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# The Myth of Racial Discrimination in Pay in the United States

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**The analyses of the General Social Survey data from 1974 to 2000 replicate earlier findings from the National Longitudinal Survey of Youth that racial disparity in earnings disappears once cognitive ability is controlled for. The results are robust across many alternative specifications, and further show that blacks receive significantly greater returns to their cognitive ability than nonblacks. The trend data show that there was no sign of racial discrimination in the United States as early as 1970s. The analyses call into question the necessity of and justification for preferential treatment of ethnic minorities. Copyright © 2005 John Wiley & Sons, Ltd.**

## INTRODUCTION

It is commonplace to observe that there is widespread 'racial discrimination' in the United States. Every introductory sociology textbook has a chapter on 'racial inequality,' the main point of which is to advance the view that 'racial discrimination' by white Americans is largely responsible for the lower socioeconomic status of black Americans. Economists (Simister, 2000) and sociologists (Cancio *et al*., 1996) commonly assume that the difference in earnings between whites and blacks, after controlling for human capital factors such as education, work experience and job tenure, necessarily reflects 'discrimination,' where employers pay equally qualified whites and blacks performing the same job differently or the existence of a dual (Doeringer and Piore, 1971) or segmented (Bonacich, 1972) labor market where blacks disproportionately occupy less desirable, low-paying jobs.

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Wilson (1978) was the first to argue that race *per se* did not affect social and economic outcomes of Americans. There have since been several studies with the National Longitudinal Survey of Youth data, all of which show that Wilson was presciently correct (O'Neill, 1990; Herrnstein and Murray, 1994, Chapter 14; Farkas and Vicknair, 1996; Farkas *et al*., 1997), although the ultimate cause of racial disparity in earnings does not appear to be social class, as Wilson (1978) argued, but is instead cognitive abilities. All of these studies show that, while blacks earn significantly less than whites in the United States, the race difference in earnings disappears entirely once their cognitive abilities are controlled for. In this brief note, I replicate these earlier findings from the National Longitudinal Survey of Youth with data from the General Social Surveys (GSS). My results, robust across various statistical specifications, show that there is no evidence for racial discrimination in pay in the United States, and race instead is a proxy measure for cognitive ability. I also present trend data to demonstrate that there does not appear to have been any sign of racial discrimination in pay in the United States in the last 30 years.

## DATA

The National Opinion Research Center at the University of Chicago has administered the GSS either annually or biennially since 1972. Personal interviews are conducted with a nationally representative sample of non-institutionalized adults in the United States. The sample size is about 1500 for each annual survey, and about 3000 for each biennial one. The exact questions asked in the survey vary by the year; the crucial questions about verbal IQ were not asked before 1974. The total sample size from 1974 to 2000 is 37 819, even though all of the analyses below are conducted with smaller samples due to listwise deletion of cases for missing data. The questions measuring verbal intelligence are asked only of a subset of the sample each year. The GSS data are available to download at the web site of Survey Documentation and Analysis at the University of California —Berkeley (http://csa.berkeley.edu/archive.htm).

The Appendix presents the definitions of all the variables used in the multiple regression equations presented below, with their means and standard deviations. They are all standard social demographic variables often used to predict wages. All of their definitions are straightforward, but some explanations are in order for the binary variable for race (1 = black, 0 = otherwise). The GSS classifies respondents into three racial categories: white, black, and other. I use the black–nonblack dichotomy, rather than the more common white–nonwhite dichotomy, for two reasons. First, it makes more phylogenetic sense to group the 'other' category (which are mostly Asians) with whites, rather than blacks (Rushton, 1995). Second, and more importantly, given that Asians have significantly greater earnings than whites (11.39 vs 10.64, $t = 3.91$, $p < 0.001$), who in turn have significantly greater earnings than blacks (10.64 vs 9.50, $t = 11.02$, $p < 0.001$), using the black–nonblack dichotomy provides a statistically more conservative test of my hypothesis that there is no racial discrimination in pay in the United States than using the white–nonwhite dichotomy. At any rate, all of the statistical results presented below are identical if I exclude 834 Asians (2.2%) from my sample. (These results are available from the author upon request.)

