



Appendix A. Secondary and Supplemental Analyses

Appendix A.1. Estimates of Nonlethal Force Criteria by Respondent Race/Ethnicity

Given that victimization by law enforcement is a phenomenon that, in the public's imagination, is most closely associated with black Americans and other racial minorities, it is important to briefly explore potential racial/ethnic variation in estimation accuracy.

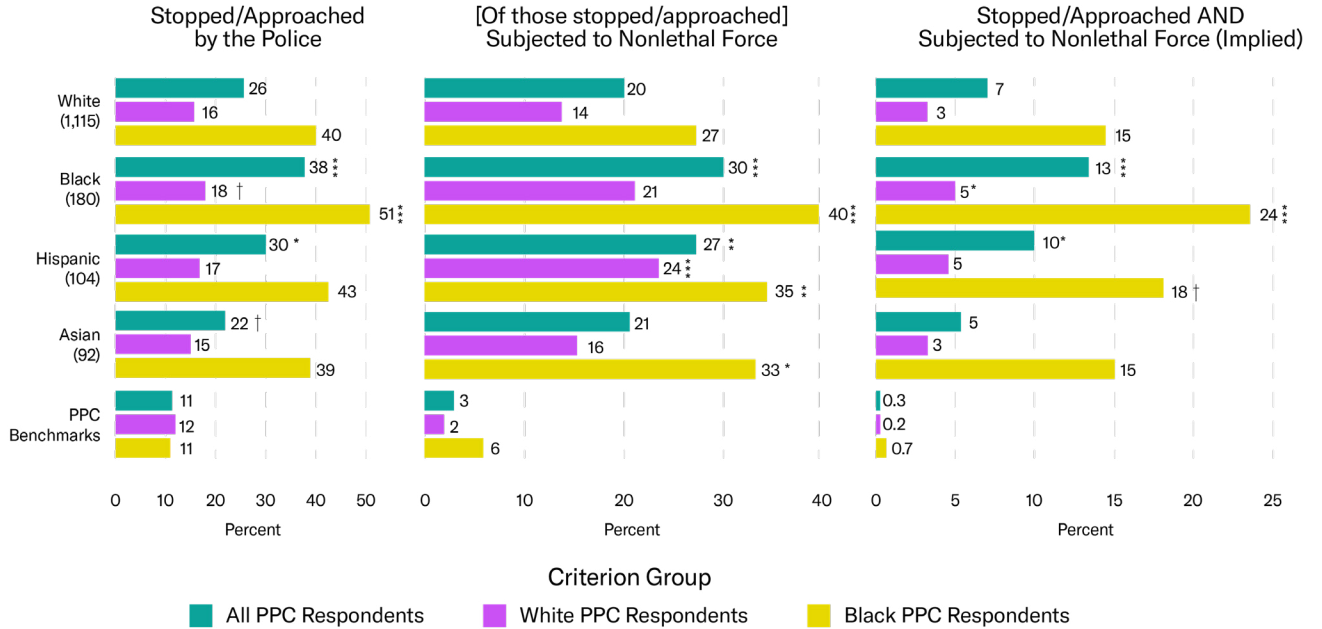
Figure A.1A presents the average criterion estimates among the sample's four major racial/ethnic groups. As one might expect, black (followed by Hispanic) respondents had the largest average overestimates across all criteria. Most notably (see middle panel), the average black respondent estimated that 30% of all, 21% of white, and 40% of black Police–Public Contact (PPC) survey respondents who reported being stopped or approached by police also reported experiencing nonlethal force. To contrast, these estimates fall to 20%, 14%, and 27%, respectively, for the average white respondent¹—differences that are all statistically significant at the $p < 0.001$ threshold and that are also robust to adjustments for educational attainment, age, and other demographic indicators.

Average estimates of these nonlethal force criteria among Hispanic respondents (27%, 24%, and 35%, respectively) were also less accurate relative to those among white respondents, but to a somewhat lesser degree. Lastly, excepting their (higher) estimates of nonlethal force against blacks, the estimates of the average Asian respondent were not statistically different from those of the average white respondent.



Figure A.1A

Estimates of Nonlethal Force Criteria, by Respondent Race/Ethnicity



Note: Bars in first four rows represent the average percentage estimate of the listed criterion among self-identified white, black, Hispanic, and Asian respondents. Bars in bottom row represent the actual share of all PPC respondents, white PPC respondents, and black PPC respondents who reported experiencing a listed outcome.

Bars in the first four rows of the right panel represent respondents' average implied estimates of the reporting rates of nonlethal force for each of the three PPC populations overall. These implied estimates are calculated by multiplying together respondents' estimates for each criterion group and dividing by 100.

With the exception of the benchmark values in the "implied estimates" chart, all figures are rounded to the nearest whole number. Sample sizes for the ideological groups are in parentheses. White respondents are the reference group for tests of statistical significance.

†p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001

Source: Author survey



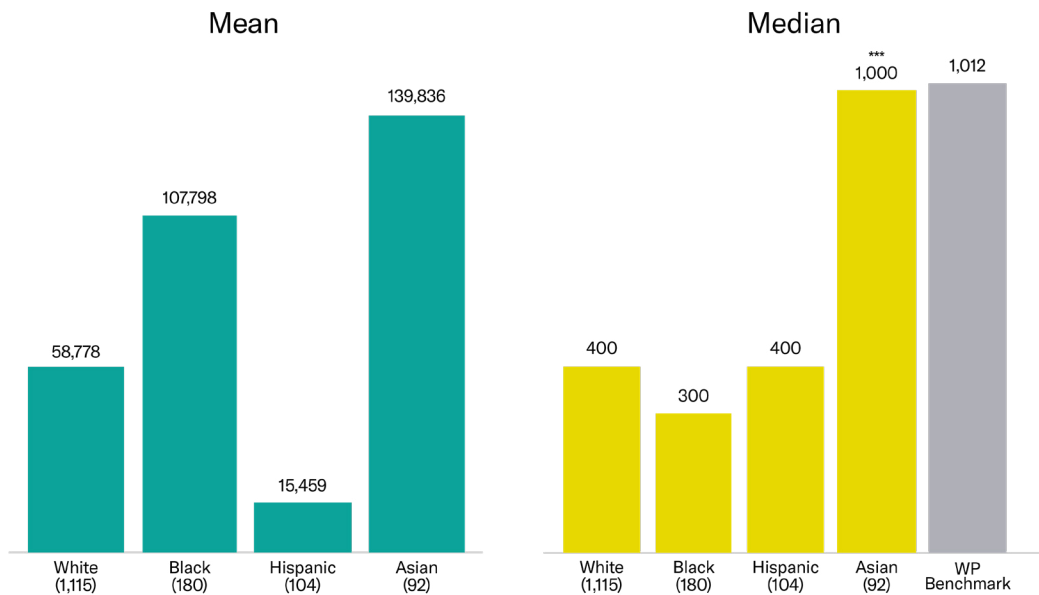
Appendix A.2. Estimates of Lethal Force Criteria by Respondent Race/Ethnicity

