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SKIN TONE EFFECTS AMONG
AFRICAN AMERICANS:
PERCEPTIONS AND REALITY

Joni Hersch

Skin Tone Effects among African Americans: Perceptions and Reality

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Abstract

It is commonly assumed that lighter skinned African Americans receive preferential treatment over darker skinned counterparts. Using individual data from three sources, this paper examines the influence of skin tone on education and on wages. Lighter skin tone has a consistent positive impact on educational attainment but has a less consistent influence on wages. Possible mechanisms by which skin tone differences might influence economic outcomes are investigated, including measurement error, perceived attractiveness, access to integrated schools or work groups, perceived discrimination, and genetic differences. The perception that there is differential treatment on the basis of skin tone is more pronounced than the observed disparities.

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There are considerable racial disparities in economic outcomes and health, as well as evidence that these effects of race differ by skin tone, with darker skin tone associated with inferior economic outcomes and higher blood pressure. Using data from three sources, I find consistent evidence that African Americans with lighter skin tone have higher educational attainment than those with darker skin tone, with some but limited evidence that the racial difference in wages is attenuated by lighter skin tone. I explore explanations for these findings, considering the influence of possible measurement error, perceived attractiveness, access to integrated schools or work groups, perceived discrimination, and genetic differences. The perception that there is differential treatment on the basis of skin tone is more pronounced than the observed disparities.

I. Data sets and background statistics

I examine data from three sources, the National Survey of Black Americans, 1979 – 80 (NSBA), the Multi-City Study of Urban Inequality 1992 – 94 (MCSUI), and the Detroit Area Study, 1995: Social Influence on Health: Stress, Racism, and Health Protective (DAS).[2] The NSBA is a national probability sample of 2,107 respondents drawn to be representative of black

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[1] Harvard Law School. This paper was presented at the AEA/NEA session "Skin Tone Discrimination and Economic Outcomes" at the 2006 Allied Social Science Association meetings. A shorter version of this paper is forthcoming in *American Economic Review Papers and Proceedings* 96 (2), May 2006.

[2] Arthur H. Goldsmith, Darrick Hamilton, and William Darity Jr. (2005) have used both the NSBA and the MCSUI to examine the effect of skin tone on wages among males.

households in the U.S.[3] The MCSUI surveyed individuals in Atlanta, Boston, Detroit, and Los Angeles.[4] There are 8,916 completed household interviews in the four cities, yielding about 3,200 black respondents. The DAS provides a sample of 1,139 respondents in the Detroit area, of which about half are black.[5]

In each data set interviewers categorized the respondents' skin tone into five categories (NSBA and DAS) or three categories (MCSUI). Because few respondents to the NSBA were recorded as 'very light,' I combine the categories light and very light when using these data. Both the NSBA and MCSUI provide information on education, childhood background, and labor market characteristics including earnings. Although the DAS does not include information on earnings, it includes a series of questions about perceptions of treatment not available in other data sets. In addition, respondents to the DAS self-reported their skin tone as one of five categories, uniquely allowing corroboration between self-reports of skin tone and interviewer reports.

Table 1 provides average values of education, hourly wage, and employment status using the NSBA and the MCSUI to identify how skin tone differences may matter. Lighter skin tone is clearly associated with higher employment rates for women and higher educational attainment for both women and men. For example, based on the NSBA, women with light skin tone average 1.7 years more education than women with very dark skin tone, with the corresponding

[3] Jackson, James S., and Gerald Gurin. National Survey of Black Americans, Waves 1-4, 1979-1980, 1987-1988, 1988-1989, 1992 [Computer file]. Conducted by University of Michigan, Survey Research Center. ICPSR version Ann Arbor, MI: Inter-university Consortium for Political and Social Research [producer and distributor], 1997.
[4] Multi-City Study of Urban Inequality, 1992 – 1994: [Atlanta, Boston, Detroit, and Los Angeles]. Bobo, Lawrence, James Johnson, Melvin Oliver, Reynolds Farley, Barry Bluestone, Irene Browne, Sheldon Danziger, Gary Green, Harry Holzer, Maria Krysan, Michael Massagli, Camille Zubrinsky Charles, Joleen Kirschenman, Philip Moss, and Chris Tilly.
[5] Jackson, James, and David Williams. Detroit Area Study: 1995: Social Influence on Health: Stress, Racism, and Health Protective Resources [Computer File]. ICPSR version. Ann Arbor, MI: University of Michigan, Department of Sociology, Detroit Areas Studies [producer], 2002. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2002.

difference of 1.3 years for men. Educational attainment increases as skin tone lightens. Most of the comparisons indicate statistically significant differences between average years of education by skin tone category. The employment rate for women with very dark skin tone in the NSBA is strikingly lower than that of women with lighter skin tone, with a gap of 15 to 20 percentage points.

