

US Public Perceptions of an Intelligence Quotient Test Score Gap Between Black Americans and White Americans

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Abstract

Intelligence quotient (IQ) is a common measure of intelligence that associates with many important life outcomes. Research over several decades has indicated that the average IQ test score among Black Americans is lower than the average IQ test score among White Americans, but in weighted results from a national nonprobability survey, only about 41% of US adults indicated awareness of this IQ gap. Results from a follow-up convenience survey indicated that, in the aggregate, White participants' rating of White Americans' average IQ and average intelligence is higher than Blacks Americans' average IQ test score and average intelligence and was not driven by White participants' belief in a universal White intellectual superiority. These and other results could have implications regarding the US public's perceptions about the reasons for Black/White inequality and implications for the use of intelligence stereotype scales as measures of racial prejudice.

Keywords

intelligence quotient, IQ, intelligence, stereotypes, race, perceptions, inequality

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Research has indicated that, on intelligence quotient (IQ) tests designed to measure intelligence, the average IQ test score among Black Americans is lower than the average IQ test score among White Americans (see, for example, Gottfredson, 1997: 14; Herrnstein and Murray, 1994: 276–277; Jensen, 1969: 81; Nisbett, 2005: 303; Roth et al., 2001: 320; Turkheimer et al., 2017). Consideration of this Black/White gap on IQ tests and related tests of cognitive ability can produce vastly different inferences

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about the reason for Black/White inequality in domains in which intelligence is a plausible influence.

For example, Flynn (1991: 119) discussed how data from 1980 indicated that, even though Black Americans were underrepresented in managerial, professional, or technical occupations compared with White Americans, Blacks Americans were overrepresented in these high-status occupations relative to the representation that would be expected based on mean IQ levels. Similarly, Jencks and Phillips (1998) reported data from the early 1990s indicating that the Black/White income gap was nontrivially lower when holding constant scores on the Armed Services Vocational Aptitude Battery and that, even though in unadjusted analyses Blacks were about 17 percentage points less likely to have graduated from college than Whites, Blacks were nonetheless about 6 percentage points more likely to have graduated from college than Whites when controlling for 12th-grade test scores in vocabulary, reading, and math.

Like with the Black disadvantage in these earlier uncontrolled analyses, Black Americans still have less positive outcomes than White Americans have in many important domains, such as educational achievement (De Brey et al., 2019), elite college representation (Ashkenas et al., 2017), occupational status (Tran et al., 2019), income (Wilson, 2018), health (Artiga and Orgera, 2019), and mortality risk (National Center for Health Statistics, 2019). Individual-level variation in such domains has been linked to individual-level variation in IQ test scores (e.g. Čukić et al., 2017; Deary et al., 2007; Der et al., 2009; Strenze, 2007), and a recent survey indicated that the US population on net perceives being intelligent to be an important factor in getting ahead in life (Suhay et al., 2020). Thus, the relative on-average performance of Blacks and Whites on IQ tests can be an important consideration for informing perceptions of the extent to which Black Americans' disadvantage in particular domains is attributable to non-IQ factors such as anti-Black discrimination and for informing preferences about policies to remediate Black Americans' disadvantage in these domains.

However, in survey data described as follows, a substantial percentage of US adults indicated the belief that there is no Black/White IQ test score gap. Moreover, most participants substantially underestimated the size of this gap, compared with the estimated size based on the academic literature on IQ. Misperceptions about the presence of a Black/White IQ test score gap varied sufficiently by race and political orientation to plausibly account for some of the disagreement between Blacks and Whites and liberals and conservatives over policies intended to remediate Black/White inequality in important life outcomes, to the extent that increased attributions of Black/White inequality to the Black/White IQ test score gap reduce attributions of such inequality to anti-Black discrimination or to other non-IQ factors. In addition, incorrect responses about the Black/White IQ test score gap associated with political orientation in a way that raises questions about the validity of the common practice of using intelligence stereotype scales to measure racial prejudice.

Literature Review

The Black/White IQ test score gap is a generalization about groups. Research has documented that such generalizations are often accurate (Jussim et al., 2009), including generalizations about racial or ethnic groups. For example, Ashton and Esses (1999: 233) reported that a sample of undergraduates at the University of Western Ontario who had attended a high school in Canada were "reasonably accurate" in ordering nine ethnic

groups by average course grade across Toronto high school grade levels, and Kaplowitz et al. (2003) reported results from a 1995 survey in Michigan that indicated that participants' mean ordering of Blacks and Whites was correct for out-of-wedlock births, poverty status, family income, and college graduate income.

However, research has also documented inaccurate generalizations about racial or ethnic groups, such as the 2002 Gallup/Phi Delta Kappa poll reported on in Crabtree (2002), in which only 49% of Americans indicated that academic achievement for White students is higher than academic achievement for Black and other minority students. Moreover, in some instances participants have correctly ranked groups but incorrectly estimated the gaps between groups. Estimates of the size of the Black/White gaps in Kaplowitz et al. (2003) tended to not fall within 20% of the true value, and participants in Kraus et al. (2017) on average correctly indicated that Black Americans lag White Americans in income and wealth but were nontrivially incorrect in their estimates of current levels of income and wealth inequality.

Generalizations about racial groups can be informed by factors such as the racial composition of one's county during adolescence (see Goldman and Hopkins, 2020) and the content of news and entertainment that a person consumes (see Oliver et al., 2007). Reported perceptions about racial groups can also be affected by social desirability in which survey respondents hide their true perceptions. For example, Morning et al. (2019) indicated that participants given a direct item were less likely to indicate acceptance of the claim that "Genetic differences contribute to income inequality between black and white people," compared with participants in a list experiment that permitted participants to conceal their acceptance of the claim. Given contemporary norms regarding racial equality, it is reasonable to expect social desirability to reduce selection of a response that indicates a relative Black disadvantage on tests of intelligence.