Given survey data indicating that black Americans are more likely than all other racial/ethnic groups to fear being victimized by the police and given that black respondents exhibited the largest overestimates for the nonlethal force criteria, one might expect them to have the largest overestimates of the average annual number of fatal officer-involved shootings (FOIS). Yet **Figure A.2A** shows that this is not the case.

While the average black estimate (107,798) of FOIS victims was higher than that of all groups except Asians (139,836), the median black estimate (300) was the lowest. Meanwhile, though the average Asian estimate was the most inaccurate, the median Asian estimate (1,000) all but hits the benchmark bull’s-eye.

Figure A.2A

Estimated Average Annual Number of FOIS Victims, by Respondent Race/Ethnicity



Note: Bars in left panel represent mean estimates of the average annual number of fatal police-shooting victims in 2015–22. Yellow bars in right panel represent median estimates of the average annual number of fatal police-shooting victims in 2015–22. The gray bar in right panel represents the average annual number of victims reported in the *Washington Post*’s Police Shootings database. Sample sizes for the racial/ethnic groups are in parentheses. White respondents are the reference group for tests of statistical significance.

†p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001

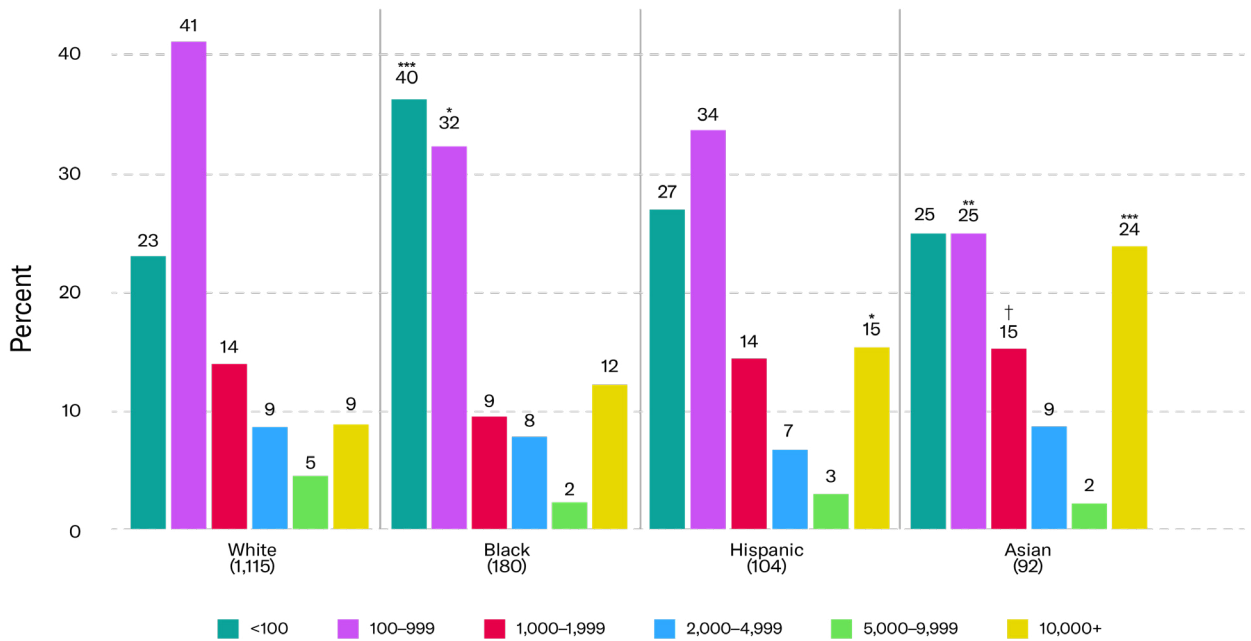
Source: Author survey; *Washington Post*’s Police Shootings database



Figure A.2B helps illuminate these counterintuitive patterns. First, black respondents (36%) were more likely than all other groups to give estimates of 100 or fewer FOIS victims, which explains their low median. In the other direction, Asian respondents were more likely (24%) than all other groups to give victim estimates of 10,000 or more while they were *least* likely (50%) to give those of fewer than 1,000. Thus, Asians’ near-perfect (median) accuracy appears to be mostly a function of having relatively fewer underestimates, on the one hand, while having more high overestimates than all other groups, on the other.

Figure A.2B

Categorical Distribution of Estimates, by Respondent Race/Ethnicity



Note: Bars represent the share of respondents who gave average annual fatal shooting victim estimates of 100 or fewer; 100 or more but fewer than 1,000; 1,000 or more but fewer than 2,000; 2,000 or more but fewer than 5,000; 5,000 or more but fewer than 10,000; and 10,000 or more. These estimation categories are derived from a continuous estimation scale that ranges from 0 to 32 million (standard deviation [SD] = 1 million). Sample sizes for the racial/ethnic groups are in parentheses. White respondents are the reference group for tests of statistical significance.