In contrast, evidence that skin tone affects wages is limited. For both sexes, in both data sets, those in the light category have the highest average hourly wage, but this value is significantly different from those with darker skin only for men in the NSBA. Furthermore, the pattern for women based on the MCSUI does not show an increasing wage from darker to lighter skin tone but instead shows that women in the medium skin tone category have the lowest average wage.

II. Education and wage regressions

To control for factors other than skin tone which may affect education and wages, I estimate education and wage regressions by gender, using the NSBA and MCSUI. The NSBA is comprised of black respondents only so black/white comparisons cannot be made. I include in the MCSUI analyses only those respondents who were non-Hispanic black or white, thus removing from the sample those reported as any other category (mainly Hispanic and Asian.) Both data sets have information on parents' education as well as other characteristics that influence educational attainment, such as residential characteristics when growing up.[6] All equations control for cohort in 10-year intervals. Those reported living mainly outside of the US

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[6] Neither data set has information on school resources, such as class size or teacher salaries that have been the focus of much research in the educational attainment literature, but as the overall finding is that family resources have a larger and more consistent influence on educational outcomes than school resources, this omission should not be critical.

are excluded from the years of education analyses, as are those who are under age 18, over age 65, or missing information on variables included in the equations.

The wage equations are estimated using a conventional log wage specification augmented by measures of skin tone.[7] I exclude the self-employed from the wage analyses, and control for education, tenure, an approximation of actual work experience,[8] whether the job is covered by union contract, whether the worker is a government employee, and marital status. In the equations using the NSBA, I include indicators for residence in the South or an urban area; using the MCSUI, I include indicators for city.

Table 2 reports the coefficients of skin tone for the education and wage regressions, estimated separately by gender and data set.[9] The pattern of effects is similar to the unadjusted averages reported in Table 1. Those with darker skin color attain significantly less education than those with lighter skin color. Adjustment for characteristics such as parents' education cuts the magnitude of the disparity by up to half. There is a clear pattern, with the educational attainment penalty smaller as skin tone lightens, although the coefficients are not always significantly different from the coefficient in adjacent skin tone groups.

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[7] I calculate hourly wage in the NSBA from reported information on earnings, period of earnings, and hours worked. Hourly wage is provided in the MCSUI using a similar procedure.

[8] Respondents to the NSBA were asked in what year they first got a job that they thought of as a regular, permanent job, and then were asked whether there were years they did not work full-time for most of the year, reporting the reason for not working full-time (e.g., child care, health.) I subtract the total number of years not worked full-time from the total number of years since the first permanent job. Note that this may understate actual years of work experience as respondents were not requested to report partial years not worked full-time. In the MCSUI, respondents reported their age when they left full-time schooling, and separately reported about what share of those years they had worked full-time. I use this information to estimate full-time experience. Although potential experience (measured as age – education – 5) is a commonly used proxy for experience when actual experience is not reported, potential experience overstates actual experience for women, so this approximation allows me to adjust for work history differences in equations estimated by gender. The work experience questions were not asked in Detroit; to include observations from Detroit in the sample I impute experience for those in Detroit. The imputation uses education, sex, marital status, age and its square, number of children under age 18, race, employment status, and tenure.

[9] Complete regression results for all specifications are reported in the Appendix.

The wage equations likewise show a pattern similar to those indicated by the unadjusted averages of Table 1. Using NSBA data, there is an earnings penalty of about 20 percent for all men with darker skin tone relative to men with light or very light skin tone, although there are no significant differences in the magnitude of the disparity within the darker skin tone categories. Data from the MCSUI shows that women with medium skin tone face a wage penalty relative to women with light skin tone. However, the wage regressions do not show the pattern of advantage as skin tone lightens observed in the education regressions.

III. Possible mechanisms

The preceding results indicate that there is a consistent effect of skin tone on educational attainment, with suggestive but less consistent support for an effect of skin tone on wages. In this section I explore possible mechanisms by which skin tone differences may influence economic outcomes.