Reported generalizations about racial groups can also be influenced by a motivated responding that reflects a participant's desired patterns for racial groups instead of the patterns that the participant would have reported based on an earnest evaluation of the evidence available to the participant. Such motivated responding was detected in experiments reported in Bullock et al. (2015) and Prior et al. (2015), in which monetary incentives for correct responses reduced factual disagreement between Democratic respondents and Republican respondents on politically relevant items. Given this evidence and other evidence that motivated responding can differ by political orientation (e.g. Schaffner and Luks, 2018), it is reasonable to expect divergence by political orientation in responses about the politically relevant question of relative Black/White performance on tests of intelligence.

Winegard and Winegard (2017: 197) discussed the concept of "cosmic egalitarianism," in which certain groups are thought to be "relatively equal on all socially desired traits". Motivated responding due to such cosmic egalitarianism could influence reported perceptions of relative Black/White performance on IQ tests, with responses influenced by cosmic egalitarianism plausibly more concentrated among participants on the political Left. Moreover, anti-Black animus is plausibly more common on the political Right, with evidence such as polling indicating that a higher percentage of Republicans than of Democrats consider interracial marriage to be morally wrong (Frankovic, 2018). Opposition to interracial marriage loaded onto the same factor as Black/White intelligence stereotyping did in Virtanen and Huddy (1998), so some participants might perceive that opposition to interracial marriage could be justified by Black/White differences in intelligence; if so, motivated responding due to anti-Black animus might increase reported perceptions of a Black disadvantage relative to Whites on IQ tests, with this

Table 1. Perceptions of a US Black/White IQ Test Score Gap.

	Point estimate	84% confidence interval	95% Confidence interval	N
American National Election Studies Time Series Study 2012				
% rating White intelligence in general higher than Black intelligence in general				
Full sample	40.2	[39.0, 41.6]	[38.4, 42.2]	5510
Whites	43.2	[41.7, 44.8]	[41.1, 45.5]	3275
Blacks	19.2	[16.2, 22.6]	[15.2, 24.1]	959
White liberals	34.2	[31.3, 37.3]	[30.2, 38.5]	819
White conservatives	49.2	[46.9, 51.5]	[46.0, 52.4]	1372
General Social Survey 2016				
% rating White intelligence in general higher than Black intelligence in general				
Full sample	20.2	[18.7, 21.8]	[18.1, 22.5]	1888
Whites	19.2	[17.2, 21.3]	[16.5, 22.2]	1250
Blacks	13.1	[10.7, 15.9]	[9.9, 17.2]	308
White liberals	13.5	[10.4, 17.2]	[9.4, 18.9]	334
White conservatives	24.7	[21.7, 28.0]	[20.6, 29.4]	459
YouGov 2017				
% indicating that White Americans tend to score higher on IQ tests, on average, compared with Black Americans				
Full sample	41.2	[36.7, 45.8]	[35.0, 47.7]	508
Whites	45.6	[40.3, 50.9]	[38.3, 53.0]	373
Blacks	12.2	[7.3, 19.7]	[6.0, 23.4]	61
White liberals	33.7	[26.2, 42.1]	[23.5, 45.5]	94
White conservatives	59.1	[50.8, 66.8]	[47.5, 69.7]	138

IQ: intelligence quotient.

All estimates are weighted and include respondents who did not respond to an item. See Supplementary Appendix 2 for a discussion of the coding of liberal and conservative. Note that the difference in percentages between the 2012 American National Election Studies Time Series Study (ANES, 2014, 2016) and 2016 General Social Survey (Smith et al., 2018) and 2012 General Social Survey (Smith et al., 2018) appears to not be mainly due to differences in the years in which the survey was conducted (see Sood, 2011): for the 2012 GSS, the full sample estimate was 25.0 (N = 1302). The 2016 ANES Time Series Study did not include an intelligence stereotype item (ANES, 2017).

increase more concentrated on the political Right. Given these considerations, it is reasonable to expect participants on the political Right to be more likely than participants on the political Left to report the perception that White Americans perform better on IQ tests than Black Americans perform (Frankovic, 2018).

Study 1

Study 1 was a nonprobability survey administered online between 27 and 31 July 2017 by YouGov to US resident members of an opt-in survey panel, with a set of interviewed respondents matched down to a sample of 2000. Reported results are weighted to reflect the US adult population. Supplementary Appendix 1 provides more information on the sample and weighting. Items used in this study measuring perceptions of a Black/White

IQ test score gap were preregistered at the Open Science Framework (https://osf.io/cx3eb/?view_only=22147e7cc9264da19c2ecdf7dcd32a60), but no analyses of these items were preregistered, so reported analyses are exploratory. Roughly one-fourth of participants were randomly assigned to an item that did not concern IQ, and these responses are not reported here. The study received approval from the author's Institutional Review Board. Statistical analyses for Study 1 and Study 2 were conducted in Stata 15 (StataCorp, 2017).

About one in four participants (N = 508) were randomly assigned to receive the item as follows, with the order of the first two response options randomized:

Which of the following two groups tends to score higher on IQ tests, on average, compared to the other group?

- Black Americans
- White Americans
- Both groups tend to score equally high on IQ tests

For the full sample, 2% selected "Black Americans," 55% selected the "Both groups" option, 1% did not respond to the item, and 41% selected "White Americans"; respective percentages among Whites were 1%, 52%, 2%, and 46%. Moreover, a smaller percentage of White liberals (34%) than White conservatives (59%, $p < 0.05$ for the difference) indicated that White Americans tend to score higher on IQ tests on average than Black Americans score, which matches the pattern regarding public perceptions of a Black/White intelligence gap detected in ANES and GSS surveys, in which a smaller percentage of White liberals than of White conservatives rated the "in general" intelligence of Whites higher than that of Blacks. See Table 1 for more information.

Table 2 reports results from a logistic regression predicting selection of the "White Americans" response to the IQ item, with all other responses or non-responses to that item coded as the comparison category. Selection of "White Americans" was more common among Republicans than among Democrats, Independents, and those not sure of their partisan identification; was more common among strong Republicans than among participants in any other category of the party identification item; and was more common among very conservative participants than among moderate, liberal, or very liberal participants or participants not sure of their political ideology. Across all models, Blacks and mixed race persons were less likely than Whites to have selected "White Americans," and Asians were more likely than Whites to have selected "White Americans." The Morning et al. (2019) list experiment about Black/White genetic differences indicated that social desirability was higher among women and participants with higher levels of education; consistent with this, in some Table 2 models, being female and higher levels of education associated at $p < 0.05$ with a decreased probability of selecting "White Americans" for the IQ item.