†p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001

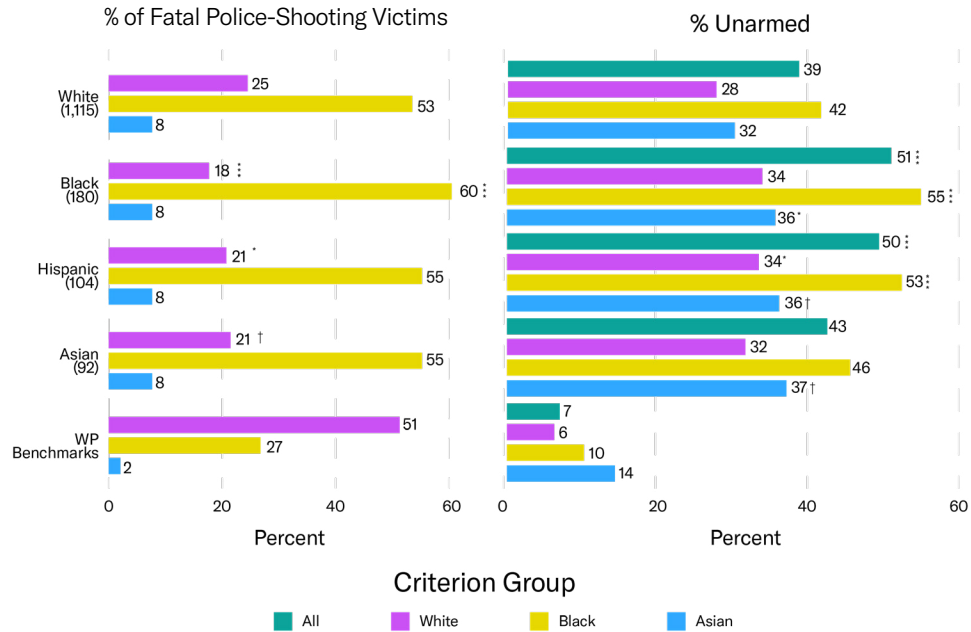
Source: Author survey

With respect to the racial distribution of FOIS victims, the left panel in Figure A.2C shows that black (18%, p < 0.001), Hispanic (21%, p=0.026), and Asian (21%, p=0.079) respondents all tended to give somewhat lower estimates of the white share than white respondents (25%). As black respondents had the lowest (under)estimates of the white share, they also had the highest (over)estimates of the black share, with the largest difference occurring between them and whites (53%, p < 0.001).



Figure A.2C

Estimates of the Racial Distribution and Unarmed Share of FOIS Victims, by Respondent Race/Ethnicity



Note: In the left panel, bars in first four rows represent the average percentage estimates of the white, black, and Asian shares of annual FOIS victims in 2015–22 among the overall sample and by self-identified respondent race/ethnicity. Bars in bottom row represent the actual racial-group shares reported in the *Washington Post’s* Police Shootings database. In the right panel, bars in the first four rows represent the average percentage estimates of the unarmed shares of each criterion population’s fatal police-shooting victims. Bars in bottom row represent the actual unarmed shares reported in the *Washington Post’s* Police Shootings database. All figures are rounded to the nearest whole number. Sample sizes for the racial/ethnic groups are in parentheses. White respondents are the reference group for tests of statistical significance.

†p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001

Source: Author survey

Turning to the right panel, though all significantly overestimated rates of unarmed victims, black and Hispanic respondents did so to a greater degree than white and Asian respondents. Whereas respondents in the latter two groups estimated that 39% and 43% of all fatal shooting victims were unarmed, respectively, these estimates rise to 51% and 50% among black and Hispanic respondents. Interestingly, black respondents gave significantly higher estimates of the white unarmed victim share (34%) than even their white counterparts (28%).

Once again, though, the largest overestimates are observed for the black share, with black and Hispanic respondents, respectively, estimating that 55% and 53% of black victims were unarmed, as compared with estimates of 42% and 46% for white and Asian respondents. Finally, all respondents perceived the unarmed Asian rate to be higher than the white rate, though the differences here—approximately 2 points for non-Asian and 5 points for Asian respondents—pale in comparison with those between the estimated white and black shares.



Appendix A.3. Estimates of Violent Criminal Offending

The extent to which people are disturbed by racial disparities in police use of nonlethal and lethal force is likely influenced by their causal attributions for them. And what they causally attribute them to, in turn, may be a function of their awareness of average differences in criminal behavior, which increases an average group member's likelihood of encounters with police. Indeed, police shootings tend to be highly (though perhaps curvilinearly)² correlated with violent-crime rates, and a number of studies have concluded that racial disparities in the former dissipate when benchmarked to the latter.³

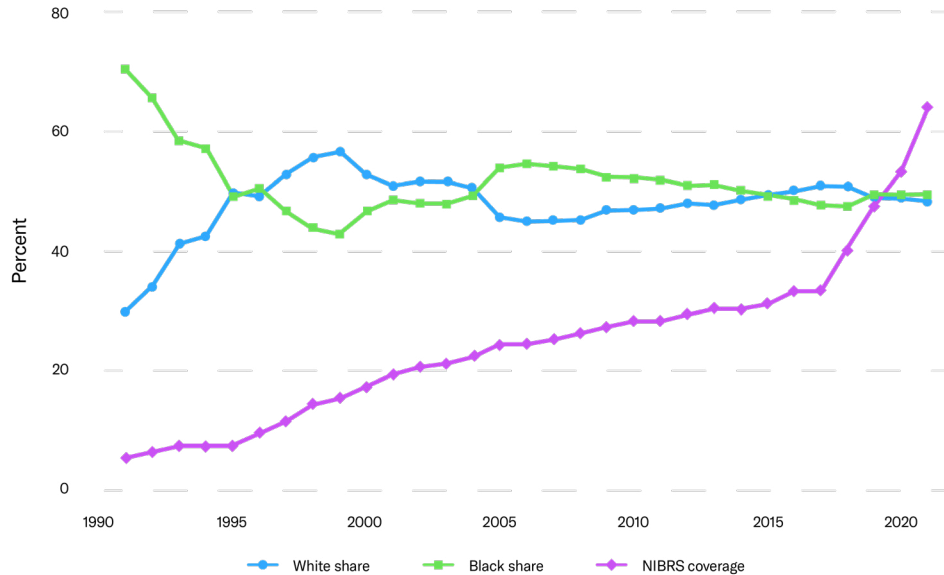
Another estimation module thus asks respondents to estimate racial-group shares of violent offenders. It begins by informing respondents that data “from the FBI’s National Incident-Based Reporting System (NIBRS) indicates that 682,586 violent crimes (homicide, assault, robbery, rape) were reported in 2021 for which the race of the offender is known (91% of all cases).” Next, respondents are told that, according to census data, “white Americans (including non-Hispanic and Hispanic whites) constituted 75.8% of the U.S. population in 2021, while black Americans (including non-Hispanic and Hispanic blacks) constituted 13.6% and Asian Americans 6.1% of the U.S. population.” Lastly, respondents are asked to estimate the percentage of the 682,586 violent crimes reported in 2021 that were committed by white, black, Asian, and “other” Americans.