Note that measurement error could bias any estimated effects of skin color. In contrast to studies in the medical literature that measure skin color by a reflectance meter, skin tone is reported by interviewer observation in the NSBA and MCSUI. Despite skin tone being reported by trained interviewers, both random and systematic measurement error may be considerable and may bias estimated skin tone effects. Calculations from the DAS show substantial disagreement between self- and interviewer reports of skin tone, with a match for only 65 percent of the sample of black respondents. While disagreement is not necessarily identical to measurement error, the disparity does have a large random component, as mismatched respondents were about as likely to be reported by interviewers as darker than as lighter relative to self-reports. Evidence from the MCSUI shows that non-black interviewers systematically reported skin tones of black

respondents as darker than did black interviewers (Mark E. Hill 2002). If lighter-skinned blacks have higher earnings, but are reported as darker, the negative effect of darker skin tone on wages is muted. Regressions using the MCSUI restricted to the sample in which black respondents were interviewed by black interviewers suggest such bias is possible, with the estimated negative effect on wages of dark skin 26 percent greater for men than in estimates using the full sample.

A possible explanation for the disparate results for education and wages may lie in differential employment rates on the basis of skin color. Schooling is mandatory up to a certain age regardless of skin color. But if those with darker skin color expect any wage offer to fall below their reservation wage, we may find that selection into the labor market on the basis of skin color results in similar wages for all wage earners. The employment rates reported in Table 1 suggest that such selection may occur among women, particularly women with very dark skin color, but is probably not a concern for men, as there are no differences in employment rates for men on the basis of skin color.

For further evidence on how skin tone may matter, Table 3 provides statistics on various characteristics reported in the NSBA or DAS that may be associated with economic outcomes, with access to social capital, or with perceptions of differential treatment on the basis of race or skin tone. I use three groupings of dark, medium, and light.

One possible explanation for skin tone disparities is that those with lighter skin are considered more attractive, and attractiveness itself is associated with superior economic outcomes (Daniel S. Hamermesh and Jeffrey Biddle 1994.) Data from both the NSBA and the DAS show that interviewers were far more likely to rate those with lighter skin as more attractive than average. However, inclusion of this variable in both education and wage equations using the NSBA shows that, although those more attractive have both higher education attainment, the

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effect of skin tone on education is largely unaffected by inclusion of attractiveness in the estimates. Furthermore, attractiveness does not affect wages.

Lighter skin color may influence economic outcomes by providing access to integrated schools or work environments. There is evidence in the NSBA that women with light skin were somewhat less likely to attend predominantly black schools, and that men with light skin are less likely to work in a predominantly black work group. If schools with more white students are of better quality, then some of the advantage of lighter skin may arise from access to better quality schools. However, inclusion of racial composition of elementary school shows no influence of attending a predominantly black school on educational attainment. Jobs with a greater proportion of white workers will pay better, reflecting the widely documented racial pay disparity. Estimates show that wages are lower for those in work groups that are predominantly black, but inclusion of this variable does not change the general findings.

The DAS specifically asks respondents whether they thought their skin shade affected how they were treated by white and by black people. Those with light skin tone report dramatically better treatment from whites than do blacks with darker skin tones, as well as somewhat better treatment from blacks. Although there is a general perception of differential treatment on the basis of skin tone, respondents do not report specific treatment that varies by skin tone, such as whether they face unfair police treatment, whether they are treated as less smart, or whether people act afraid of them. It is hard to reconcile such strong perceptions of general preferential treatment with limited evidence of specific treatment differentials documented in this paper.

Looming over questions of all racial disparities is whether these differences are due to genetic factors. Analysis of skin tone differences potentially could resolve this debate, with some researchers arguing that the amount of white ancestry is indexed by skin tone (Richard

Lynn 2002). Race affects wages, but gradation of skin tone generally does not. These results suggest that the proportion of white ancestry is not a dominant factor, so that genetic effects are not important determinants of racial disparities.

