at the first survey wave, and excluding age at enrollment and parental SEI. Additional specifications to test for nonlinearity in \(r\) included using indicators for quartiles of the skin color range within-race, and including \(r\) as a continuous measure with higher-order terms. While significance fluctuated for White respondents in models using the quartile specification due to the relatively small number of individuals who had been arrested or incarcerated within each color quartile, effects were consistent in direction to those presented using the continuous specification of \(r\). For Black respondents, models using the quartile...

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occupational prestige (SEI score) at the first survey wave, parental education, parental occupational prestige (SEI score), sibship size, and whether either parent is of a different race than the respondent. \( C \) denotes fixed effects on the survey center, and \( B \) denotes fixed effects on respondent age. To account for any variation by sun exposure due to seasonal fluctuation and time spent in outdoor labor, \( S \) is a set of indicators for the season in which a respondent’s skin reflectance was assessed.

We fit the models separately by race. For the results presented in table 2, model 1 is the bivariate association; model 2 introduces fixed effects on age and survey center; and model 3 introduces all remaining covariates.\(^{17}\)

As a robustness check, we then estimate the conditional association between skin color and educational attainment and occupational prestige at the first wave of data collection. The intuition here is to demonstrate that any association between skin color and likelihood of arrest is not merely channeling unexpected differences in the relationship between color and SES in our sample relative to that established in prior literature. We use the OLS regression equation

\[ y_i = \alpha + \beta_r r_i + \beta_p P_i + \beta_c C_i + \beta_b B_i + \beta_S S_i + \epsilon_i \]  

(2)

wherein \( i \) denotes an individual respondent and \( y \) is the socioeconomic outcome of interest (number of years of education attained and SEI score at wave 1, the beginning of the period for which data is available on arrest), and all remaining variables are defined as in equation 1. As per Keith and Herring (1991), Hunter (2002), Goldsmith, Hamilton, and Darity (2007) among others, we expect a relationship between skin color and these outcomes among Black men, wherein specification were consistent with those presented using the continuous specification. Higher-order terms on \( r \) were non-significant and yielded negligible improvement to model fit.\(^{17}\) With our full models run as a pooled sample with an indicator for race, a continuous measure of percent reflectance, and a race-by-reflectance interaction term, both main effects and the interaction are significant at standard levels, affirming that race is independently associated with probability of arrest and incarceration even net of reflectance.
lighter skin is associated with higher SES. As per Branigan et al. (2013), we expect no significant association between skin color and these outcomes among White men.\footnote{Branigan et al. (2013) investigated the relationship between skin reflectance and educational attainment and occupational prestige in the CARDIA sample, measuring educational attainment at age 30, and occupational prestige at age 35. Since arrest data in the CARDIA sample is collected over a short three-year period (1985-1988), during which respondents will be up to 12 years younger than at the time of measurement in Branigan et al. (2013), this final analysis is intended to confirm that the relationship between reflectance and measures of SES contemporaneous to the arrest data remain consistent with expectations in prior literature.}

Where the CARDIA data offers a precise measure of skin color, the limitations in sample size and geographical representativeness pose a challenge particularly when interpreting a potentially null effect, such as that hypothesized for Black men. While we know of no data source with sufficient variation in the skin color measure among White respondents for a feasible replication of our models for White men, as a final test we run a simplified version of model 1 on Black men in the National Longitudinal Study of Youth 1997 (Horrigan and Walker 2001). The NLSY97 is a nationally representative sample of approximately 9,000 respondents between the ages of 12 and 16 on December 31, 1996, conducted by the United States Bureau of Labor Statistics (Horrigan and Walker 2001). Respondents have been surveyed annually since 1997. As in past research using the CARDIA measure of skin reflectance (Branigan et al. 2013), an association has been found between the interviewer-coded measure of skin color in the NLSY97 and both employment (Kreisman and Rangel 2014) and educational outcomes (Hannon, DeFina, and Bruch 2013). The NLSY97 thus poses a useful compliment to the CARDIA data, offering a less precise measure of skin color, but a larger, more recent, and nationally representative sample.