According to the 2021 NIBRS data, 48% of racially identified violent offenders were white, 49% were black, and 1% were Asian. However, before proceeding to the results, it's important to note why these benchmarks might be questionable. For one thing, they are derived from reports submitted by 11,794 law-enforcement agencies whose jurisdictions cover just 64% of the total U.S. population. While this rate of coverage is quickly expanding as the FBI phases out its Summary Reporting System (SRS) and transitions to NIBRS (which it did in 2021), the figures from the latter are nonetheless incomplete. Nevertheless, **Figure A.3A** shows that the racial-group shares of violent offenders have remained more or less steady since 2000, when NIBRS's coverage was just 17%. Thus, the incompleteness of the data may not matter for estimates of group shares.



Figure A.3A

White/Black Shares of Racially Identified Violent Offenders and NIBRS Reporting Rates



Note: Blue and green lines represent the white and black shares of racially identified violent criminal offenders. Purple line represents the share of all law-enforcement agencies that reported crime data to the FBI's National Incident-Based Reporting System (NIBRS).

Source: FBI Crime Data Explorer

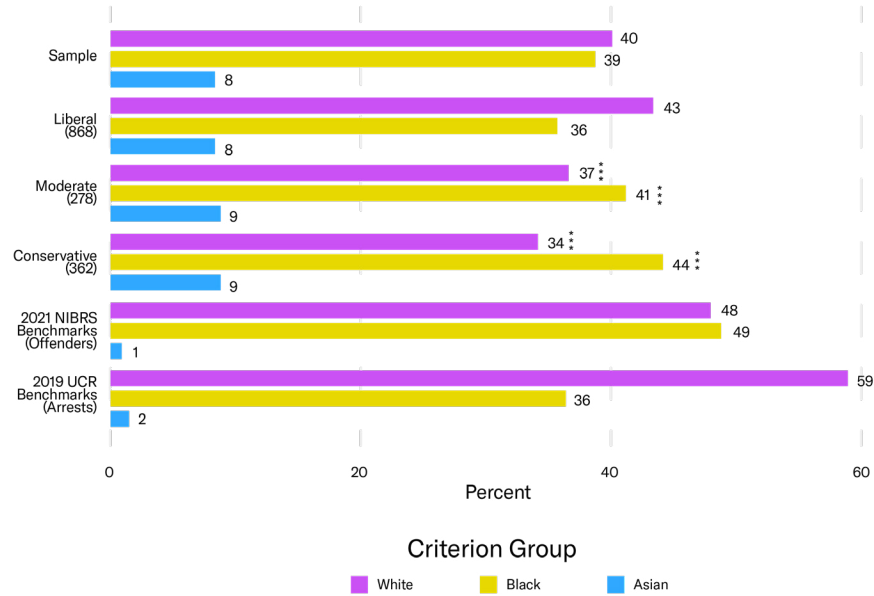
On the other hand, if the law-enforcement agencies that contributed 2021 data to NIBRS are disproportionately composed of those in urban areas, estimates of group shares will likely be biased. As I can neither exclude nor confirm this possibility, **Figure A.3B** includes alternative benchmarks, which are based on the 2019 FBI Uniform Crime Reporting (UCR) program's data of violent-crime arrests by race and which assume that the racial distribution of arrests is more or less the same in 2021 as it was in 2019. Ultimately, neither of these sources is without limitations. I thus leave it to the reader to determine which benchmarks to use for the assessment of accuracy.

If adopting the NIBRS benchmark, the results in Figure A.3B indicate that the average respondents underestimated the shares of violent crimes attributable to white (40% vs. 48%, -8 points) and black (39% vs. 49%, -10 points) Americans and overestimated the share attributable to Asian Americans (8% vs. 1%, +7 points). Recall, though, that liberal respondents were expected to underestimate and overestimate the black and white shares, respectively, while conservative respondents were expected to do the opposite. In the end, only part of this prediction is (loosely) supported in the results. Specifically, and contrary to expectations, liberals (36%) and conservatives (44%) underestimated the black share. As expected, though, the former did so to a significantly greater degree than the latter (-13 vs. -5 points, $p < 0.001$). Likewise, liberals (43%) and conservatives (34%) underestimated the white share, but liberals significantly less so than conservatives (-5 vs. -14 points, $p < 0.001$). Taken as a whole, conservatives were more accurate in their estimates of the black share, while liberals were more accurate in their estimates of the white share.



Figure A.3B

Estimates of 2021 Racial-Group Violent-Crime Shares, by Respondent Ideology



Note: Bars in first four rows represent average percentage estimates of each racial group’s share of all reported violent crimes reported in 2021 among the overall sample and among self-identified liberal, moderate, and conservative respondents. Bars in the bottom two rows represent the racial-group shares of violent offenders and of violent-crime arrests reported in the 2021 NIBRS and 2019 UCR, respectively. Sample sizes for the ideological groups are in parentheses. Liberal respondents are the reference group for tests of statistical significance.