References

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Appendix Table 1: National Survey of Black Americans
Dependent variable: Years of education

	Female	Male
Very dark	-1.156**	-1.065*
	(0.328)	(0.441)
Dark	-0.534*	-0.793*
	(0.228)	(0.345)
Medium	-0.403+	-0.476
	(0.206)	(0.335)
Born 1928 - 1937	1.497**	1.147**
	(0.244)	(0.352)
Born 1938 - 1947	1.985**	2.254**
	(0.234)	(0.335)
Born 1948 - 1957	2.020**	2.061**
	(0.227)	(0.319)
Born after 1957	1.279**	0.900*
	(0.301)	(0.413)
Maximum of parents' education	0.213**	0.179**
	(0.026)	(0.038)
Parents' education missing	0.475	0.322
	(0.292)	(0.437)
Number of siblings	-0.108**	-0.097**
	(0.022)	(0.031)
Raised in South	-0.345+	-0.404
	(0.178)	(0.247)
Raised in rural area	-0.541**	-0.568*
	(0.203)	(0.281)
Raised in large city	0.352+	0.419+
	(0.180)	(0.254)
Constant	9.526**	10.010**
	(0.392)	(0.595)
Observations	1047	637
R-squared	0.33	0.29
p-value[a]		
Very Dark = Dark	0.05	0.47
Very Dark = Medium	0.01	0.10
Dark = Medium	0.47	0.19

Standard errors in parentheses, + significant at 10%; * significant at 5%; ** significant at 1%.
This table provides complete regression results for Table 2, Panel A, columns 1 and 2.
a. p-value for tests of hypothesis of equality of coefficients on indicated variables.

Dependent variable: Ln(real wage)

	Female	Male
Very dark	0.059	-0.214**
	(0.069)	(0.079)
Dark	0.014	-0.175**
	(0.042)	(0.063)
Medium	0.038	-0.207**
	(0.038)	(0.061)
Experience	0.012**	0.013*
	(0.004)	(0.005)
Experience squared/100	-0.037**	-0.035**
	(0.010)	(0.012)
Tenure	0.025**	0.034**
	(0.005)	(0.007)
Tenure squared/100	-0.046**	-0.067**
	(0.012)	(0.022)
Education	0.078**	0.059**
	(0.006)	(0.007)
Government	0.005	-0.080*
	(0.032)	(0.040)
Union contract	0.151**	0.238**
	(0.033)	(0.041)
South	-0.231**	-0.101*
	(0.035)	(0.044)
Urban	0.035	0.076+
	(0.035)	(0.042)
Married	0.016	0.062
	(0.030)	(0.040)
Constant	0.432**	0.912**
	(0.092)	(0.122)
Observations	473	366
R-squared	0.49	0.47
p-value[a]		
Very Dark = Dark	0.50	0.55
Very Dark = Medium	0.74	0.91
Dark = Medium	0.49	0.45

Standard errors in parentheses, + significant at 10%; * significant at 5%; ** significant at 1%.
This table provides complete regression results for Table 2, Panel A, columns 3 and 4.
a. p-value for tests of hypothesis of equality of coefficients on indicated variables.

Appendix Table 3: National Survey of Black Americans
Dependent variable: Years of education

	Female	Male
Very dark	-1.004**	-1.194*
	(0.352)	(0.463)
Dark	-0.559*	-0.777*
	(0.243)	(0.366)
Medium	-0.381+	-0.552
	(0.219)	(0.353)
Born 1928 - 1937	1.667**	1.410**
	(0.259)	(0.366)
Born 1938 - 1947	2.372**	2.767**
	(0.246)	(0.344)
Born 1948 - 1957	2.706**	2.780**
	(0.232)	(0.317)
Born after 1957	2.015**	1.772**
	(0.309)	(0.409)
Number of siblings	-0.147**	-0.132**
	(0.023)	(0.031)
Raised in South	-0.545**	-0.615*
	(0.189)	(0.254)
Raised in rural area	-0.750**	-0.679*
	(0.215)	(0.292)
Raised in large city	0.374+	0.564*
	(0.192)	(0.264)
Attractive - above average	0.691**	0.396+
	(0.165)	(0.225)
Constant	10.850**	11.137**
	(0.322)	(0.479)
Observations	1032	631
R-squared	0.27	0.24
p-value[a]		
Very Dark = Dark	0.18	0.29
Very Dark = Medium	0.05	0.09
Dark = Medium	0.35	0.37

Standard errors in parentheses. + significant at 10%; * significant at 5%; ** significant at 1%.
These equations add the indicator variable for above average attractiveness to the equations reported in Table 2, Panel A, columns 1 and 2.
a. p-value for tests of hypothesis of equality of coefficients on indicated variables.