The outcome of interest is an indicator of whether a respondent reported having been arrested by the 2005 wave of data collection, at which point respondents were a minimum of 20
years old, and thus roughly comparable in age to our CARDIA sample. The independent variable of interest is an interviewer-coded skin color rating (Massey and Martin 2003), which we treat as a continuous measure. Values on the skin color scale range from zero to 10, and are coded to match the direction of the CARDIA reflectance measure, such that lower numbers denote lighter skin. For the results presented in table 4, model 1 is the bivariate association; model 2 introduces fixed effects on birth year and census region at the time respondents were impaneled (Northeast, Midwest, South, and West).

RESULTS

Results of the logistic regression models estimating the relationship between skin color and likelihood of arrest are presented in table 2. As can be seen in the bivariate models (model 1), skin reflectance does predict likelihood of arrest among White men ($p<0.01$), while for Black men there is no significant association. The magnitude of the coefficient for White men varies slightly with the addition of fixed effects on birth year and survey center in model 2, and again with the addition of the full battery of controls in model 3. Among Black men, the non-significant coefficient fluctuates negligibly across models, and by model 3 is still non-significant and substantively small.\(^{19}\)

The probability of arrest by percentile of skin reflectance is presented in figure 2.\(^{20}\) With all other variables in model 3 of table 2 held at the mean, the probability of arrest for a Black man in the darkest 10% of skin reflectance is 19.99%, while for a Black man in the lightest 10% of reflectance, the probability of arrest is 20.25%. As per table 2, this negligible change in arrest

\(^{19}\) This finding is not driven by city-specific differences in mean skin color among White men who were arrested versus those who were not ($p=0.139$).

\(^{20}\) Figure 2 generated using the -spost- package of commands written for Stata 13 (Long and Freese 2014).
probability is not statistically significant. For White men, on the other hand, moving from the bottom 10% to the top 10% of skin reflectance is associated with a significant 5.4-percentage-point decrease in probability of arrest. White men in the bottom 5% of skin reflectance—whose skin tone falls in the small region of overlap between the range of reflectance for White and Black respondents—have a probability of arrest closer to that of Black respondents than to lightest-skinned White respondents. That said, there are exceedingly few individuals in the region of common support, and so estimates at these extremes should be interpreted cautiously.

This reversal of the standard expectations regarding how skin color functions for Black and White respondents is not explained by unexpected differences in the relationship between reflectance and the longer-term socioeconomic outcomes of educational attainment or occupational prestige (table 3). Consistent with prior literature, lightness is associated with higher wave 1 educational attainment and occupational prestige in Black men, while the association between reflectance and wave 1 educational attainment and SEI is small and non-significant among White men. Moving from the bottom 10% to the top 10% of skin reflectance among Black men is associated with an additional three-fifths of a year of schooling, while for White men, moving from the bottom 10% to the top 10% of skin reflectance is associated with a non-significant addition of less than one-fifth of a year of schooling.

Our null finding for the relationship between skin color and arrest likelihood among Black men is replicated in the NLSY97 sample (table 4). While an association has been found between the NLSY97 skin color measure and longer-term socioeconomic measures of interest (Kreisman and Rangel 2014; Hannon, DeFina, and Bruch 2013), like in the CARDIA sample, the difference in arrest probability between Black men in the categories corresponding to the darkest 10% and lightest 10% of skin reflectance is less than one percentage point. As discussed above,
we know of no data source with sufficient variation in the skin color measure among White respondents for a feasible replication of our models for White men.

**DISCUSSION**

The notion that minorities are “people of color” while Whites are people without color is pervasive not only as common lay knowledge, but also within the academic research community. Studies of the relevance of skin color for social stratification have generally taken for granted that lightness is a blanket characteristic of Whites, who experience no meaningful within-race differentiation by skin tone (Hochschild and Weaver 2007). Among minorities, on the other hand, color is expected to matter continuously, with privilege attached to lightness. Colorism has therefore been implicitly assumed to be a problem only among minorities, as first we stratify skin color categorically by race, and then we sort continuously among non-Whites only.

The findings here do affirm part of that hypothesis: we find evidence that skin color can function categorically for individuals of one race, while functioning continuously for individuals of another race. Beyond that, however, the results presented pose an exception to the common understanding of how colorism operates. The standard construction of colorism would predict that White men’s probability of arrest and incarceration should remain constant across the spectrum of skin color, while Black men’s probability of arrest and incarceration decreases continuously with lighter skin. We find precisely the opposite: Black men’s probability of arrest and incarceration remains constant across the spectrum of skin color, while White men’s probability of arrest and incarceration decreases continuously with lighter skin. Rather than White respondents being categorically advantaged, while minorities are differentially advantaged on the basis of their proximity to aesthetic lightness, we find Black respondents to be
categorically *disadvantaged*, while White respondents are disadvantaged differently on the basis of their proximity to aesthetic darkness.