The GSS measures the verbal intelligence of its respondents by asking them to select a synonym for a word out of five candidates. The questions are similar to those found in the verbal section of the Graduate Record Exams (GREs). Each respondents answers 10 of these questions, and their total score thus varies from 0 to 10. I use the total number of correct responses as a crude measure of verbal intelligence in the following analyses.

## MAIN ANALYSIS

Table 1 presents the results for the entire sample from 1974 to 2000. Column (1) shows that, even after controlling for age, sex, marital status, education, union membership, occupational prestige, and survey year, race has a significant ($p < 0.01$) effect on earnings; blacks earn significantly less than nonblacks. The multiple regression analysis demonstrates that it is not entirely because blacks have less human capital, because they are less likely to have high-paying unionized jobs, or because they are more likely to be in a lower-tier labor market with less prestigious jobs, that they have lower earnings. The negative effect of race remains large and significant even after controlling for all these relevant factors.

However, once I enter the measure of verbal intelligence, which has a significant ($p < 0.01$) effect on earnings, race ceases to be significant (Table 1, Column 2). All the other variables in the equation are still equally strongly significant in their effects on earnings. It is especially important to note that the measure of verbal IQ is *not* a substitute for the measure of educational attainment; education remains strongly significant ($p < 0.0001$) even after I include verbal IQ in the equation. The inclusion of verbal IQ eliminates the significant effect of race *only*.

Now, because I have had to halve the sample from 16 720 to 8291 (recall that the question measuring verbal IQ is asked only of one-half of the sample in each survey), critics might argue that the nonsignificance of the partial effect of race on earnings is a result of the small sample size. This is unlikely for two reasons. First, all of the other variables in the equation retain their maximal significance ($p < 0.0001$); race is the only variable that becomes nonsignificant after I enter verbal IQ in the equation. More importantly, Table 1, Column (3) demonstrates that the nonsignificant partial effect of race on earnings is not an artifact of the small sample size. For this equation, I select a random 25% sample from the full sample of all

 

**Table 1. The Effect of Race on Income in the United States (1974–2000) Ordinary Least Squares Estimation**

| | (1) IQ not controlled | (2) IQ controlled | (3) IQ not controlled 25% random subsample |
|---|---|---|---|
| Race (black = 1) | −0.3120** | −0.1767 | −0.6954*** |
| | (0.0983) | (0.1397) | (0.2023) |
| Age | 0.0509**** | 0.0502**** | 0.0539**** |
| | (0.0025) | (0.0036) | (0.0050) |
| Sex (Male = 1) | 3.017**** | 2.9630**** | 3.0153**** |
| | (0.0636) | (0.0917) | (0.1287) |
| Marital status (Married = 1) | 0.6245**** | 0.5591**** | 0.6531**** |
| | (0.0656) | (0.0943) | (0.1325) |
| Education | 0.3451**** | 0.3243**** | 0.3316**** |
| | (0.0134) | (0.0216) | (0.0269) |
| Union membership (Yes = 1) | 1.8683**** | 1.8945**** | 1.8726**** |
| | (0.0839) | (0.1206) | (0.1699) |
| Occupational prestige | 0.0922**** | 0.0912**** | 0.0946**** |
| | (0.0027) | (0.0040) | (0.0055) |
| Year | 0.2704**** | 0.2712**** | 0.2723**** |
| | (0.0043) | (0.0063) | (0.0087) |
| Verbal IQ | | 0.0856** | |
| | | (0.0261) | |
| Constant | −539.6146 | −541.3700 | −543.3780 |
| $R^2$ | 0.4308 | 0.4168 | 0.4371 |
| $n$ | 16 720 | 8291 | 4126 |

Note: Main entries are unstandardized regression coefficients. Numbers in parentheses are standard errors. *$p<0.05$, **$p<0.01$, ***$p<0.001$, ****$p<0.0001$.

respondents, and estimate the same equation as in Column (1). Despite the fact that the final sample size for the reestimation in Column (3) is 4126, less than half the sample size for Column (2), the partial effect of race on earnings is highly statistically significant ($p<0.001$). Thus, the disappearance of the partial effect of race on earnings is not attributable to the small sample size, but instead to the inclusion of a measure of cognitive ability in the equation.