Appendix Table 4: National Survey of Black Americans
Dependent variable: Ln(real wage)

	Female	Male
Very dark	0.079	-0.221**
	(0.071)	(0.080)
Dark	0.016	-0.181**
	(0.043)	(0.064)
Medium	0.033	-0.212**
	(0.038)	(0.062)
Experience	0.012**	0.013*
	(0.004)	(0.005)
Experience squared/100	-0.036**	-0.035**
	(0.010)	(0.012)
Tenure	0.026**	0.033**
	(0.005)	(0.007)
Tenure squared/100	-0.046**	-0.066**
	(0.012)	(0.022)
Education	0.076**	0.059**
	(0.006)	(0.007)
Government	0.014	-0.082*
	(0.032)	(0.040)
Union contract	0.143**	0.237**
	(0.034)	(0.041)
South	-0.234**	-0.098*
	(0.035)	(0.044)
Urban	0.040	0.075+
	(0.035)	(0.042)
Married	0.018	0.062
	(0.030)	(0.040)
Attractive - above average	0.030	-0.025
	(0.030)	(0.038)
Constant	0.433**	0.924**
	(0.092)	(0.124)
Observations	467	363
R-squared	0.49	0.46
p-value[a]		
Very Dark = Dark	0.36	0.55
Very Dark = Medium	0.49	0.89
Dark = Medium	0.64	0.48

Standard errors in parentheses. + significant at 10%; * significant at 5%; ** significant at 1%.
These equations add the indicator variable for above average attractiveness to the equations
reported in Table 2, Panel A, columns 3 and 4.
a. p-value for tests of hypothesis of equality of coefficients on indicated variables.

Appendix Table 5: National Survey of Black Americans
Dependent variable: Years of education

	Female	Male
Very dark	-1.285**	-1.375**
	(0.347)	(0.455)
Dark	-0.747**	-0.983**
	(0.240)	(0.359)
Medium	-0.498*	-0.735*
	(0.218)	(0.346)
Born 1928 - 1937	1.658**	1.339**
	(0.257)	(0.365)
Born 1938 - 1947	2.470**	2.708**
	(0.243)	(0.344)
Born 1948 - 1957	2.755**	2.795**
	(0.229)	(0.315)
Born after 1957	2.121**	1.728**
	(0.309)	(0.410)
Number of siblings	-0.140**	-0.136**
	(0.023)	(0.031)
Raised in South	-0.509*	-0.426
	(0.205)	(0.281)
Raised in rural area	-0.666**	-0.584*
	(0.214)	(0.292)
Raised in large city	0.386*	0.545*
	(0.191)	(0.265)
Elementary school all or mostly black	-0.118	-0.520
	(0.226)	(0.328)
Constant	11.240**	11.824**
	(0.326)	(0.496)
Observations	1043	633
R-squared	0.25	0.23
p-value[a]		
Very Dark = Dark	0.10	0.32
Very Dark = Medium	0.03	0.09
Dark = Medium	0.19	0.33

Standard errors in parentheses. * significant at 5%; ** significant at 1%. These equations add the indicator variable for racial composition of elementary school to the equations reported in Table 2, Panel A, columns 1 and 2.

a. p-value for tests of hypothesis of equality of coefficients on indicated variables.

Appendix Table 6: National Survey of Black Americans
Dependent variable: Ln(real wage)

	Female	Male
Very dark	0.012	-0.176*
	(0.078)	(0.080)
Dark	0.023	-0.143*
	(0.049)	(0.068)
Medium	0.049	-0.176**
	(0.043)	(0.066)
Experience	0.009+	0.009
	(0.005)	(0.006)
Experience squared/100	-0.022+	-0.024+
	(0.013)	(0.013)
Tenure	0.030**	0.032**
	(0.006)	(0.007)
Tenure squared/100	-0.077**	-0.066**
	(0.023)	(0.023)
Education	0.073**	0.050**
	(0.007)	(0.008)
Government	-0.004	-0.082+
	(0.035)	(0.042)
Union contract	0.177**	0.225**
	(0.036)	(0.042)
South	-0.196**	-0.082+
	(0.040)	(0.047)
Urban	0.061	0.092*
	(0.039)	(0.044)
Married	0.026	0.043
	(0.034)	(0.042)
Work group all or mostly black	-0.106**	-0.208**
	(0.033)	(0.041)
Constant	0.491**	1.129**
	(0.110)	(0.128)
Observations	343	302
R-squared	0.50	0.49
p-value[a]		
Very Dark = Dark	0.88	0.62
Very Dark = Medium	0.61	0.99
Dark = Medium	0.52	0.46

Standard errors in parentheses. + significant at 10%; * significant at 5%; ** significant at 1%.
These equations add the indicator variable for racial composition of work group to the equations reported in Table 2, Panel A, columns 3 and 4.
a. p-value for tests of hypothesis of equality of coefficients on indicated variables.