Where Branigan et al. (2013) demonstrated the potential for skin color to affect social outcomes among White women, to our knowledge, the findings presented here stand as the first in which skin color predicts a social outcome among White men. As all human skin has a color, and skin color is a characteristic of visible phenotype with a long and diverse history of being differentially socially valued (van den Berghe and Frost 1986), this finding should not come entirely as a surprise. Acknowledging skin color as a relevant stratifying quantity among White individuals should not be interpreted as minimizing the legacy of discrimination against minorities, either by race or by color; to the contrary, the findings here suggest that recognizing how social outcomes are stratified by color among individuals of all races, White included, may itself emphasize the pervasiveness of blanket discrimination by race against minorities. Even the darkest-skinned White respondents in our sample remain less likely to be arrested than the lightest-skinned Black respondents.

Despite increasing interest in the social consequences of skin color, sociological research on colorism still rarely engages related social psychological theory on stereotyping and cross-race perception of physical appearance. Rather than attributing our observed pattern of results to a “preference for whiteness” (or conversely, a dispreference for blackness), we draw from research on stereotyping to propose an alternative explanation (Goldsmith, Hamilton, and Darity Jr 2007). The “out-group homogeneity effect” describes the tendency to perceive out-group members as “all looking alike,” while in-group members are perceived as more physically variable (Linville, Fischer, and Salovey 1989; Quattrone and Jones 1980; Ostrom and Sedikides 1992). To that end, this study builds on Hill’s (2002) test of the out-group homogeneity effect in
a population of interviewers for a large social survey, in which he finds that same-race interviewers did indeed report less variation in the skin color of other-race respondents than in same-race respondents. As Hill (2002) notes, this finding was particularly concerning because it suggests a limited ability to perceive differentiating physical characteristics in other-race individuals. Rather, “perception of other-race individuals is filtered through a powerful social prism, which provides fertile ground for the perpetuation of ethnocentric stereotypes and race-related conflict” (Hill 2002:106).

Like in the present study, Hill (2002) included only Black and White individuals in his analysis. As persons associating with a racial classification other than Black or White may fall in a more ambiguous midrange of reflectance, skin color may not serve as a functional tool for visually identifying individuals who are of one’s same race. The continuous association between skin color and arrest among White men may reflect this ambiguity, wherein lightest respondents are most unambiguously visually identifiable as White, whereas darker respondents are less readily classifiable. Findings of higher incarceration probability and harsher sentencing (Blair, Judd, and Chapleau 2004; King and Johnson 2016) among Whites with more “Afrocentric” facial features lends support to this interpretation. The CARDIA sampling frame explicitly excluded Hispanic respondents, and none of the respondents in our sample report either themselves or either of their parents as being Hispanic, thus minimizing any concern that our continuous association between color and both arrest and incarceration for White men is driven by unobserved Hispanic ethnicity. While lay knowledge regarding White colorlessness does tend to include quiet exception clauses for “not-all-the-way White” ethnic Whites (Raffo 1998),

CARDIA sampling centers used various approaches to ensure that only non-Hispanics were impaneled, including omitting potential respondents with Hispanic surnames, and pre-screening by phone for ethnicity.
we unfortunately lack further data on ethnicity in our sample, leaving this as an open area for future research.  

In the case of Black and White Americans, the minimal overlap in the distribution of skin color means that color will serve as a reasonably accurate identifier of individuals who are clearly *not* of one’s same race. As noted, at the time of our data collection, all CARDIA survey centers were in cities with a meaningfully higher percentage of White police than residents: in all cities except for Oakland, the police force was over 95% White (U.S. Department of Justice 2012). Since Black arrestees would have been almost exclusively arrested by White officers, our results follow what would be predicted by the out-group homogeneity effect if arresting officers simply perceive more variation in skin color among same-race versus other-race potential arrestees. That White men in the lowest percentiles of skin reflectance have a probability of arrest more similar to lightest-skinned Black men than to lightest-skinned White men is consistent with this explanation, as that ambiguous range of skin color would afford the highest probability of White individuals being misclassified as out-group. That said, the overlap between the distributions of reflectance for Black and White respondents is minimal, and estimates at these extremes should be interpreted cautiously.  