†p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001

Source: Author survey; 2021 NIBRS; 2019 UCR

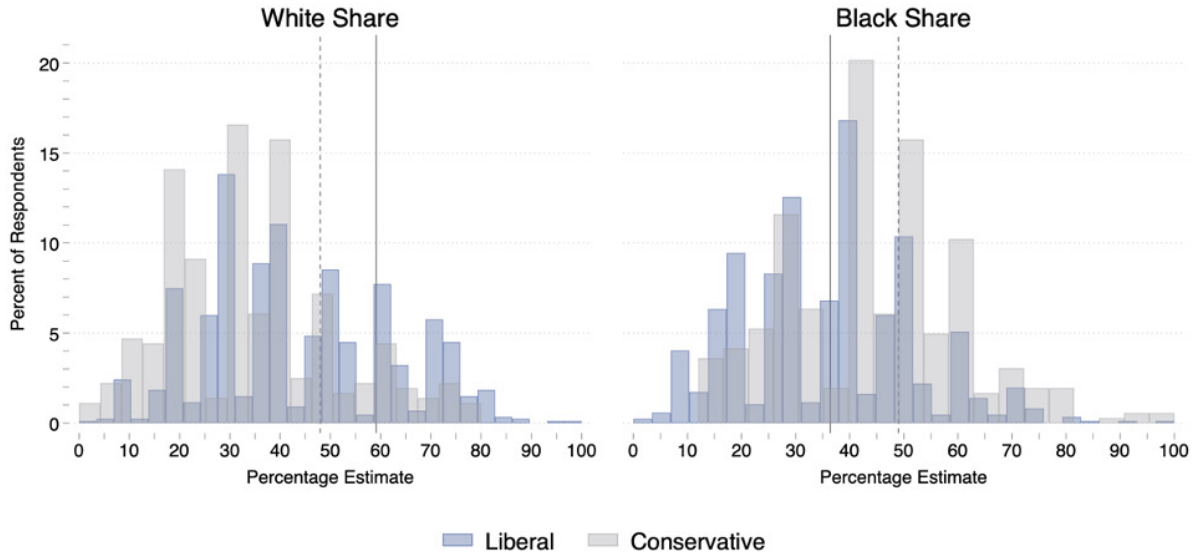
Some of the conclusions above must be modified if adopting the 2019 UCR benchmarks. Specifically, the average respondent would then have underestimated (40%) the white share (59%) by 19 points while overestimating (39%) the black share (36%) by just 3 points. The estimates of liberals also become more accurate across criteria than those of conservatives. In fact, the liberal estimate of the black share would hit the benchmark bull’s-eye, while that of conservatives would now be off by +8 points (up from -5).

Regardless of which benchmarks one adopts, liberals tend to give larger underestimates of the black share of violent criminal offenders and larger overestimates of the white share than conservatives, while conservatives tend to give larger underestimates of the white share and larger overestimates of the black share. This is evident in **Figure A.3C**, which visualizes the distribution of estimates among liberals and conservatives. For instance, for the black share of violent criminal offenders, liberals (22%) were approximately three times as likely ($p < 0.001$) as conservatives (7%) to give estimates of 20% or less, whereas conservatives (20%) were twice as likely ($p < 0.001$) as liberals (10%) to give estimates of 60% or more. For the white share of violent criminal offenders, conservatives (27%) were more than twice as likely ($p < 0.001$) as liberals (12%) to give estimates of 20% or less, while liberals (14%) were more than three times as likely ($p < 0.001$) as conservatives (4%) to give estimates of 70% or more.



Figure A.3C

Distributions of White/Black Violent-Crime Share Estimates, by Respondent Ideology



Note: Bars represent the percentage of liberal (blue) and conservative (gray) respondents (y-axis) at each point along the white and black violent-crime share estimation scales (x-axis). Dotted and solid vertical lines denote the 2021 NIBRS and 2019 UCR benchmarks, respectively.

Source: Author survey; 2021 NIBRS; 2019 UCR

In sum, the average estimates of respondents overall and those of liberals and conservatives are generally inconsistent with expectations. If adopting NIBRS benchmarks, all respondents—especially liberals—underestimated black Americans’ contribution to violent crime (as was predicted) to varying degrees, but they also underestimated that of white Americans (contrary to prediction). If judging by the UCR benchmarks (with the exception of the overestimates of conservatives, which was predicted), the respondent estimates were roughly accurate (contrary to prediction)—and the average liberal perfectly accurate (also contrary to prediction)—in estimating the black share. This was the case even as respondents (especially conservatives) substantially underestimated the white share of violent criminal offenders.

Where expectations are better supported are in the tails of the estimate distributions; liberals are significantly more likely than conservatives to give large underestimates and overestimates of the black and white shares, respectively, and conservatives are significantly more likely to do the inverse. These findings suggest that underestimates of black Americans’ overrepresentation among violent-crime offenders may play a relatively minor role in liberals’ bias-centered attributions for racial disparities in police use of force as well as in their tendency to rate whites as more violent than blacks on measures of group stereotypes.



Appendix A.4. Estimates of the U.S. State Prison Population

Public attitudes toward police use of force may also be influenced by beliefs about the kind of offenders the police put behind bars. In other words, if people perceive that such offenders are mostly incarcerated for nonviolent crimes, such as the sale or consumption of drugs—or, as in the case of Eric Garner, the sale of illegal cigarettes—they might be more likely to feel that the police typically use force in cases in which it is unwarranted or superfluous.

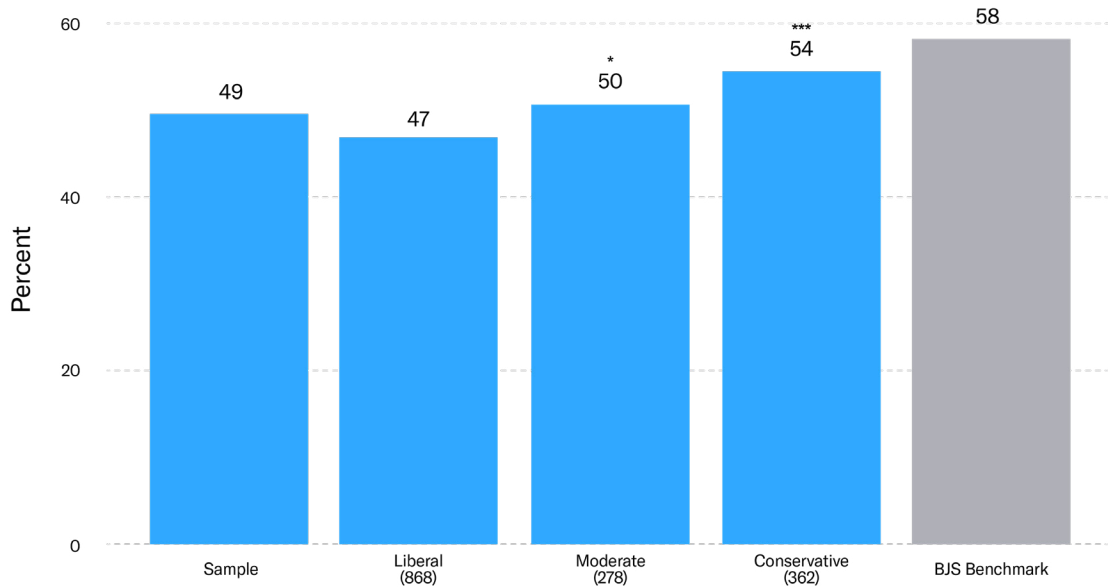
This estimation section thus asks respondents to estimate the violent-offender share of the U.S. state prison population. Specifically, respondents are first told that according to “data from the U.S. Bureau of Justice Statistics, there were a total of 1,221,288 million inmates in U.S. state prisons of January 1, 2020.” They are then asked to indicate the share of these inmates that “are in prison because they were convicted of a violent (vs. nonviolent offense).” According to 2020 Bureau of Justice Statistics data, 58% of U.S. state prison inmates are violent offenders.⁴