Even if a participant's response to the IQ item is consistent with the IQ literature, the participant might nonetheless possess an inaccurate perception of the size of the Black/White IQ test score gap. Estimates of this gap in the literature include lows such as 0.6 or 0.7 standard deviations or 10 points (Nisbett, 2005: 303) or about 10 points (Turkheimer et al., 2017) to highs such as 15 points (Gottfredson, 1997: 14), 1 standard deviation (Jensen, 1969: 81; Murray, 2007: 309–310), or 1.1 standard deviations (Herrnstein and Murray, 1994: 276–277; Roth et al., 2001: 320). Based on these estimates, simulations

Table 2. Predicting Selection of “White Americans” in the Study 1 IQ Item.

	1	2	3	4
Education	-0.97 (0.44)	-0.96 (0.45)	-0.70 (0.46)	-0.87 (0.45)
Age	0.73 (0.56)	0.39 (0.57)	0.63 (0.57)	0.17 (0.56)
Female	-0.68 (0.27)	-0.66 (0.28)	-0.69 (0.27)	-0.51 (0.26)
Race				
Black	-1.88 (0.48)	-1.74 (0.51)	-1.75 (0.50)	-1.51 (0.47)
Hispanic	-0.06 (0.50)	0.23 (0.49)	0.25 (0.49)	0.04 (0.46)
Asian	1.48 (0.63)	1.92 (0.63)	1.94 (0.65)	1.49 (0.61)
Mixed	-3.12 (0.96)	-3.19 (1.00)	-3.42 (1.04)	-3.22 (0.96)
Other race	-0.97 (0.77)	-0.88 (0.72)	-0.82 (0.82)	-1.05 (0.79)
Political party				
Democrat		-0.82 (0.36)		
Independent		-1.02 (0.34)		
Other		-1.07 (0.60)		
Not sure		-1.75 (0.68)		
Partisan intensity				
Strong Democrat			-1.32 (0.42)	
Not very strong Democrat			-1.30 (0.55)	
Lean Democrat			-2.23 (0.63)	
Independent			-1.39 (0.41)	
Lean Republican			-1.71 (0.44)	
Not very strong Republican			-1.13 (0.50)	
Not sure			-2.39 (0.87)	
Political ideology				
Very liberal				-1.18 (0.52)
Liberal				-1.05 (0.49)
Moderate				-1.17 (0.43)
Conservative				-0.20 (0.44)
Not sure				-1.55 (0.67)
Constant	0.28 (0.40)	1.03 (0.44)	1.35 (0.46)	1.15 (0.50)

Note: Cell entries are coefficients and standard errors from a weighted logistic regression predicting responses to the Study 1 IQ item, coded 1 if a participant selected “White Americans” and coded 0 for other responses or a non-response. N=508 for all models. Omitted categories are: male, White, Republican, Strong Republican, and Very conservative. Bold indicates $p < 0.05$ (two-tailed test).

described in Supplementary Appendix 3 indicated that between 14% to 27% of Black Americans should be expected to score at least as well on an IQ test as the median White American scores.

To assess whether participant perceptions of the size of the Black/White IQ test score gap match such estimates from the IQ literature, about half of participants not assigned to the aforementioned IQ item (N=998) were randomly assigned to receive the item below, in which responses were recorded on a slider with no default value that permitted responses in 1-unit increments from 0 to 100, inclusive:

Suppose that 100 White Americans and 100 Black Americans are randomly selected to take an IQ test. If 50 of the 100 White Americans correctly answer all of the questions on the IQ test, how many of the 100 Black Americans would you expect to correctly answer all of the questions on the same IQ test?

This hypothetical IQ test item essentially asks participants to indicate the percentage of Black Americans that the participant expects to score at least as high on the IQ test as the median White American scores, but the item is phrased to prevent participants from easily locating an estimate of the correct response online (see Clifford and Jerit, 2014, and Jensen and Thomsen, 2014, for evidence that a nontrivial percentage of survey participants consult external sources when responding online to knowledge items). Mean responses for the full sample and selected groups did not fall within or near the range expected based on the IQ literature, with mean responses of 52 among the full sample, 50 among Whites, 58 among Blacks, 50 among White liberals, and 49 among White conservatives, with 50% of the full sample selecting 50. See the top panel in Figure 1 for the distribution of substantive responses to this item among White participants. Supplementary Appendix 4 provides more detail on responses to this item.

Associations of Perceptions of a Black/White IQ Test Score Gap

Results from Study 1 suggested that some of the variation in racial intelligence stereotyping detected in earlier research might reflect variation in awareness of the Black/White IQ test score gap. To better help assess the reasons for variation in reported perceptions of the existence of a Black/White IQ test score gap, Study 2 was conducted, measuring how perceptions about the Black/White IQ test score gap associate with certain perceptions and attitudes. Participants were asked to respond to items about a Black/White gap in IQ and a Black/White gap in intelligence, which permits assessment of the extent to which responses to the IQ item might inform responses to the intelligence item. Participants were asked to compare Asian Americans to White Americans in math ability; on average, Asian students outperform White students on standardized math tests in US schools (De Brey et al., 2019: 74–77) and on the SAT math test (College Board, 2019), so this item permits an assessment of the extent to which participants who indicate that White Americans outperform Black Americans on IQ tests are merely selecting a response that reflects well on White Americans and are not selecting a response that matches available evidence. Given that the ability of IQ tests to measure intelligence has been disputed (e.g. Richardson, 2002), participants were asked to indicate how well IQ tests measure intelligence, which permits assessment of the extent to which disagreement about the Black/White intelligence item is due to disagreement over the validity of IQ tests as measures of intelligence. Participants were asked to compare Black students to White students on work ethic, which permits assessment of the extent to which responses about IQ associate with views about Blacks in a non-IQ domain. And participants participated in an experiment designed to assess the extent to which selection of 50 in the hypothetical IQ test estimate item is due to the format of the item.