## SUPPLEMENTAL ANALYSES

### Ordinal (Ordered Logit) Regression Estimation

Technically, it is not proper to use ordinary least squares (OLS) estimation (as I do in Table 1) to analyze earnings in the GSS data, because they are measured, not by an interval-ratio variable (such as dollars), but by 23 equidistant ordinal categories. Strictly speaking, one should use ordinal regression technique (McCullagh, 1980), even though most researchers using the GSS earnings get away with using the OLS, because the categories are many and equidistant.

Table 2 presents the results of ordered logit reestimation of Equations (1) and (2) from Table 1. The results are identical to those presented in Table 1. When cognitive ability is not included in the equation, race has a statistically significant ($p<0.001$) effect on earnings, and all the control variables have very strongly significant ($ps<0.0001$) effects. When cognitive ability is included, race ceases to be significant, cognitive ability has a positive effect on earnings at the same statistical level of significance as race does in

 

**Table 2. The Effect of Race on Income in the United States (1974–2000) Ordinal Regression (Ordered Logit) Estimation**

| | | (1) IQ not controlled | (2) IQ controlled |
|---|---|---|---|
| Race (black = 1) | | −0.1418*** | −0.0970 |
| | | (0.0422) | (0.0591) |
| Age | | 0.0256**** | 0.0249**** |
| | | (0.0011) | (0.0015) |
| Sex (Male = 1) | | 1.3442**** | 1.2960**** |
| | | (0.0287) | (0.0407) |
| Marital status (Married = 1) | | 0.2649**** | 0.2378**** |
| | | (0.0282) | (0.0399) |
| Education | | 0.1592**** | 0.1464**** |
| | | (0.0059) | (0.0093) |
| Union membership (Yes = 1) | | 0.7612**** | 0.7460**** |
| | | (0.0364) | (0.0514) |
| Occupational prestige | | 0.0417**** | 0.0401**** |
| | | (0.0012) | (0.0017) |
| Year | | 0.1230**** | 0.1208**** |
| | | (0.0020) | (0.0029) |
| Verbal IQ | | | 0.0422*** |
| | | | (0.0110) |
| Threshold | ($Y = 1$) | 246.3125 | 241.8313 |
| | ($Y = 2$) | 247.3787 | 242.9298 |
| | ($Y = 3$) | 247.8236 | 243.3486 |
| | ($Y = 4$) | 248.1438 | 243.6681 |
| | ($Y = 5$) | 248.4275 | 243.9524 |
| | ($Y = 6$) | 248.6617 | 244.1842 |
| | ($Y = 7$) | 248.8849 | 244.3965 |
| | ($Y = 8$) | 249.2673 | 244.7549 |
| | ($Y = 9$) | 249.8423 | 245.3245 |
| | ($Y = 10$) | 250.2680 | 245.7544 |
| | ($Y = 11$) | 250.6273 | 246.1053 |
| | ($Y = 12$) | 250.9982 | 246.4739 |
| | ($Y = 13$) | 251.3476 | 246.8133 |
| | ($Y = 14$) | 251.6926 | 247.1622 |
| | ($Y = 15$) | 252.2922 | 247.7337 |
| | ($Y = 16$) | 252.8978 | 248.3249 |
| | ($Y = 17$) | 253.3646 | 248.7646 |
| | ($Y = 18$) | 254.1054 | 249.5026 |
| | ($Y = 19$) | 254.7466 | 250.1463 |
| | ($Y = 20$) | 255.6014 | 250.9656 |
| | ($Y = 21$) | 256.8935 | 252.4026 |
| | ($Y = 22$) | 257.2780 | 252.7736 |
| Pseudo $R^2$ (Cox and Snell) | | 0.4484 | 0.4330 |
| $n$ | | 16 720 | 8291 |

Note: Main entries are unstandardized regression coefficients. Numbers in parentheses are standard errors. *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$, ****$p < 0.0001$.

Equation (1) ($p < 0.001$), and all the other variables retain their maximal significance ($p < 0.0001$). The comparison of Tables 1 and 2 leads me to conclude that my use of OLS in Table 1 does not distort or alter the findings. Since the OLS is much easier to interpret and understand, more concise to present, and more widely used, I will continue to use the OLS in my following analyses.