Figure A.4A graphs the average estimates for the sample and for each of the ideological groups.⁵ The average respondent underestimated (49%) the criterion by 9 points. As expected, conservatives (54%) underestimated it by a significantly ($p < 0.001$) smaller margin than liberals (47%)—and, though not shown, “liberals” (48%) by a significantly ($p < 0.001$) smaller margin than “very liberals” (42%). A glance at the estimation distributions further shows that 48% of liberals (vs. 33% of conservatives, $p < 0.001$) gave estimates of 40% or less, including 37% (vs. 25% of conservatives, $p < 0.001$) who gave estimates of less than 40%. Conservatives, meanwhile, were nearly twice as likely as liberals (14% vs. 8%, $p=0.002$) to give estimates of 80% or more, and 11 points more likely (29% vs. 18%, $p < 0.001$) to give estimates of 70% or more.



Figure A.4A

Estimates of the Violent-Offender Share of the U.S. State Prison Population, Overall and by Respondent Ideology



Note: Blue bars represent average estimates of the violent-offender share of the U.S. state prison population for the overall sample and among self-identified liberal, moderate, and conservative respondents. The gray bar represents the actual violent-offender share reported by BJS. Sample sizes for the ideological groups are in parentheses. Liberal respondents are the reference group for tests of statistical significance.

†p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001

Source: Author survey; 2020 BJS data

These results are wholly aligned with expectations. Though all respondents underestimated the violent-offender share of the state prison population on average, liberals did so to a significantly greater degree than conservatives.

Appendix A.5. Summarizing Estimation (In)accuracy

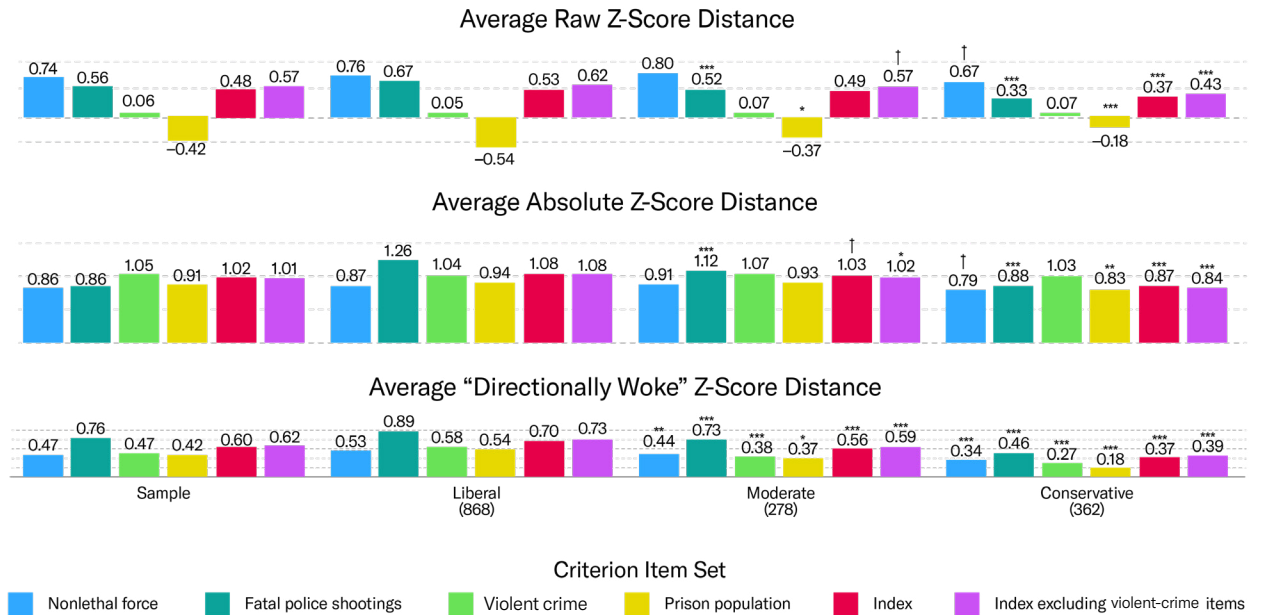
Summary indexes can provide an overview of respondents' estimation accuracy across criteria. To generate them, I first subtract respondents' criterion estimates from their respective benchmarks. I then z-score each resulting differenced scale to have a mean of 0 and an SD of 1.⁶ These z-scored differenced scales are subsequently regressed onto the original differenced scales for the purpose of identifying the z-score corresponding to the value of 0 (i.e., a perfectly accurate estimate). Finally, I create new scales by adding or subtracting (depending on whether it is negative or positive) this z-score value from the respective z-scored difference scales. The outputs are thus scales on which the value 0 represents a perfectly accurate estimate, and all other values denote the z-score (or SD) distance therefrom.



The top row of **Figure A.5A** displays the average z-score distances from “perfect accuracy” for each individual criterion set and the overall average across all sets combined, represented by the index. For instance, respondents’ estimates for the nonlethal force items were an average of 0.74 SD *above* (i.e., an overestimate) their respective benchmark values. And, in the other direction, their estimates of the violent-offender share of the prison population were 0.42 SD *below* the respective benchmarks, on average.

Figure A.5A

Estimation Accuracy Index Scores Overall and by Respondent Ideology



Note: Bars in top row represent the average SD distance of respondents’ criterion estimates from their respective benchmarks. Scores of 0 on the combined indexes (purple bars) indicate that a respondent consistently gave criterion estimates that matched their respective benchmarks (i.e., perfect accuracy). Scores above and below 0 indicate that a respondent overestimated and underestimated the criterion benchmarks, on average, respectively. Bars in the middle row represent the *absolute* average SD distance of respondents’ criterion estimates from their respective benchmarks. Bars in the bottom row represent the average SD distance of respondents’ criterion estimates from their respective benchmarks when the use-of-force estimates for whites, the violent-crime estimates for blacks, and the estimates for the violent-offender share of the prison population are reverse-coded.