Appendix Table 7: Multi-City Study of Urban Inequality
Dependent variable: Years of Education

	Female	Male
Dark	-0.403*	-0.968**
	(0.171)	(0.204)
Medium	-0.267	-0.507**
	(0.163)	(0.178)
Light	0.092	-0.424+
	(0.178)	(0.224)
Born 1938 - 1947	0.402*	0.415
	(0.156)	(0.304)
Born 1948 - 1957	0.343*	0.620*
	(0.165)	(0.273)
Born 1958 - 1967	0.002	0.249
	(0.144)	(0.293)
Born after 1967	-0.282+	-0.234
	(0.151)	(0.352)
Maximum of parents' education	0.244**	0.254**
	(0.025)	(0.025)
Parents' education missing	1.044**	1.091**
	(0.215)	(0.363)
Raised in South	-0.135	-0.232
	(0.186)	(0.175)
Constant	10.446**	10.629**
	(0.314)	(0.410)
Observations	2682	1729
R-squared	0.20	0.25
p-value[a]		
Dark = Medium	0.07	0.00
Medium = Light	0.00	0.67
Dark = Light	0.00	0.00

Robust standard errors in parentheses adjusted for sampling design using the variable ustratum.
+ significant at 10%; * significant at 5%; ** significant at 1%. This table provides complete
regression results for Table 2, Panel B, columns 1 and 2.
a. p-value for tests of hypothesis of equality of coefficients on indicated variables.

Appendix Table 8: Multi-City Study of Urban Inequality
Dependent variable: Ln(real wage)

	Female	Male
Dark	-0.146**	-0.206**
	(0.031)	(0.028)
Medium	-0.172**	-0.185**
	(0.030)	(0.029)
Light	-0.113**	-0.146*
	(0.036)	(0.062)
Full time experience	0.020**	0.018**
	(0.003)	(0.005)
Full time experience squared/100	-0.042**	-0.026*
	(0.010)	(0.011)
Tenure	0.046**	0.037**
	(0.004)	(0.005)
Tenure squared/100	-0.089**	-0.073**
	(0.016)	(0.015)
Education	0.108**	0.078**
	(0.005)	(0.008)
Government	-0.005	0.005
	(0.021)	(0.036)
Union contract	0.078*	0.104*
	(0.035)	(0.047)
Married	-0.003	0.158**
	(0.029)	(0.023)
Atlanta	-0.018	-0.077
	(0.053)	(0.051)
Boston	0.105+	-0.092*
	(0.057)	(0.035)
Los Angeles	0.085*	0.030
	(0.041)	(0.041)
Constant	0.465**	1.062**
	(0.080)	(0.128)
Observations	1724	1161
R-squared	0.44	0.42
p-value[a]		
Dark = Medium	0.39	0.55
Medium = Light	0.05	0.54
Dark = Light	0.22	0.31

Robust standard errors in parentheses adjusted for sampling design using the variable ustratum. +
significant at 10%; * significant at 5%; ** significant at 1%. This table provides complete
regression results for Table 2, Panel B, columns 3 and 4.

a. p-value for tests of hypothesis of equality of coefficients on indicated variables.

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Appendix Table 9: Multi-City Study of Urban Inequality
Dependent Variable: Years of education

	Female	Male
Dark	-0.439+	-1.049**
	(0.229)	(0.234)
Medium	-0.272	-0.620**
	(0.177)	(0.196)
Light	0.096	-0.500+
	(0.168)	(0.260)
Born 1938 - 1947	0.292+	0.408
	(0.152)	(0.311)
Born 1948 - 1957	0.199	0.641*
	(0.163)	(0.289)
Born 1958 - 1967	-0.071	0.185
	(0.137)	(0.292)
Born after 1967	-0.379*	-0.250
	(0.136)	(0.337)
Maximum of parents' education	0.245**	0.256**
	(0.026)	(0.025)
Parents' education missing	0.941**	1.045**
	(0.204)	(0.357)
Raised in South	-0.129	-0.237
	(0.189)	(0.174)
Constant	10.520**	10.634**
	(0.330)	(0.399)
Observations	2430	1561
R-squared	0.21	0.26
p-value[a]		
Dark = Medium	0.03	0.03
Medium = Light	0.00	0.55
Dark = Light	0.00	0.01

Robust standard errors in parentheses adjusted for sampling design using the variable ustratum.
+ significant at 10%; * significant at 5%; ** significant at 1%. Sample composed of white
respondents and black respondents interviewed by black interviewer.
a. p-value for tests of hypothesis of equality of coefficients on indicated variables.