### The Effects of Job Tenure and Work Experience

It is common to enter and control for measures of job tenure and work experience in wage equations. Unfortunately, however, the GSS measures respondents' job tenure and work experience only in one survey year (1991). Table 3 presents the results from this survey year. As Column (1) shows, race is not significant when measures of job tenure and work experiences are controlled for. Consistent with the results presented in Tables 1 and 2, where cognitive ability (when entered in the equation) has just as significant an effect on earnings as race does (when cognitive ability is not included), verbal intelligence in Table 3, Column (2) does not significantly increase the respondents' income in 1991.[1] This result is consistent with my contention that race is a proxy for cognitive ability.

### The Effects of Supply-Side Factors

It is also common to use hourly wages, rather than annual earnings, as the dependent variable in wage equations, in order to separate the effects of demand-side factors (wage offers) from those of supply-side factors (hours worked).[2] Unfortunately, however, hourly wages are not available in the GSS data. It is nonetheless possible for me to control for the supply-side factors of labor effort. First, the GSS asks its respondents how many hours they worked in the previous week. (The information on a typical week is not available.) Second, the GSS measures whether the respondent works full-time or part-time (0 if part-time, 1 if full-time). I include these two variables in the equation, to control for the supply-side factors.

As Table 4 shows, however, the results are identical to those presented in Tables 1–3. When cognitive ability is not controlled for, race has a significantly ($p < 0.05$) negative effect on earnings

**Table 3. The Effect of Race on Income in the United States Controlling for Job Tenure and Work Experience (1991)**

| | (1) IQ not controlled | (2) IQ controlled |
|---|---|---|
| Race (black = 1) | −0.1899 | −0.1069 |
| | (0.4471) | (0.5685) |
| Age | −0.0438 | −0.0485 |
| | (0.024) | (0.0310) |
| Sex (Male = 1) | 2.7392**** | 2.6269**** |
| | (0.2977) | (0.3801) |
| Marital status (Married = 1) | 0.6251* | 0.6235 |
| | (0.2867) | (0.3579) |
| Education | 0.3560**** | 0.2927*** |
| | (0.0603) | (0.0846) |
| Union membership (Yes = 1) | 1.0151* | 1.2969* |
| | (0.4012) | (0.5112) |
| Occupational prestige | 0.1020**** | 0.1068**** |
| | (0.0124) | (0.0158) |
| Job tenure | −0.0368**** | −0.0325** |
| | (0.0086) | (0.0063) |
| Work experience | 0.1436**** | 0.1460**** |
| | (0.0256) | (0.0329) |
| Verbal IQ | | 0.0827 |
| | | (0.1031) |
| Constant | 0.3238 | 0.4454 |
| $R^2$ | 0.3865 | 0.3909 |
| $n$ | 807 | 526 |

Note: Main entries are unstandardized regression coefficients. Numbers in parentheses are standard errors. $^{*}p<0.05$, $^{**}p<0.01$, $^{***}p<0.001$, $^{****}p<0.0001$.

**Table 4. The Effects of Supply-Side Factors**

| | (1) IQ not controlled | (2) IQ controlled |
|---|---|---|
| Race (black = 1) | −0.3782* | −0.3669 |
| | (0.1694) | (0.2535) |
| Age | 0.0710**** | 0.0656**** |
| | (0.0047) | (0.0070) |
| Sex (Male = 1) | 1.8383**** | 1.5557**** |
| | (0.1135) | (0.1685) |
| Marital status (Married = 1) | 0.5099**** | 0.6146*** |
| | (0.1127) | (0.1666) |
| Education | 0.3867**** | 0.3639**** |
| | (0.0243) | (0.0384) |
| Union membership (Yes = 1) | 1.1808**** | 1.3423**** |
| | (0.1515) | (0.2305) |
| Occupational prestige | 0.0766**** | 0.0797**** |
| | (0.0047) | (0.0070) |
| Year | 0.1831**** | 0.1654**** |
| | (0.0245) | (0.0364) |
| Hours worked per week | 0.0635**** | 0.0689**** |
| | (0.0047) | (0.0068) |
| Part-time/Full-time (Full-time = 1) | 4.3981**** | 4.1680**** |
| | (0.1755) | (0.2549) |
| Verbal IQ | | 0.1682*** |
| | | (0.0476) |
| Constant | −375.8331 | −340.9391 |
| $R^2$ | 0.4833 | 0.4789 |
| $n$ | 4274 | 2053 |

Note: Main entries are unstandardized regression coefficients. Numbers in parentheses are standard errors. $^{*}p<0.05$, $^{**}p<0.01$, $^{***}p<0.001$, $^{****}p<0.0001$.