Study 2

Study 2 was a nonprobability survey administered online through Qualtrics on 14 June 2018. Participants were drawn from Amazon Mechanical Turk and were listed as having

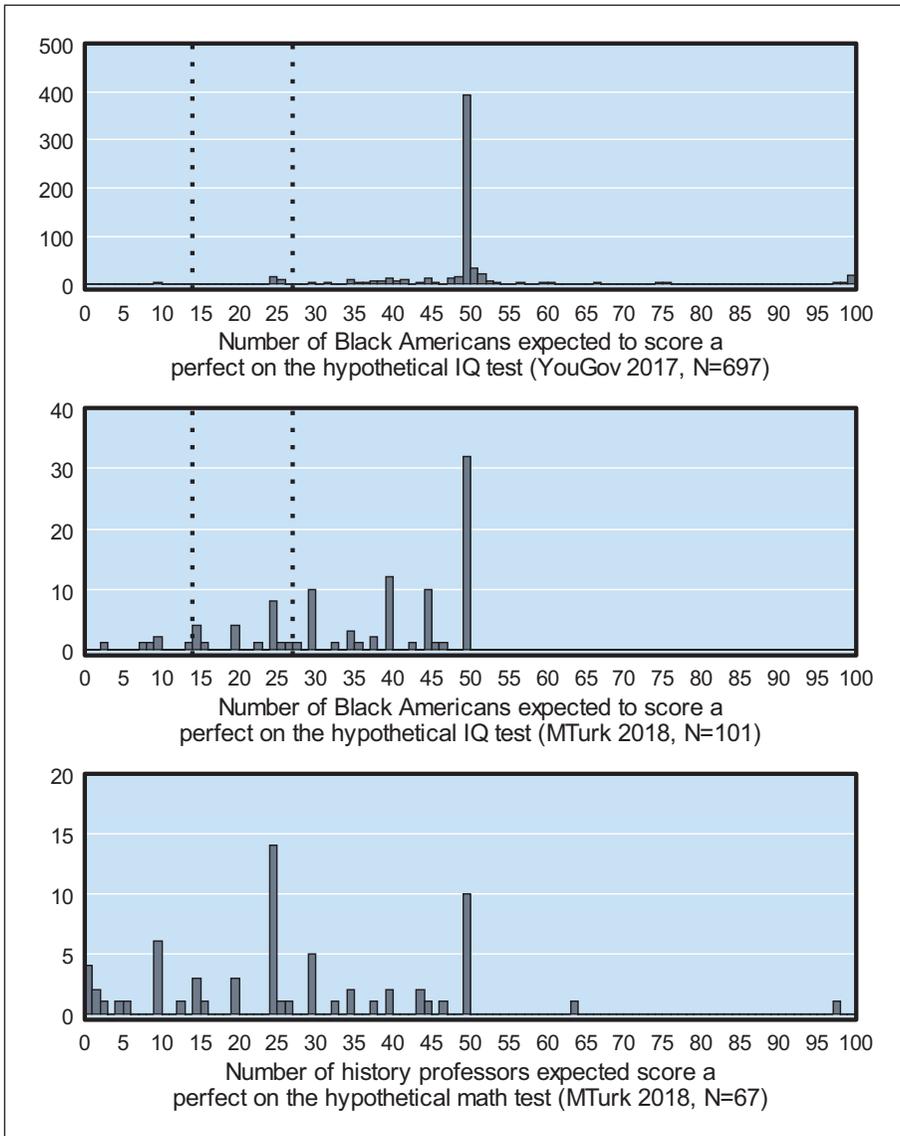


Figure 1. Responses to the Hypothetical Test Items (Study 1 and Study 2). Each panel reports the count of White participants who selected a number for the hypothetical IQ test item or the hypothetical math test item. Vertical dashed lines at 14 and 27 indicate the range of expected responses to the hypothetical IQ test item based on the IQ literature. The figure was produced in R (R Core Team, 2018) using ggplot2 (Wickham, 2016).

a location in the United States, 50 or more approved HITs (human intelligence tasks), and at least a 95% HIT approval rate. The study received approval from the author's Institutional Review Board. Survey items listed in Supplementary Appendix 5 were pre-registered at the Open Science Framework (https://osf.io/u6tgk/?view_only=0babcdf1a7246f5ad91bd4539320b24), but no analyses were preregistered, so reported analyses are

exploratory. Supplementary Appendix 6 provides more information on the sample. Data were recorded for 287 cases, and 277 cases finished the survey. Median survey completion time for finished cases was 113 seconds, and MTurkers who requested payment were paid 60 cents, producing a median hourly rate of about US\$19. Given concerns about MTurk quality (e.g. Bai, 2018; TurkPrime, 2018) and to avoid racial confounds, reported analyses were limited to the 168 cases that identified as only White of the 228 finished cases that did not share with any other case an MTurk ID, an IP address, or a latitude/longitude combination. An attention check was passed by 165 of these 168 participants (98%). Results have not been weighted to reflect population characteristics.

The IQ item differed slightly from the Study 1 IQ item, with an explicit indication that IQ tests are used to measure intelligence, which, if anything, would plausibly increase social desirability in responses:

IQ tests are used to measure intelligence. Which statement below do you think is most correct about IQ test scores?

- On average, Black Americans score **higher on IQ tests** than White Americans score.
- On average, Black Americans score **the same on IQ tests** as White Americans score.
- On average, Black Americans score **lower on IQ tests** than White Americans score.

For the above item, 47% of the White participants selected the “lower on IQ tests” response, which closely matched the 46% of White participants that selected “White Americans” in the corresponding Study 1 item.

For the item measuring perceptions about whether, on average, Black Americans are more, equally, or less intelligent compared with White Americans, responses to this intelligence item associated with responses to the IQ item: of the 49 White participants who indicated that Black Americans are less intelligent than White Americans, 96% indicated that, on average, Black Americans score lower on IQ tests than White Americans score; however, of the 119 White participants who did not indicate that Black Americans are less intelligent than White Americans, only 27% indicated that, on average, Black Americans score lower on IQ tests than White Americans score ($p < .001$ for the difference).