Reverse-coding entails subtracting respondents’ criterion estimates from their respective benchmark values. Scores of 0 on the resulting indexes still represent perfect estimation accuracy. Scores above 0, though, indicate that a respondent tended to: (a) overestimate the general, black, and Asian use-of-force criteria and/or to underestimate the white use-of-force criteria; (b) underestimate the black and overestimate the white violent-crime shares; and (c) underestimate the violent-offender share of the population.

The reverse is the case for scores below 0, which would indicate that a respondent tended to: (a) underestimate the general, black, and Asian use-of-force criteria and/or to overestimate the white use-of-force criteria; (b) overestimate the black and underestimate the white violent-crime shares; and (c) overestimate the violent-offender share of the population. Sample sizes for the ideological groups are in parentheses. Liberal respondents are the reference group for tests of statistical significance.

†p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001

Source: Author survey



By these measures, ideological differences in accuracy tend to be modest, if statistically significant. This is not surprising, given that positive and negative values on these scales offset or cancel out, and given that liberals' and conservatives' estimates for a number of overall criteria were very similar and generally diverged only with respect to those for different racial groups.

For instance, for the nonlethal force items, the overestimates of liberal respondents were only 0.09 SD larger ($p=0.050$) on average than those of conservatives. This is because the differences between them were largely confined to the estimated rates for black PPC respondents. For other individual criterion sets, liberal-conservative differences range from -0.02 SD (group violent-crime shares; $p=0.156$) to $+0.34$ SD (fatal police shootings; $p < 0.001$) and $+0.36$ SD (prison population; $p < 0.001$) above the criteria. Across all sets, the average liberal (over)estimate was 0.53 SD above the criterion, as compared with 0.37 SD above among conservatives. This 0.16 SD difference ($p < 0.001$) grows to 0.19 SD if excluding the violent-crime items,⁷ whose accuracy benchmarks are questionable.

But because positive and negative values offset or cancel out in the raw distance scales, respondents' estimates appear to be more accurate than they actually are. Arguably, a better approach to assessing accuracy is to multiply all negative values by -1 and examine *absolute* accuracy, i.e., the positive distance of all estimates from zero. These absolute accuracy scores are presented in the middle row of Figure A.5A. For instance, across all item sets, the average liberal estimate was 1.08 SD removed from the criterion, whereas the average conservative estimate was off by 0.87 SD. Thus, the estimates of conservative respondents were 0.21 SD—or 0.24 SD if excluding the violent-crime items—more accurate ($p < 0.001$), on average, than those of their liberal counterparts.

Recall that a common thread across respondents' estimates was to give larger overestimates when criteria implicated black vs. white Americans. For instance, the average respondent substantially overestimated and underestimated, respectively, the black and white shares of those fatally shot by police. While the average respondent overestimated *both* the unarmed black and white victim shares, the number of respondents who overestimated the former *and* underestimated the latter (212 respondents, or 14.1% of the sample) was five times the number who did the inverse (42 respondents, or 2.8%).

It is thus worthwhile to consider the general extent to which respondents gave estimates that were directionally “woke” vs. “unwoke.”⁸ In the most extreme case, a directionally woke estimator is one who perceives that police use of force is pervasive and exclusively directed against nonwhites, that all FOIS victims are unarmed, that whites constitute all of the country's violent criminal offenders, and/or that the U.S. state prison population is exclusively filled with nonviolent offenders. Conversely, the most extreme directionally “unwoke” estimator is one who perceives that police use of force either never occurs or is exclusively directed against whites, that either no fatal police-shooting victims are unarmed or that only white victims are unarmed, that nonwhites commit all violent crimes, and/or that the U.S. state prison population exclusively consists of violent offenders.

Needless to say, such extreme directionally woke and unwoke estimators are hypothetical endpoints. Virtually no respondent in the sample meets their descriptions. My interest, then, is in quantifying the extent to which respondents exhibit such estimation tendencies—in other words, measuring where they fall along the woke and unwoke continuum.

To construct such directionally woke accuracy indexes, I reverse-code all use-of-force accuracy measures for whites so that positive and negative scores therein now denote underestimates and overestimates, respectively. I do the same for the accuracy measure of black violent-crime estimates and for that of estimates of the violent-offender share of the state prison population.

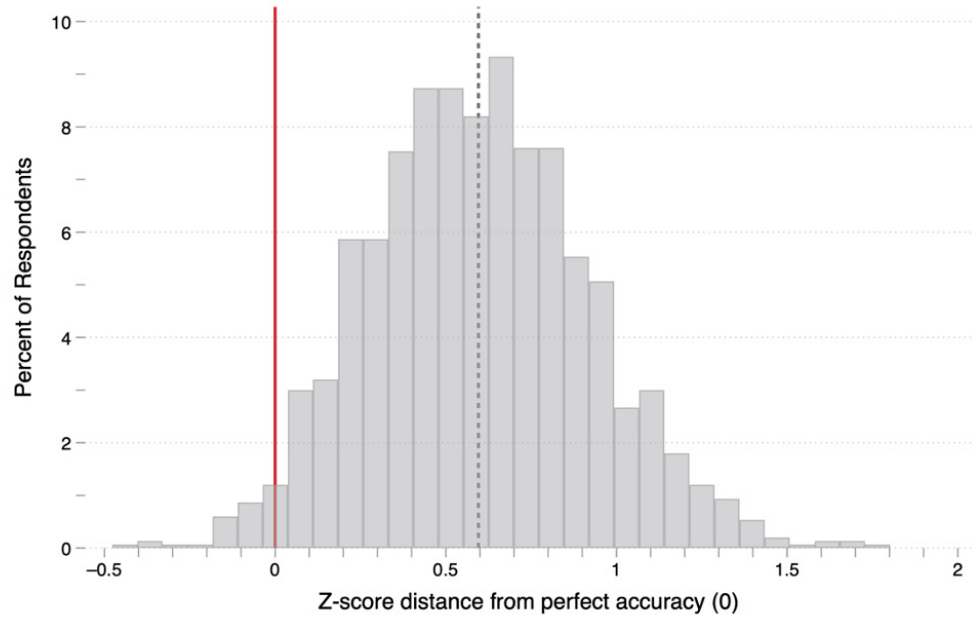
Scores on the resulting indexes are shown in the bottom row of Figure A.5A, while its frequency distribution is visualized in **Figure A.5B**. Scores of 0 still denote perfect estimation accuracy, while scores above and below zero now represent respondents who gave relatively greater directionally



woke and unwoke (mis)estimates on average, respectively. Naturally, liberal–conservative differences on the combined directionally woke index are now larger—approximately 0.33 SD in size—than those observed in the raw and absolute indexes. And, as is demonstrated later in Appendixes A.6–A.7, of the three accuracy indexes, the directionally woke index is by far the most predictive of respondents’ policing perceptions and policy preferences.