(Column 1). When cognitive ability is controlled for, however, race once again ceases to be significant (Column 2), mirroring the pattern presented in Tables 1–3. Quite expectedly, both supply-side factors have a strongly significant ($p$s $<0.0001$) effect on earnings, as do all the other variables in the equation.

### The Effects of Job Segregation by Race

Another potential criticism is that 'racial discrimination' in the labor market operates, not so much through paying black workers less than white workers when they perform the same job, but through the operation of 'dual labor market' (Doeringer and Piore, 1971) or 'segmented labor market' (Bonacich, 1972), where black workers are channelled into low-prestige, low-paying jobs and white workers into high-prestige, high-paying jobs. These critics would thus argue that I am underestimating the 'racial discrimination' in the labor market, by controlling for some job characteristics, such as their degree of unionization and prestige, as I do in all of my analyses presented in Tables 1–4, because unionized and/or high prestige jobs pay more.[3]

Table 5 presents the results of analysis when I exclude the union membership and occupational prestige from the equations. While excluding these

**Table 5. The Effects of Job Segregation by Race**

| | (1) IQ not controlled | (2) IQ controlled |
|---|---|---|
| Race (black = 1) | −0.2767*** | 0.0258 |
| | (0.0826) | (0.1113) |
| Age | 0.0673**** | 0.0668**** |
| | (0.0021) | (0.0029) |
| Sex (Male = 1) | 3.0877**** | 3.0340**** |
| | (0.0549) | (0.0753) |
| Marital status (Married = 1) | 0.8607**** | 0.8116**** |
| | (0.0568) | (0.0776) |
| Education | 0.5714**** | 0.5273**** |
| | (0.0098) | (0.0159) |
| Year | 0.2689**** | 0.2736**** |
| | (0.0036) | (0.0049) |
| Verbal IQ | | 0.1371**** |
| | | (0.0215) |
| Constant | −536.2836 | −545.9169 |
| $R^2$ | 0.3899 | 0.3787 |
| $n$ | 23 631 | 12 949 |

Note: Main entries are unstandardized regression coefficients. Numbers in parentheses are standard errors. $^{*}p<0.05$, $^{**}p<0.01$, $^{***}p<0.001$, $^{****}p<0.0001$.

**Table 6. Differential Returns to Cognitive Ability by Race and Sex**

| | |
|---|---|
| Race (black = 1) | −1.6994**** |
| | (0.3999) |
| Age | 0.0511**** |
| | (0.0036) |
| Sex (Male = 1) | 2.5072**** |
| | (0.2865) |
| Marital status (Married = 1) | 0.5449**** |
| | (0.0943) |
| Education | 0.3241**** |
| | (0.0217) |
| Union membership (Yes = 1) | 1.8816**** |
| | (0.1207) |
| Occupational prestige | 0.0915**** |
| | (0.0040) |
| Year | 0.2703**** |
| | (0.0064) |
| Verbal IQ | 0.0135 |
| | (0.0361) |
| Verbal IQ × Race | 0.2894**** |
| | (0.0718) |
| Verbal IQ × Sex | 0.0731 |
| | (0.0439) |
| Constant | −539.2635 |
| $R^2$ | 0.4181 |
| $n$ | 8291 |

Note: Main entries are unstandardized regression coefficients. Numbers in parentheses are standard errors. $^{*}p<0.05$, $^{**}p<0.01$, $^{***}p<0.001$, $^{****}p<0.0001$.

variables does increase the significance of race somewhat (from $p<0.01$ to $p<0.001$), thereby partially vindicating the dual or segmented labor market critics, my main conclusion remains unchanged. When cognitive ability is not included in the equation, race has a statistically significant effect on earnings ($p<0.001$); when it is included, race ceases to be significant. My main conclusion that race is a proxy for cognitive ability remains whether or not I control for some job characteristics.