An alternative explanation for the results presented would be that our controls for socioeconomic background fail to truly capture the relationship between color and socioeconomic disadvantage more broadly, which is in turn associated with higher likelihood of

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22 To the extent that “not-all-the-way White” ethnicity correlates with religion, reports of religious denomination at very least present no meaningful differences in likelihood of arrest or incarceration. Separately by race, Protestants, Catholics, and individuals not reporting a denomination (atheist/agnostic/“none”) are represented at approximately equal proportions among men who had and had not been arrested or incarcerated. Our sample included too few religious minorities for separate comparison (of the five self-reported Muslims, none reported a criminal record; of the 53 self-reported Jews, three reported a criminal record).
encountering the criminal justice system. While we cannot rule out this causal pathway, our models account for a far richer battery of background measures than are available in court or police records, the most common source of data for population research on color and criminal justice outcomes (e.g. King and Johnson 2016; Viglione, Hannon, and DeFina 2011).

Furthermore, if color is merely a correlate of socioeconomic disadvantage, that darker skin tone is associated with lower educational attainment and occupational prestige among Black men and not among White men (table 3) would suggest that color should be also associated with arrest among Blacks and not Whites—the opposite of what we find here. As a supplemental test of whether darker skin color is associated with life stress more broadly for White men, we ran model 3 of table 2 on our sample of White men using as our outcome a range of additional “life events” from the same survey questionnaire from which our arrest and incarceration data were drawn. Outcomes included whether respondents reported an alcohol problem, troubles at work, having moved to a worse neighborhood, or going on or off of welfare. Skin reflectance among White men was not associated with any of the additional outcomes considered.

While we present our results as a complication to the standard conceptualization of colorism, generalizing these findings to the current American population should be done with caution. The CARDIA sample is drawn from four specific urban centers, two Midwestern, one Southern, and one Western. Furthermore, our arrest and incarceration data is from thirty years ago, a mere two decades after the passage of the Civil Rights Act. Shifts in the American racial landscape since the mid-1980s may have altered the probability of arrest and incarceration from the pattern of results observed here, or altered the association between color and any of the other socioeconomic outcomes tested.
That said, our results from the NLSY97 data suggest that at least the null association between skin color and arrest probability among young Black men may well persist to the present. Although our analysis remains correlational and not causal, the portrait of arrest and incarceration probability painted here aligns with contemporary concern that excessive police brutality against Black men and boys may be partially due to the perception of Black individuals as homogenous across critical demographic differences such as physical size or age (Patton 2014). The police commentary following the fatal shooting of 12-year-old Tamir Rice by a White officer in November 2014 poses a relevant example: as per the president of the Cleveland Police Patrolman’s Association, the officer simply “had no clue he was a 12-year-old” (Bever 2014). While police departments in the CARDIA collection cities are more integrated now than they were in the 1980s, the percentage of White officers remains disproportionate to the racial composition of the resident populations (Ashkenas and Park 2015). Although the police forces in the cities from which our population was drawn were almost exclusively White at the time of data collection, information on racial identification of the specific arresting officers would be useful to directly test our proposed explanation for the pattern of results observed.

Our findings emphasize the need to consider color as a separate quantity from race in models of social outcomes. This point has practical implications, as the tools for recording skin color data in social surveys have been developed with the implicit understanding that collecting color data among White Americans is not a priority. As such, mechanical measurement like that used in this analysis remains the sole option for assessing the relationship between skin color and social outcomes without first imposing categorical assumptions about the relevance of skin color by race. The increasing number of social data sources collecting interviewer-coded skin color ratings—including the General Social Survey, the Fragile Families and Child Wellbeing Study,
and the National Longitudinal Study of Youth 1997, as used here—suggests that color data is of sufficient interest to the research population to merit serious consideration of how it should best be quantified. That the coding tool constructed for the New Immigrant Survey (Massey and Martin 2003) was subsequently used in all three surveys noted above marks a meaningful improvement over past efforts to collect interviewer-coded skin color, as it provides a basis for cross-cohort and cross-survey analysis. However, as colorimeter readings can now be taken using a smartphone (Chang 2012), eliminating the cost and burden of lab-standard equipment, interviewer coding may no longer have the benefit of efficiency to outweigh the comparative loss of precision.