Figure 2 reports associations of responses to the IQ item, indicating that, compared with other White participants, White participants who reported the perception that, on average, Black Americans score lower on IQ tests than White Americans score were more likely to select the perception that, on average, Asian Americans are better at math than White Americans (65% to 39%, $p = .001$), had higher ratings of how much of the standardized math and reading test score gap between Black students and White students is due to Black students not working as hard as White students work (0.36 to 0.25 for responses placed on a 0-to-1 scale, $p < .001$), and reported expectations for the number of Black Americans to correctly answer all of the questions on the hypothetical IQ test that were closer to the aforementioned estimates based on the IQ literature (30 to 43, $p < .001$); however, there was insufficient evidence to conclude that the two sets of White participants had different mean responses regarding how well IQ tests measure intelligence (0.41 to 0.48 for responses on a 0-to-1 scale, $p = .087$), although patterns might differ if separate items were asked to assess whether IQ is as valid of a measure of Black intelligence as for White intelligence. Patterns in Figure 2 for the associations with the IQ item were similar to the associations with the intelligence item, as indicated in Supplementary Appendix 7.

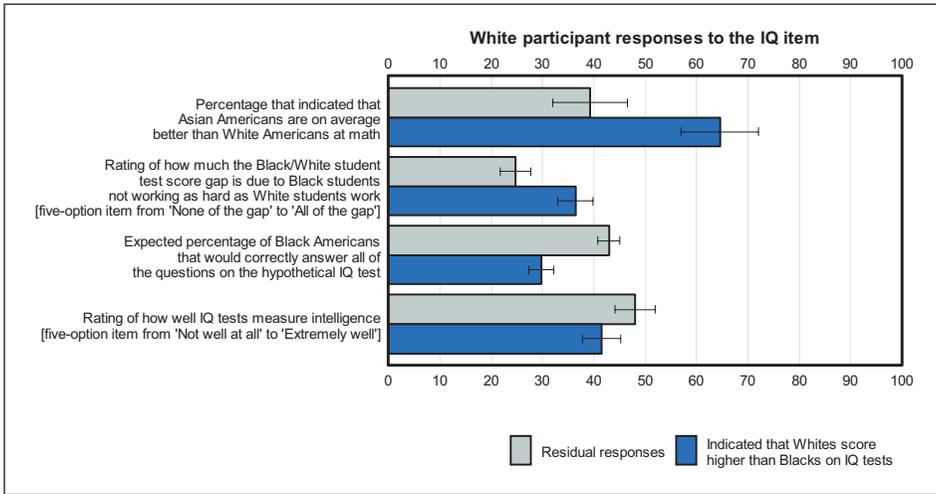


Figure 2. Study 2 Associations with the Black/White IQ Item. The figure reports MTurk responses from White participants placed on a 0-to-100 scale, with error bars indicating 84% confidence intervals. The figure was produced in R (R Core Team, 2018) using ggplot2 (Wickham, 2016).

Study 2 included the Study 1 hypothetical IQ test item, but using a drop-down box to record responses and with about one-third of participants randomly assigned to a parallel item that asked participants to indicate how many of 100 history professors the participant expects to correctly respond to each item on a math test on which 50 of 100 math professors correctly responded to each item. Math professors should perform better on a math test than how history professors perform, which makes selection of 50 an implausible response; this item can thus help assess the extent to which selection of 50 on the IQ item is due to the item requiring more concentration and cognitive ability than some participants expend. The bottom panels of Figure 2 indicate that, compared with the 32% of White participants that selected 50 for the IQ test version of the item, only 15% of White participants selected 50 for the math test version of the item ($p = .014$ for the difference in proportions), with a modal response to the IQ item of 50 (as in Study 1) but a modal response of 25 for the math test item. The format of the IQ item thus appears to be responsible for some but not all of the selection of 50. However, as reported in Supplementary Appendix 8, lower levels of education did not predict selection of 50 for the Study 1 hypothetical IQ test item.

Discussion

Barone (2017) claimed that “People are aware, even if elite writers try not to let anyone say so in public, that Americans of African descent have lower average scores on intelligence tests.” However, results from a weighted national nonprobability survey suggested that fewer than half of US residents indicated that White Americans tend to score higher on IQ tests, on average, compared with Black Americans. Moreover, the perception that the average IQ test score for Black Americans is not lower than the average IQ test score for White Americans was more concentrated among Blacks than among Whites and was more concentrated among Whites on the political Left than among Whites on the political Right.

This difference in perceptions, if sincere, plausibly contributes to disagreement about explanations for Black disadvantage in certain outcomes and about policies intended to remediate this disadvantage. Consider Black underrepresentation among lawyers (American Bar Association, 2019) or in medical school enrollment (Association of American Medical Colleges, 2019): persons who think that the average IQ test score among Black Americans is lower than the average IQ test score among White Americans might attribute much or all of this Black underrepresentation to differences in the cognitive abilities measured by IQ tests that are helpful for success in the professions or on the standardized tests used to help determine who enters the professions; however, persons who think that the average IQ test score among Black Americans is equal to or higher than the average IQ test score among White Americans must attribute Black underrepresentation to other factors. Moreover, persons who do not perceive a Black/White IQ gap might disagree with persons who do perceive such a gap about whether proportionate representation of racial groups in the legal or medical field would produce individual-level unfairness in which the admission threshold is effectively set at different locations by race and could lead to a profession that is on average less qualified on objective measures.

But the apparent widespread lack of awareness about the presence of a Black/White IQ test score gap might be due at least partly to social desirability or motivated reasoning. Responses indicating that Black Americans tend to score as high on IQ tests as White Americans score are consistent with a “cosmic egalitarianism” belief that groups are “relatively equal on all socially desired traits” (Winegard and Winegard, 2017: 197), and, as would be expected from social desirability or motivated reasoning, these responses were more common on the political Left than on the political Right. This “cosmic egalitarianism” explanation is also consistent with the pattern in Study 2 in which, compared with other White participants, White participants who indicated a Black American disadvantage relative to White Americans on the IQ item (and were thus cosmic inequality for this item) were more likely than other White participants to indicate an Asian American math ability advantage relative to White Americans (and thus were cosmic inequality for both items). Responses to the Black/White IQ item associating with responses to the Asian/White math ability item also provides evidence that correct responses to the Black/White IQ test score item were not largely due to White participants selecting the response most favorable to Whites.