### Differential Returns to Cognitive Ability by Race and Sex

If cognitive ability has a strong effect on earnings, as the results presented in Tables 1–5 seem to demonstrate, then does the effect vary by race and/or sex? Do blacks and whites, or men and women, have differential returns to their cognitive ability on their earnings?

In order to address this question, I add the interaction terms between race and cognitive ability, and between sex and cognitive ability, in my equation. The results in Table 6 show that the interaction term between verbal IQ and race is highly statistically significant ($p<0.0001$). The interaction term is positive, indicating that blacks receive much higher returns to their cognitive ability on their earnings than nonblacks do. On the other hand, the interaction term between sex and cognitive ability is not significant; men and women appear to receive the same returns to their cognitive ability on their earnings. Both of these results are consistent with an earlier analysis of the National Longitudinal Survey of Youth (Farkas *et al*., 1997).

### Trend Data

Finally, it appears that there has never been any sign of racial discrimination in pay in the United States in the last 30 years. Table 7 repeats the same analyses as in Table 1 (Columns (1) and (2)) with samples from 1974 to 1980 only. Once again, despite a much smaller sample, race has a significantly ($p<0.05$) negative effect on income when cognitive ability is not controlled for (Column 1), but ceases to be significant once I enter it in the equation (Column 2). Cognitive ability has a significantly ($p<0.05$) positive effect on income, and all the other variables are equally strongly significant in both equations.

The pattern is slightly different, and even more consistent with my contention that there is no evidence of racial discrimination in pay in the United States, in the analysis of the GSS data from the 1980s (Table 8). During this decade, race does not have a significant effect on income ($p = 0.1204$) *even when* verbal IQ is not controlled for. Accordingly, and consistent with my argument that race is a proxy for cognitive ability, verbal IQ does not have a significant effect on income ($p = 0.1929$) during 1980s. I am not at all sure why race differences in earnings in the US disappear during the 1980s, when they clearly exist during the 1970s and 1990s. The solution to this puzzle requires further research and investigation.[4]

The pattern from the 1990s (Table 9) is identical to the pattern from the 1970s (Table 7) and with the overall pattern from 1974 to 2000 (Table 1). Race has a significantly ($p<0.05$) negative effect on income when verbal IQ is not controlled for,

**Table 7. Trend Data: The Effect of Race on Income in the United States (1974–1980)**

| | (1) Verbal IQ not controlled | (2) Verbal IQ controlled |
|---|---|---|
| Race (black = 1) | −0.4429* | −0.2827 |
| | (0.1782) | (0.2680) |
| Age | 0.0337**** | 0.0336**** |
| | (0.0038) | (0.0056) |
| Education | 0.2193**** | 0.1787**** |
| | (0.0216) | (0.0358) |
| Marital status (Married = 1) | 0.5743**** | 0.4834** |
| | (0.1099) | (0.1580) |
| Union membership (Yes = 1) | 1.7925**** | 1.7545**** |
| | (0.1248) | (0.1766) |
| Sex (Male = 1) | 3.012**** | 3.1441**** |
| | (0.1050) | (0.1517) |
| Occupational prestige | 0.0697**** | 0.0647**** |
| | (0.0045) | (0.0065) |
| Year | 0.5368**** | 0.6059**** |
| | (0.0265) | (0.0730) |
| Verbal IQ | | 0.0895* |
| | | (0.0417) |
| Constant | −1063.4413 | −1200.112 |
| $R^2$ | 0.4272 | 0.3940 |
| $n$ | 3489 | 1708 |

Note: Main entries are unstandardized regression coefficients. Numbers in parentheses are standard errors. *$p<0.05$, **$p<0.01$, ***$p<0.001$, ****$p<0.0001$.

**Table 8. Trend Data: The Effect of Race on Income in the United States (1981–1990)**

| | (1) Verbal IQ not controlled | (2) Verbal IQ controlled |
|---|---|---|
| Race (black = 1) | −0.2392 | −0.4072 |
| | (0.1540) | (0.2132) |
| Age | 0.0487**** | 0.0525**** |
| | (0.0040) | (0.0061) |
| Education | 0.3345**** | 0.3078**** |
| | (0.0217) | (0.0369) |
| Marital status (Married = 1) | 0.6110**** | 0.4138** |
| | (0.1070) | (0.1590) |
| Union membership (Yes = 1) | 2.062**** | 1.8789**** |
| | (0.1370) | (0.1991) |
| Sex (Male = 1) | 3.217**** | 3.2041**** |
| | (0.1040) | (0.1553) |
| Occupational prestige | 0.0964**** | 0.0957**** |
| | (0.0045) | (0.0067) |
| Year | 0.2492**** | 0.2634**** |
| | (0.0230) | (0.0382) |
| Verbal IQ | | 0.0567 |
| | | (0.0435) |
| Constant | −497.3715 | −525.4923 |
| $R^2$ | 0.3442 | 0.3308 |
| $n$ | 6306 | 2921 |