Appendix Table 10: Multi-City Study of Urban Inequality
Dependent Variable: Ln(real wage)

	Female	Male
Dark	-0.162**	-0.260**
	(0.034)	(0.042)
Medium	-0.200**	-0.183**
	(0.027)	(0.030)
Light	-0.118**	-0.138+
	(0.035)	(0.079)
Full time experience	0.018**	0.020**
	(0.004)	(0.005)
Full time experience squared/100	-0.038**	-0.031*
	(0.011)	(0.011)
Tenure	0.045**	0.039**
	(0.004)	(0.005)
Tenure squared/100	-0.084**	-0.077**
	(0.018)	(0.015)
Education	0.109**	0.075**
	(0.005)	(0.009)
Government	-0.004	0.001
	(0.023)	(0.038)
Union contract	0.091*	0.079+
	(0.039)	(0.046)
Married	-0.003	0.151**
	(0.030)	(0.027)
Atlanta	-0.017	-0.074
	(0.046)	(0.046)
Boston	0.065	-0.101*
	(0.064)	(0.039)
Los Angeles	0.079*	0.036
	(0.034)	(0.041)
Constant	0.471**	1.079**
	(0.081)	(0.134)
Observations	1535	1024
R-squared	0.44	0.43
p-value[a]		
Dark = Medium	0.32	0.04
Medium = Light	0.01	0.55
Dark = Light	0.19	0.11

Robust standard errors in parentheses adjusted for sampling design using the variable ustratum.
+ significant at 10%; * significant at 5%; ** significant at 1%. Sample composed of white respondents and black respondents interviewed by black interviewer.
a. p-value for tests of hypothesis of equality of coefficients on indicated variables.

Table 1: Education, Wage, and Employment Status by Skin Tone Category

	Very dark	Dark	Medium	Light	Notes[a]
Panel A: National Survey of Black Americans					
Female					
Education (years)	10.44	10.95	11.52	12.17	b,c,d,e, f
Hourly wage ($1994)	8.96	8.55	9.29	9.69	
Ln(hourly wage) ($1994)	1.48	1.48	1.53	1.59	
Employed if age 18 - 65	43.75	58.92	61.71	64.56	a,b,c
Male					
Education (years)	11.14	11.18	11.75	12.41	c,e
Hourly wage ($1994)	11.29	11.62	11.55	13.97	e,f
Ln(hourly wage) ($1994)	1.68	1.76	1.76	1.97	c,e,f
Employed if age 18 - 65	77.61	77.57	79.32	78.89	
Panel B: Multi-City Study of Urban Inequality					
Female					
Education (years)		12.53	12.79	13.24	d,e,f
Hourly wage ($1994)		10.16	9.71	10.55	
Ln(hourly wage) ($1994)		2.17	2.13	2.21	
Employed if age 18 - 65		50.29	56.82	58.44	d,e
Male					
Education (years)		12.45	13.13	13.23	d,e
Hourly wage ($1994)		11.11	11.72	12.44	
Ln(hourly wage) ($1994)		2.27	2.33	2.39	
Employed if age 18 - 65		64.49	69.57	69.89	

Notes. Means calculated using respondents age 18-65. Education means calculated from respondents raised in the U.S. and not missing information on variables in education regressions reported in Table 2. Wage means calculated from employed respondents, not self-employed, with real wage between $2 and $100 per hour, not missing values on variables in wage regressions reported in Table 2.

a. Significant differences in means of skin tone categories at the 10-percent level based on Bonferroni multiple comparison test, where a – compares very dark to dark; b – compares very dark to medium; c – compares very dark to light; d – compares dark to medium; e – compares dark to light; f – compares medium to light.