To the extent that the perception that there is no Black/White IQ test score gap is a sincere perception, there might be value in research assessing the extent to which awareness of this gap influences willingness to support policies to remediate the gap and its perceived consequences. Given that reported misperception about the lack of a Black/White IQ test score gap was more common on the political Left, such research could also provide balance to misperceptions research, which Ecker and Ang (2019: 244) suggested has often involved correction of misperceptions that are more commonly held on the political Right.

Future research could also assess whether perceptions about the Black/White IQ test score gap influence policy preferences. Scarborough et al. (2019) reported on evidence suggesting that beliefs about workplace discrimination against African Americans could explain a large percentage of the Black/White gap in support for workplace diversity policies; the research also found that support for workplace diversity policies was higher when the policies were presented as an attempt to minimize racial discrimination than when presented as an attempt to increase racial diversity or

when no justification was presented. To the extent that the public considers the Black/White IQ gap to be a plausible contributor to Black/White inequality, correct perceptions about this IQ gap might reduce how much Black/White inequality is attributed to anti-Black discrimination and thus decrease support for racial diversity policies; however, given evidence that lay persons attribute to genetics a large percentage of the variation in intelligence among people (Willoughby et al., 2019), correct perceptions about the Black/White IQ test score gap might increase support for racial diversity policies, to the extent that the genetic component of the lay IQ explanation reduces how much Black/White inequality is attributed to Black/White differences in factors such as work ethic. Research has provided evidence that correcting misperceptions can change policy preferences (such as Sides, 2016, about the estate tax), but correcting misperceptions about the Black/White IQ gap might have more limited effects, similar to the limited and inconsistent effects for correcting misperceptions regarding the size of the foreign-born population on immigration attitudes (Hopkins et al., 2018), especially if preferences about policies designed to reduce racial inequality are not causally prior to perceptions of the reason for racial inequality.

Another implication of the results regarding misperceptions of the Black/White IQ test score gap is for the use of intelligence stereotype scales as a measure of racial prejudice (e.g. Elmendorf and Spencer, 2014: 1126; Federico and Sidanius, 2002: 154; Goldman and Hopkins, 2020; Piston, 2010: 433–434; Tuch and Hughes, 2011: 138–139). Rating Blacks in general lower than Whites in general on intelligence stereotype scales is consistent with “blatant negative stereotyping [that] seems central to old-fashioned or ‘biological’ racism” (Knuckey and Kim, 2015: 910). But given Study 2 results indicating that, among White participants, ratings of White Americans higher than Black Americans on the IQ item positively associated with rating of White Americans higher than Black Americans in intelligence, unequal ratings of Blacks and Whites on an intelligence stereotype scale is also consistent with a good faith interpretation of results from decades of IQ research or inferences based on racial differences in SAT scores or other metrics that plausibly capture intelligence.

This good faith explanation for unequal stereotype scale ratings might apply to stereotypes about traits other than intelligence and to stereotypes about groups other than racial groups, to the extent that unequal ratings on the stereotype scales are informed by a good faith perception of patterns captured in statistics, such as data about race or sex differences in the rate of violent offending (Lauritsen et al., 2009; Morgan, 2017: 2). Researchers should thus consider whether unequally rating two groups is a per se indication of prejudice that can be properly made without an assessment of the correctness of the generalizations captured in the stereotype scales or without an assessment of the thought process that produced the generalization. This consideration is especially important for research that produces inferences that are based on mean levels of stereotype scale responses (e.g. Elmendorf and Spencer, 2014) but is also relevant for research in which stereotype scales are used to predict socially or politically relevant outcomes such as turnout (Krupnikov and Piston, 2015), vote choice (Hopkins, 2019), and attitudes about policy (Yadon and Piston, 2019).

The present research involved perceptions about gap between Black Americans and White Americans in average IQ test scores. Future research could add important information by expanding the target groups and by assessing perceived target group differences in the tails of the IQ test score distribution. For example, representation of Black Americans relative to White Americans differs at different IQ thresholds, with Blacks

relatively more common below thresholds under the median and relatively less common above thresholds above the median. Many racial gaps of consequence involve the tails of a distribution for an outcome, such as an income levels below the poverty line or representation in elite educational institutions, and perceptions about average IQ gaps are less informative regarding these gaps.

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Data statement

Data and code to reproduce the reported analyses will be uploaded to the author's Dataverse.

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Supplementary information

Additional supplementary information may be found with the online version of this article.

Appendix 1. Study 1 YouGov Survey Information

Appendix 2. Study 1 Coding of Ideology for Table 1

Appendix 3. IQ Simulations

Appendix 4. Perceptions of the Size of the U.S. Black/White IQ Test Score Gap

Appendix 5. Study 2 MTurk Survey IQ/Intelligence Stereotypes Questionnaire

Appendix 6. Study 2 MTurk Survey Information

Appendix 7. Study 2 MTurk Intelligence Item Correlates

Appendix 8. Study 1 Selection of 50 for the Hypothetical IQ Item

References

- American Bar Association (2019) *ABA Profile of the Legal Profession 2019*. Chicago, IL: American Bar Association.
- American National Election Studies (ANES) (2014) *User's Guide and Codebook for the ANES 2012 Time Series Study*. Ann Arbor, MI; Palo Alto, CA: The University of Michigan; Stanford University.
- American National Election Studies (ANES) (2016) *ANES 2012 Time Series Study*. Ann Arbor, MI: Inter-University Consortium for Political and Social Research.
- American National Election Studies (ANES) (2017) *User's Guide and Codebook for the ANES 2016 Time Series Study*. Ann Arbor, MI; Palo Alto, CA: The University of Michigan; Stanford University.
- Artiga S and Orgera K (2019) *Key Facts on Health and Health Care by Race and Ethnicity*. Kaiser Family Foundation. Available at: <https://www.kff.org/disparities-policy/report/key-facts-on-health-and-health-care-by-race-and-ethnicity/> (accessed 30 April 2020).