Note: Main entries are unstandardized regression coefficients. Numbers in parentheses are standard errors. *$p<0.05$, **$p<0.01$, ***$p<0.001$, ****$p<0.0001$.

**Table 9. Trend Data: The Effect of Race on Income in the United States (1991–2000)**

| | (1) Verbal IQ not controlled | (2) Verbal IQ controlled |
|---|---|---|
| Race (black = 1) | −0.3906* | −0.0707 |
| | (0.1653) | (0.2358) |
| Age | 0.0614**** | 0.0549**** |
| | (0.0043) | (0.0061) |
| Education | 0.4124**** | 0.3873**** |
| | (0.0233) | (0.0348) |
| Marital status (Married = 1) | 0.6280**** | 0.6666**** |
| | (0.1094) | (0.1520) |
| Union membership (Yes = 1) | 1.6471**** | 1.8502**** |
| | (0.1508) | (0.2140) |
| Sex (Male = 1) | 2.9119**** | 2.8304**** |
| | (0.1068) | (0.1489) |
| Occupational prestige | 0.1017**** | 0.1024**** |
| | (0.0046) | (0.0064) |
| Year | 0.1873**** | 0.1947**** |
| | (0.0181) | (0.0246) |
| Verbal IQ | | 0.1540*** |
| | | (0.0433) |
| Constant | −375.5148 | −391.0319 |
| $R^2$ | 0.3138 | 0.3163 |
| *n* | 6901 | 3635 |

Note: Main entries are unstandardized regression coefficients. Numbers in parentheses are standard errors. *$p<0.05$, **$p<0.01$, ***$p<0.001$, ****$p<0.0001$.

but it ceases to be significant once it is controlled for. Once again, verbal IQ has a significantly ($p<0.001$) positive effect on income, and all the other variables in the equation remain equally significant after the inclusion of verbal IQ. Verbal IQ eliminates the significant effect of race only.

## CONCLUSION

The results presented in Tables 1–9 collectively demonstrate that race is not so much a measure of skin color as an indicator of cognitive ability. Various specifications employed in the analyses above increase the robustness of the statistical findings and my confidence in the substantive conclusion. In every table, the significantly positive effect of verbal IQ on income replaces the similarly significantly negative effect of race. When race is not a significant predictor of income to begin with, as when job tenure and work experience are controlled (Table 3) or in the 1980s (Table 8), then verbal IQ is not a significant predictor either. My analyses suggest that there has never been any evidence of widespread racial discrimination in pay in the United States in the last 30 years.[5] Affirmative action, and other preferential treatment of ethnic minorities in the United States, are often justified on the ground of countering and reversing past and present discrimination against them. If there has never been any racial discrimination in the past or present to begin with, it appears that such government policies lose much of their justification for existence.

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## APPENDIX A

Variable definitions and descriptive statistics are given in Table A1.

**Table A1. Variable Definitions and Descriptive Statistics (General Social Survey, 1974–2000)**

| Variable | Definition | Mean | SD | *n* |
|---|---|---|---|---|
| *Dependent* | | | | |
| Income | Annual individual earnings measured in 12–23 equidistant ordinal categories | 10.53 | 5.36 | 23 695 |
| *Independent* | | | | |
| Race | 1 = black, 0 = otherwise | 0.14 | 0.34 | 37 816 |
| Verbal IQ | Number of correct answers on a 10-item vocabulary test (0–10) | 5.98 | 2.17 | 20 239 |

 