Finally, while it is increasingly accepted that appearance matters for social outcomes, the results presented emphasize the importance of considering how measurable quantities of the visible body function similarly to and differently from more traditional quantities of interest in population research. Whereas education, income, and other measures of socioeconomic status may be visibly displayed through dress or carriage, aspects of the visible body such as skin color or body fatness have the unique property that they may be rendered socially relevant even in the absence of individual action, when one’s body is observed by others. As such, quantitative research engaging the visible physical body should consider aspects of social interaction that may affect how bodies are perceived by relevant gatekeepers, such as context and timing, as well as theories of how the visible body may be understood differently across social categories such as gender and race.
REFERENCES


King, Ryan, and Brian Johnson. 2016. “A Punishing Look: Skin Tone and Afrocentric Features in the Halls of Justice.”


Figure 1. Spectrophotometer Readings for Black and White Respondents, by Arrest Record

Arrested

Note: Higher reflectance indicates lighter skin color.
Table 1. Summary Statistics for Selected Variables by Race: the CARDIA study, 1985-88

<table>
<thead>
<tr>
<th>Variable</th>
<th>All Men</th>
<th>White Men</th>
<th>Black Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=1578</td>
<td>N=887</td>
<td>N=691</td>
<td></td>
</tr>
<tr>
<td><strong>Arrested (%)</strong></td>
<td>13.498</td>
<td>8.343</td>
<td>20.116</td>
</tr>
<tr>
<td>(34.181)</td>
<td>(27.668)</td>
<td>(40.116)</td>
<td></td>
</tr>
<tr>
<td><strong>% Reflectance</strong></td>
<td>34.553</td>
<td>45.418</td>
<td>20.592</td>
</tr>
<tr>
<td>(13.470)</td>
<td>(3.939)</td>
<td>(6.915)</td>
<td></td>
</tr>
<tr>
<td><strong>SEI (std)</strong></td>
<td>0.054</td>
<td>0.338</td>
<td>-0.303</td>
</tr>
<tr>
<td>(0.958)</td>
<td>(0.960)</td>
<td>(0.828)</td>
<td></td>
</tr>
<tr>
<td><strong>Education (years)</strong></td>
<td>14.237</td>
<td>14.992</td>
<td>13.273</td>
</tr>
<tr>
<td>(2.455)</td>
<td>(2.504)</td>
<td>(2.015)</td>
<td></td>
</tr>
<tr>
<td><strong>Age (years)</strong></td>
<td>25.034</td>
<td>25.517</td>
<td>24.419</td>
</tr>
<tr>
<td>(3.515)</td>
<td>(3.319)</td>
<td>(3.664)</td>
<td></td>
</tr>
<tr>
<td><strong>Father’s education (years)</strong></td>
<td>11.491</td>
<td>13.427</td>
<td>9.013</td>
</tr>
<tr>
<td>(5.685)</td>
<td>(4.931)</td>
<td>(5.626)</td>
<td></td>
</tr>
<tr>
<td><strong>Mother’s education (years)</strong></td>
<td>12.349</td>
<td>13.101</td>
<td>11.392</td>
</tr>
<tr>
<td>(4.186)</td>
<td>(3.982)</td>
<td>(4.250)</td>
<td></td>
</tr>
<tr>
<td><strong>Father’s SEI (std)</strong></td>
<td>-0.007</td>
<td>0.286</td>
<td>-0.369</td>
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<tr>
<td>(0.951)</td>
<td>(0.969)</td>
<td>(0.782)</td>
<td></td>
</tr>
<tr>
<td><strong>Mother’s SEI (std)</strong></td>
<td>-0.001</td>
<td>0.147</td>
<td>-0.181</td>
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<tr>
<td>(0.839)</td>
<td>(0.774)</td>
<td>(0.874)</td>
<td></td>
</tr>
<tr>
<td><strong>Number of siblings</strong></td>
<td>3.070</td>
<td>2.683</td>
<td>3.566</td>
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<td>(2.391)</td>
<td>(1.907)</td>
<td>(2.819)</td>
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<tr>
<td><strong>Non-same-race parent</strong></td>
<td>0.038</td>
<td>0.028</td>
<td>0.049</td>
</tr>
<tr>
<td>(0.190)</td>
<td>(0.166)</td>
<td>(0.217)</td>
<td></td>
</tr>
<tr>
<td><strong>Birth year</strong></td>
<td>1959.802</td>
<td>1959.331</td>
<td>1960.399</td>
</tr>
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<td>(3.549)</td>
<td>(3.373)</td>
<td>(3.681)</td>
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</tr>
<tr>
<td><strong>Missing father’s education data</strong></td>
<td>0.139</td>
<td>0.070</td>
<td>0.228</td>
</tr>
<tr>
<td>(0.346)</td>
<td>(0.256)</td>
<td>(0.420)</td>
<td></td>
</tr>
<tr>
<td><strong>Missing mother’s education data</strong></td>
<td>0.067</td>
<td>0.052</td>
<td>0.087</td>
</tr>
<tr>
<td>(0.251)</td>
<td>(0.222)</td>
<td>(0.282)</td>
<td></td>
</tr>
<tr>
<td><strong>Missing father’s SEI</strong></td>
<td>0.094</td>
<td>0.043</td>
<td>0.158</td>
</tr>
<tr>
<td>(0.291)</td>
<td>(0.203)</td>
<td>(0.365)</td>
<td></td>
</tr>
<tr>
<td><strong>Missing mother’s SEI</strong></td>
<td>0.307</td>
<td>0.352</td>
<td>0.248</td>
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<tr>
<td>(0.461)</td>
<td>(0.478)</td>
<td>(0.432)</td>
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<tr>
<td><strong>Black (%)</strong></td>
<td>43.791</td>
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</tr>
<tr>
<td>(49.629)</td>
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<td></td>
</tr>
</tbody>
</table>