- Ashkenas J, Park H and Pearce A (2017) Even With Affirmative Action, Blacks and Hispanics Are More Underrepresented at Top Colleges Than 35 Years Ago. *The New York Times*, 24 August. Available at: <https://www.nytimes.com/interactive/2017/08/24/us/affirmative-action.html> (accessed 30 April 2020).
- Ashton MC and Esses VM (1999) Stereotype Accuracy: Estimating the Academic Performance of Ethnic Groups. *Personality and Social Psychology Bulletin* 25 (2): 225–236.
- Association of American Medical Colleges (2019) Table B-3: Total U.S. Medical School Enrollment by Race/Ethnicity (Alone) and Sex, 2015–2016 through 2019–2020. Available at: https://www.aamc.org/system/files/2019-11/2019_FACTS_Table_B-3.pdf (accessed 30 April 2020).
- Bai H (2018) Evidence That a Large Amount of Low Quality Responses on MTurk Can Be Detected with Repeated GPS Coordinates. Available at: <https://www.maxhuibai.com/blog/evidence-that-responses-from-repeating-gps-are-random> (accessed 30 April 2020).
- Barone M (2017) Michael Barone: Group Differences Don't Undermine Case against Racial Discrimination. *The Washington Examiner*, 27 August. Available at: <https://www.washingtonexaminer.com/michael-barone-group-differences-dont-undermine-case-against-racial-discrimination> (accessed 30 April 2020).
- Bullock JG, Gerber AS, Hill SJ, et al. (2015) Partisan Bias in Factual Beliefs about Politics. *Quarterly Journal of Political Science* 10: 519–578.
- Clifford S and Jerit J (2014) Is There a Cost to Convenience? An Experimental Comparison of Data Quality in Laboratory and Online Studies. *Journal of Experimental Political Science* 1 (2): 120–131.
- College Board (2019) *SAT Suite of Assessments Annual Report: Total Report*. New York: College Board.
- Crabtree S (2002) Bridging the Minority Achievement Gap. *Gallup*, 22 October. Available at: <http://www.gallup.com/poll/7030/bridging-minority-achievement-gap.aspx> (accessed 30 April 2020).
- Čukić I, Brett CE, Calvin CM, et al. (2017) Childhood IQ and Survival to 79: Follow-Up of 94% of the Scottish Mental Survey 1947. *Intelligence* 63: 45–50.
- De Brey C, Musu L, McFarland J, et al. (2019) Status and Trends in the Education of Racial and Ethnic Groups 2018. NCES 2019-038, February. Washington, DC: National Center for Education Statistics.
- Deary IJ, Strand S, Smith P, et al. (2007) Intelligence and Educational Achievement. *Intelligence* 35 (1): 13–21.
- Der G, Batty GD and Deary IJ (2009) The Association between IQ in Adolescence and a Range of Health Outcomes at 40 in the 1979 US National Longitudinal Study of Youth. *Intelligence* 37 (6): 573–580.
- Ecker UKH and Ang LC (2019) Political Attitudes and the Processing of Misinformation Corrections. *Political Psychology* 40 (2): 241–260.
- Elmendorf CS and Spencer DM (2014) The Geography of Racial Stereotyping: Evidence and Implications for VRA Preclearance after Shelby County. *California Law Review* 102: 1123–1180.
- Federico CM and Sidanius J (2002) Sophistication and the Antecedents of Whites' Racial Policy Attitudes: Racism, Ideology, and Affirmative Action in America. *Public Opinion Quarterly* 66 (2): 145–176.
- Flynn JR (1991) *Asian Americans: Achievement beyond IQ*. New York: Psychology Press.
- Frankovic K (2018) Moral Judgments Often Split along Party Lines. *YouGov*. Available at: <https://today.yougov.com/topics/philosophy/articles-reports/2018/03/19/moral-judgments-often-split-along-party-lines> (accessed 30 April 2020).
- Goldman SK and Hopkins DJ (2020) Past Place, Present Prejudice: The Impact of Adolescent Racial Context on White Racial Attitudes. *Journal of Politics* 82 (2): 529–542.
- Gottfredson LS (1997) Mainstream Science on Intelligence: An Editorial with 52 Signatories, History, and Bibliography. *Intelligence* 24 (1): 13–23.
- Herrnstein RJ and Murray C (1994) *The Bell Curve: Intelligence and Class Structure in American Life*. New York: The Free Press.
- Hopkins DJ (2019) The Activation of Prejudice and Presidential Voting: Panel Evidence from the 2016 US Election. *Political Behavior*. Epub ahead of print 11 September. DOI: 10.1007/s11109-019-09567-4.
- Hopkins DJ, Sides J and Citrin J (2018) The Muted Consequences of Correct Information about Immigration. *Journal of Politics* 81 (1): 315–320.
- Jencks C and Phillips M (1998) The Black-White Test Score Gap: An Introduction. In: Jencks C and Phillips M (eds) *The Black-White Test Score Gap*. Washington, DC: Brookings Institution Press, pp.1–51.
- Jensen AR (1969) How Much Can We Boost IQ and Scholastic Achievement? *Harvard Educational Review* 39 (1): 1–123.
- Jensen C and Thomsen JPF (2014) Self-Reported Cheating in Web Surveys on Political Knowledge. *Quality & Quantity* 48 (6): 3343–3354.
- Jussim L, Cain TR, Crawford JT, et al. (2009) The Unbearable Accuracy of Stereotypes. In: Nelson TD (ed.) *The Handbook of Prejudice, Stereotyping, and Discrimination*. New York: Psychology Press, pp.199–227.