**Table A1.** (Continued)

| Variable | Definition | Mean | SD | *n* |
|---|---|---|---|---|
| Age | Chronological age | 45.19 | 17.58 | 37 682 |
| Sex | 1 = male, 0 = female | 0.43 | 0.50 | 37 816 |
| Marital status | 1 = currently married, 0 = otherwise | 0.55 | 0.50 | 37 808 |
| Education | Years of formal schooling | 12.57 | 3.14 | 37 699 |
| Union membership | 1 = member of a labor union, 0 = otherwise | 0.14 | 0.34 | 26 637 |
| Occupational prestige | For 1974–1987, Hodges–Siegel–Rossi Prestige Scores; for 1988–2000, NORC/GSS prestige scores | 41.28 | 13.94 | 35 404 |
| Job tenure (1991) | Number of years and months with the current employer | 13.73 | 16.49 | 903 |
| Work experience (1991) | Number of years spent working for pay since age 16 | 19.54 | 14.04 | 1495 |
| Hours worked per week | Number of hours worked last week | 41.09 | 13.97 | 22 496 |
| Part-time/full-time work | 1 = full-time, 0 = part-time | 0.81 | 0.39 | 8318 |
| Year | Survey year (1974–2000) | 1987.57 | 7.93 | 37 816 |

## NOTES

1. It is odd that, while the effect of work experience on income is significantly positive, as predicted, the effect of job tenure on income is equally significantly *negative*. Further, the bivariate correlation between job tenure and income in the GSS data is weakly but statistically significantly negative ($r = -0.145$, $p < 0.001$, $n = 814$). An inspection of the scatterplot, however, reveals that the negative correlation is due to a small number of outliers with very long job tenures and very low incomes. For instance, there are three respondents who claim to have had job tenure of 83 years each. One of them makes less than $3000, the second less than $4000, and the third less than $20 000. Given that the maximum lifetime work experience in the GSS is 70 years, and the maximum age of all respondents is 89, job tenures of 83 years are impossible and likely reflect a coding or reporting error. If I exclude all cases of job tenure over 40 years, the bivariate correlation between job tenure and income becomes weakly but statistically significantly positive ($r = 0.144$, $p < 0.001$, $n = 743$).
2. I thank one anonymous reviewer for making this point.
3. I thank another anonymous reviewer for making this point.
4. Race has a significantly negative effect on earnings ($p < 0.05$) during the 1980s if I exclude union membership and occupational prestige from the equation. Race ceases to be significant once I enter cognitive ability in the equation.
5. While not specifically focusing on earnings, as I do in this paper, some field experimental studies appear to discover some evidence of 'racial discrimination' elsewhere in the American labor market. For example, Pager's (2003) experimental audit study arranges for matched pairs of black and white job applicants, either with or without (fictitious) criminal record, to apply for real entry-level jobs, to examine whether they receive the initial callback for a job interview. Pager's results show that white applicants are significantly more likely to receive a callback than black applicants (0.34 vs 0.14, $p < 0.01$) and white applicants with a criminal record are just as likely to receive a callback as black applicants without a criminal record (0.17 vs 0.14, *ns*). This seems to suggest an operation of 'racial discrimination.' Given the massive race differences in the baseline probability of having a criminal record, however, it is unlikely that a researcher can experimentally manipulate the criminal record and the race of a job applicant independently, and thus the findings of all such field experiments are quite suspect. As an analogy in the case of comparable sex differences, suppose a researcher experimentally manipulates the sex of job applicants and their (fictitious) desire to quit the job once they have children to become stay-at-home parents. In other words, half of the female job applicants and half of the male job applicants express such a desire, during the initial job interview. Further suppose that the researcher finds that male applicants who expressed such a desire received a job offer just as frequently as female applicants who did not. Would this be credible evidence of 'sex discrimination'? Given the massive sex difference in the baseline probability of quitting a job to become a full-time parent (where women are much more likely to do so than men), it would be highly irrational for employers to take such fictitious information at the face value and treat men and women who express such a desire identically, if high job turnover was a genuine and legitimate concern. It is similarly irrational for employers to treat black and white job applicants with (or without) a fictitious criminal record identically. Field experimental studies such as Pager's (2003) therefore present very suspect evidence for 'discrimination' when there are real group differences in baseline probabilities of possessing some characteristics. While Pager (2003) addresses a large number of potential problems with her field experimental design in the appendix, she does not address this problem of race differences in the baseline probability of having a criminal record.

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