Table 2: Skin Tone Effects on Educational Attainment and Wage

| | Dependent variable: | | | |
| | Education[a] | | Ln(wage)[b] | |
	Female	Male	Female	Male
Panel A: National Survey of Black Americans				
Very dark	-1.156**	-1.065*	0.059	-0.214**
	(0.328)	(0.441)	(0.069)	(0.079)
Dark	-0.534*	-0.793*	0.014	-0.175**
	(0.228)	(0.345)	(0.042)	(0.063)
Medium	-0.403+	-0.476	0.038	-0.207**
	(0.206)	(0.335)	(0.038)	(0.061)
N	1047	637	473	366
R-squared	0.33	0.29	0.49	0.47
p-value[c]				
Very Dark = Dark	0.05	0.47	0.50	0.55
Very Dark = Medium	0.01	0.10	0.74	0.91
Dark = Medium	0.47	0.19	0.49	0.45
Panel B: Multi-City Study of Urban Inequality				
Dark	-0.403*	-0.968**	-0.146**	-0.206**
	(0.171)	(0.204)	(0.027)	(0.032)
Medium	-0.267	-0.507**	-0.172**	-0.185**
	(0.163)	(0.178)	(0.026)	(0.035)
Light	0.092	-0.424+	-0.113**	-0.146**
	(0.178)	(0.224)	(0.038)	(0.056)
N	2682	1729	1724	1161
R-squared	0.20	0.25	0.44	0.42
p-value[c]				
Dark = Medium	0.07	0.00	0.39	0.55
Medium = Light	0.00	0.67	0.05	0.54
Dark = Light	0.00	0.00	0.22	0.31

Notes. Omitted category using NSBA is blacks with light/very light skin tone. Omitted category using MCSUI is whites. + significantly different from 0 at the 10-percent level; * significantly different from 0 at the 5-percent level; ** significantly different from 0 at the 1-percent level. Standard errors in parentheses, with standard errors in regressions based on MCSUI adjusted for sample stratification design.

a. Additional variables in the education regressions are birth cohort, maximum of parents' education, and an indicator for whether raised in the South. Equations using NSBA also include number of siblings and indicators for whether raised in rural area or raised in large city.
b. Additional variables in the wage regressions are experience, experience squared, tenure, tenure squared, education, and indicators for government employment, union contract, married (NSBA and MCSUI), and whether living in the South or an urban area (NSBA) or city indicator (MCSUI).
c. p-value for tests of hypothesis of equality of coefficients on indicated variables.

Table 3: Racial Environment and Treatment by Skin Tone Category

	Dark	Medium	Light	Notes[a]
Panel A: National Survey of Black Americans				
Female				
Attractive – above average	30.1	44.5	55.8	a, b, c
Elementary school all or mostly black	85.3	82.4	74.2	a, b
Neighborhood growing up all or mostly black	84.2	79.9	76.7	b
Present neighborhood all or mostly black	82.6	77.8	72.2	b
Work group all or mostly black	45.9	44.1	37.6	
Male				
Attractive – above average	33.4	39.3	61.8	b, c
Elementary school all or mostly black	85.9	84.0	81.0	
Neighborhood growing up all or mostly black	82.6	80.2	80.4	
Present neighborhood all or mostly black	78.9	73.0	68.6	
Work group all or mostly black	43.7	49.4	32.1	c
Panel B: Detroit Area Study				
Female				
Attractive – above average	36.3	35.2	50.9	b, c
Work group all or mostly black	51.9	48.1	47.3	
Unfair police treatment	24.2	16.1	23.1	
Treated as not smart	23.3	16.6	13.0	
People act afraid	12.2	10.1	5.6	
Whites treat better due to skin color	8.9	8.2	39.8	b, c
Blacks treat better due to skin color	4.4	8.2	17.0	b, c
Male				
Attractive – above average	40.0	28.3	63.6	b, c
Work group all or mostly black	30.8	32.7	32.0	
Unfair police treatment	60.0	60.9	57.6	
Treated as not smart	16.4	17.8	18.8	
People act afraid	27.3	22.0	12.5	
Whites treat better due to skin color	0.0	13.3	42.4	a, b, c
Blacks treat better due to skin color	1.9	10.9	12.5	

Notes. Based on interviewer report of skin color. All values are percentages.

a. Indicates differences in means. Significant differences at the 10-percent level based on Bonferroni multiple comparison test where a – compares dark to medium; b – compares dark to light; c – compares medium to light.