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23 Skin reflectance is measured in 1992-93 (Wave 4). Higher skin reflectance denotes lighter skin.
24 Educational attainment and socioeconomic Index (SEI) score are measured at wave 1.
<table>
<thead>
<tr>
<th></th>
<th><strong>White Men</strong></th>
<th></th>
<th><strong>Black Men</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Model 1</strong></td>
<td><strong>Model 2</strong></td>
<td><strong>Model 3</strong></td>
<td><strong>Model 1</strong></td>
</tr>
<tr>
<td>% Skin Reflectance</td>
<td>-0.072**</td>
<td>-0.080**</td>
<td>-0.072*</td>
<td>-0.007</td>
</tr>
<tr>
<td></td>
<td>(0.027)</td>
<td>(0.028)</td>
<td>(0.032)</td>
<td>(0.014)</td>
</tr>
<tr>
<td>Education</td>
<td>-0.266***</td>
<td>-0.289***</td>
<td>-0.289***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.073)</td>
<td>(0.069)</td>
<td>(0.091)</td>
<td></td>
</tr>
<tr>
<td>SEI (std)</td>
<td>-0.018</td>
<td>-0.018</td>
<td>-0.012</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.012)</td>
<td>(0.010)</td>
<td>(0.012)</td>
<td></td>
</tr>
<tr>
<td>Mother’s education</td>
<td>0.020</td>
<td>-0.032</td>
<td>-0.044</td>
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</tr>
<tr>
<td></td>
<td>(0.069)</td>
<td>(0.052)</td>
<td>(0.061)</td>
<td></td>
</tr>
<tr>
<td>Father’s education</td>
<td>0.044</td>
<td>-0.004</td>
<td>-0.004</td>
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<tr>
<td></td>
<td>(0.061)</td>
<td>(0.046)</td>
<td>(0.061)</td>
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<td>Mother’s SEI (std)</td>
<td>0.317</td>
<td>-0.243</td>
<td>-0.243</td>
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<tr>
<td></td>
<td>(0.334)</td>
<td>(0.226)</td>
<td>(0.334)</td>
<td></td>
</tr>
<tr>
<td>Father’s SEI (std)</td>
<td>0.044</td>
<td>0.132</td>
<td>0.132</td>
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<tr>
<td></td>
<td>(0.020)</td>
<td>(0.217)</td>
<td>(0.217)</td>
<td></td>
</tr>
<tr>
<td>Number of siblings</td>
<td>-0.009</td>
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<td>0.010</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.070)</td>
<td>(0.038)</td>
<td>(0.070)</td>
<td></td>
</tr>
<tr>
<td>Missing father’s ed</td>
<td>0.280</td>
<td>0.344</td>
<td>0.344</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.910)</td>
<td>(0.582)</td>
<td>(0.910)</td>
<td></td>
</tr>
<tr>
<td>Missing mother’s ed</td>
<td>0.602</td>
<td>-0.973</td>
<td>-0.973</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.009)</td>
<td>(0.731)</td>
<td>(1.009)</td>
<td></td>
</tr>
<tr>
<td>Missing father’s SEI</td>
<td>1.150</td>
<td>0.201</td>
<td>0.201</td>
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<tr>
<td></td>
<td>(0.782)</td>
<td>(0.526)</td>
<td>(0.782)</td>
<td></td>
</tr>
<tr>
<td>Missing mother’s SEI</td>
<td>0.764</td>
<td>-0.745</td>
<td>-0.745</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.747)</td>
<td>(0.450)</td>
<td>(0.747)</td>
<td></td>
</tr>
<tr>
<td>Non-same-race parent</td>
<td>-0.961</td>
<td>-0.082</td>
<td>-0.082</td>
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</tr>
<tr>
<td></td>
<td>(0.847)</td>
<td>(0.472)</td>
<td>(0.847)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.857</td>
<td>2.206</td>
<td>5.470**</td>
<td>-1.240***</td>
</tr>
<tr>
<td></td>
<td>(1.188)</td>
<td>(1.408)</td>
<td>(2.063)</td>
<td>(0.299)</td>
</tr>
</tbody>
</table>