- Kaplowitz SA, Fisher BJ and Broman CL (2003) How Accurate Are Perceptions of Social Statistics about Blacks and Whites? Effects of Race and Education. *Public Opinion Quarterly* 67: 237–243.
- Knuckey J and Kim M (2015) Racial Resentment, Old-Fashioned Racism, and the Vote Choice of Southern and Nonsouthern Whites in the 2012 US Presidential Election. *Social Science Quarterly* 96 (4): 905–922.
- Kraus MW, Rucker JM and Richeson JA (2017) Americans Misperceive Racial Economic Equality. *Proceedings of the National Academy of Sciences* 114 (39): 10324–10331.
- Krupnikov Y and Piston S (2015) Racial Prejudice, Partisanship, and White Turnout in Elections with Black Candidates. *Political Behavior* 37 (2): 397–418.
- Lauritsen JL, Heimer K and Lynch JP (2009) Trends in the Gender Gap in Violent Offending: New Evidence from the National Crime Victimization Survey. *Criminology* 47 (2): 361–399.
- Morgan RE (2017) Race and Hispanic Origin of Victims and Offenders, 2012–15. NCJ 250747, October. Washington, DC: Bureau of Justice Statistics.
- Morning A, Brückner H and Nelson A (2019) Socially Desirable Reporting and the Expression of Biological Concepts of Race. *Du Bois Review: Social Science Research on Race*. Epub ahead of print 14 October. DOI: 10.1017/S1742058X19000195.
- Murray C (2007) The Magnitude and Components of Change in the Black–White IQ Difference from 1920 to 1991: A Birth Cohort Analysis of the Woodcock–Johnson Standardizations. *Intelligence* 35 (4): 305–318.
- National Center for Health Statistics (2019) *Health, United States, 2018*. Hyattsville, MD: National Center for Health Statistics.
- Nisbett RE (2005) Heredity, Environment, and Race Differences in IQ: A Commentary on Rushton and Jensen (2005). *Psychology, Public Policy, and Law* 11 (2): 302–310.
- Oliver MB, Ramasubramanian S and Kim J (2007) Media and Racism. In: Roskos-Ewoldsen DR and Monahan JL (eds) *Communication and Social Cognition: Theories and Methods*. Mahwah, NJ: Erlbaum, pp.273–291.
- Piston S (2010) How Explicit Racial Prejudice Hurt Obama in the 2008 Election. *Political Behavior* 32 (4): 431–451.
- Prior M, Sood G and Khanna K (2015) You Cannot Be Serious: The Impact of Accuracy Incentives on Partisan Bias in Reports of Economic Perceptions. *Quarterly Journal of Political Science* 10 (4): 489–518.
- R Core Team (2018) *R: A Language and Environment for Statistical Computing*. Vienna: R Foundation for Statistical Computing. Available at: <https://www.R-project.org/>
- Richardson K (2002) What IQ Tests Test. *Theory & Psychology* 12 (3): 283–314.
- Roth PL, Bevier CA, Bobko P, et al. (2001) Ethnic Group Differences in Cognitive Ability in Employment and Educational Settings: A Meta-analysis. *Personnel Psychology* 54 (2): 297–330.
- Scarborough WJ, Lambouthis DL III and Holbrook AL (2019) Support of Workplace Diversity Policies: The Role of Race, Gender, and Beliefs about Inequality. *Social Science Research* 79: 194–210.
- Schaffner BF and Luks S (2018) Misinformation or Expressive Responding? What an Inauguration Crowd Can Tell Us about the Source of Political Misinformation in Surveys. *Public Opinion Quarterly* 82 (1): 135–147.
- Sides J (2016) Stories or Science? Facts, Frames, and Policy Attitudes. *American Politics Research* 44 (3): 387–414.
- Smith TW, Davern M, Freese J, et al. (2018.) *General Social Surveys, 1972–2016*. Chicago, IL: University of Chicago.
- Sood G (2011) GSS and ANES: Alike Yet Different. *Goji Berries*. Available at: <https://web.archive.org/web/20161010235941/http://gbytes.gsood.com/2011/01/01/gss-and-anes-a-pattern-of-difference/> (accessed 30 April 2020).
- StataCorp (2017) *Stata Statistical Software: Release 15*. College Station, TX: StataCorp.
- Strenze T (2007) Intelligence and Socioeconomic Success: A Meta-analytic Review of Longitudinal Research. *Intelligence* 35 (5): 401–426.
- Suhay E, Klasnja M and Rivero G (2020) Ideology of Affluence: Explanations for Inequality and Political Attitudes among Rich Americans. *Journal of Politics*. Epub ahead of print 22 July. DOI: 10.7910/DVN/A3M7PY.
- Tran VC, Lee J and Huang TJ (2019) Revisiting the Asian Second-Generation Advantage. *Ethnic and Racial Studies* 42 (13): 2248–2269.
- Tuch SA and Hughes M (2011) Whites’ Racial Policy Attitudes in the Twenty-First Century: The Continuing Significance of Racial Resentment. *The ANNALS of the American Academy of Political and Social Science* 634 (1): 134–152.

- Turkheimer E, Harden KP and Nisbett RE (2017) Charles Murray Is Once Again Peddling Junk Science about Race and IQ. *Vox*. Available at: <https://www.vox.com/the-big-idea/2017/5/18/15655638/charles-murray-race-iq-sam-harris-science-free-speech> (accessed 30 April 2020).
- TurkPrime (2018) After the Bot Scare: Understanding What's Been Happening with Data Collection on MTurk and How To Stop It. *TurkPrime*, 18 September. Available at: <https://blog.turkprime.com/after-the-bot-scare-understanding-whats-been-happening-with-data-collection-on-mturk-and-how-to-stop-it>
- Virtanen SV and Huddy L (1998) Old-Fashioned Racism and New Forms of Racial Prejudice. *Journal of Politics* 60 (2): 311–332.
- Wickham H (2016) *Ggplot2: Elegant Graphics for Data Analysis*. New York: Springer.
- Willoughby EA, Love AC, McGue M, et al. (2019) Free Will, Determinism, and Intuitive Judgments about the Heritability of Behavior. *Behavior Genetics* 49 (2): 136–153.
- Wilson V (2018) *Racial Inequalities in Wages, Income, and Wealth Show That MLK's Work Remains Unfinished*. Economic Policy Institute. Available at: <https://www.epi.org/publication/racial-inequalities-in-wages-income-and-wealth-show-that-mlks-work-remains-unfinished/> (accessed 30 April 2020).
- Winegard BM and Winegard B (2017) Paranoid Egalitarian Meliorism. In: Crawford JT and Jussim L (eds) *The Politics of Social Psychology*. New York: Routledge, pp.193–209.
- Yadon N and Piston S (2019) Examining Whites' Anti-black Attitudes after Obama's Presidency. *Politics, Groups, and Identities* 7 (4): 794–814.

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