Model 1 is the bivariate association; Model 2 introduces fixed effects on age and survey center; and model 3 introduces all remaining covariates.  
* p<0.05, ** p<0.01, *** p<0.001
Figure 2. Probability of Arrest by Percentile of Skin Reflectance

Probabilities are estimated at the 1st, 10th, 25th, 50th, 75th, 90th, and 99th percentiles of skin reflectance by race. Probabilities are based on predictions from model 3 of table 2, holding all other covariates at the mean.
Table 3. Ordinary Least Squares Regression Models: Wave 1 Educational Attainment and SEI Score on Percent Skin Reflectance (Coefficients on Percent Skin Reflectance)

<table>
<thead>
<tr>
<th>Model</th>
<th>White Men</th>
<th>Black Men</th>
<th>White Men</th>
<th>Black Men</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIVARIATE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Reflectance</td>
<td>0.041*</td>
<td>0.045***</td>
<td>0.073</td>
<td>0.019***</td>
</tr>
<tr>
<td></td>
<td>(0.020)</td>
<td>(0.010)</td>
<td>(0.118)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>FULL MODEL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Reflectance</td>
<td>0.021</td>
<td>0.029**</td>
<td>-0.001</td>
<td>0.015**</td>
</tr>
<tr>
<td></td>
<td>(0.019)</td>
<td>(0.010)</td>
<td>(0.114)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>N</td>
<td>889</td>
<td>729</td>
<td>867</td>
<td>670</td>
</tr>
</tbody>
</table>

Note: Center and birth year fixed effects included in all models. Standard errors are in parentheses. The full model includes measures of parental education and occupation with indicators for missingness; number of siblings; whether respondent reports having been arrested; and whether either parent is of a different race than the respondent. Occupational prestige models include a control for educational attainment at wave 1.

* $p<0.05$, ** $p<0.01$, *** $p<0.001$
Table 4. Logistic Regression Models: Ever Arrested on Interviewer-Coded Skin Color among Black Men in the NLSY97

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Color</td>
<td>-0.002</td>
<td>-0.005</td>
</tr>
<tr>
<td></td>
<td>(0.035)</td>
<td>(0.037)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.183</td>
<td>0.470</td>
</tr>
<tr>
<td></td>
<td>(0.143)</td>
<td>(0.294)</td>
</tr>
</tbody>
</table>

N = 855

Note: Model 1 is the bivariate association; Model 2 introduces fixed effects on birth year and on census region at the time a respondent was impaneled. The interviewer-coded skin color scale is run as a continuous measure ranging from 0-10, coded such that as in the CARDIA data, lower values denote darker skin.

* $p<0.05$, ** $p<0.01$, *** $p<0.001$