Figure A.5B

Directionally Woke Estimation (In)accuracy Index Score Distribution



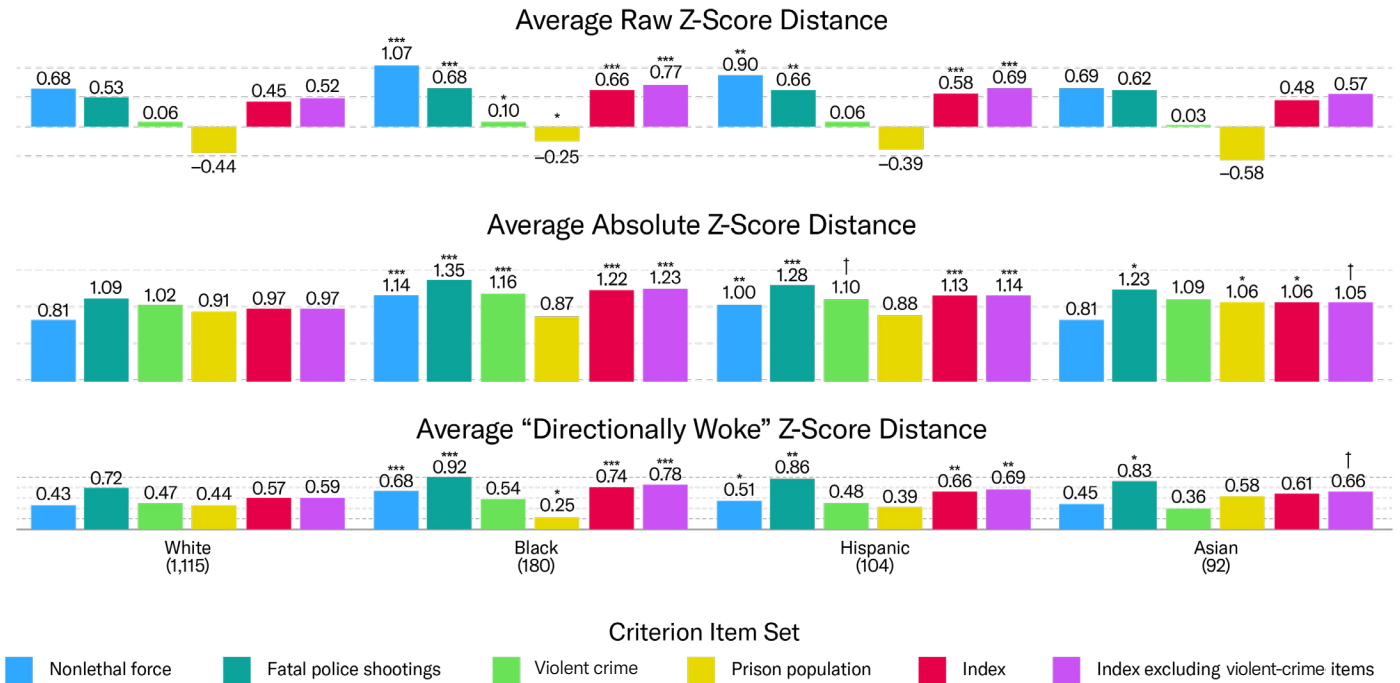
Note: Gray bars represent the percentage of respondents scoring at a given point along the directionally woke estimation (in)accuracy index. Dashed vertical black line represents the mean sample index score. Solid vertical red line represents perfect estimation accuracy (i.e., a score of 0 on the index).

Source: Author survey



Figure A.5C

Estimation Accuracy Index Scores, by Respondent Race/Ethnicity



Note: Bars in top row represent the average SD distance of respondents' criterion estimates from their respective benchmarks. Scores of 0 on the combined indexes (purple bars) indicate that a respondent consistently gave criterion estimates that matched the respective benchmarks (i.e., perfect accuracy). Scores above and below 0 indicate that a respondent overestimated and underestimated the criterion benchmarks on average, respectively. Bars in the middle row represent the *absolute* average SD distance of respondents' criterion estimates from their respective benchmarks. Bars in the bottom row represent the average SD distance of respondents' criterion estimates from their respective benchmarks when the use-of-force estimates for whites, the violent-crime estimates for blacks, and the estimates for the violent-offender share of the prison population are reverse-coded.

This reverse-coding entails subtracting respondents' criterion estimates from their respective benchmark values. Scores of 0 on the resulting indexes still represent perfect estimation accuracy. Scores above 0, though, indicate that a respondent tended to: (a) overestimate the general, black, and Asian use-of-force criteria and/or to underestimate the white use-of-force criteria; (b) underestimate the black and overestimate the white violent-crime shares; and (c) underestimate the violent-offender share of the population.

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†p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001

Source: Author survey

Appendix A.6. The Relationship Between Estimation Accuracy and Perceptions

Before proceeding to the experimental analysis, the first and most basic question that needs to be addressed is whether respondents' criterion estimates are independently predictive of their view of the problem of police violence. If not, there is little hope of the treatment having any appreciable effect on the latter.

In order to answer this question, I separately regress the six-item perceptions index on each of the three estimation accuracy indexes featured in Table 4 in the main body of this report. The purpose is to test which of the estimation accuracy indexes, if any, best accounts for variation in the perceptions index. However, because any relationship between the two is likely to be at least partially a function of other core variables (such as partisanship and ideology), I additionally fit models that adjust for respondent ideology, partisanship, age, sex, race/ethnicity, educational attainment, household income, marital status, household presence of children, census division, and whether the respondent was assigned to the treatment or control group.⁹

Figure A.6A plots the baseline and covariate-adjusted beta coefficients for the effects of each of the three estimation accuracy indexes on the six-item perceptions index.¹⁰

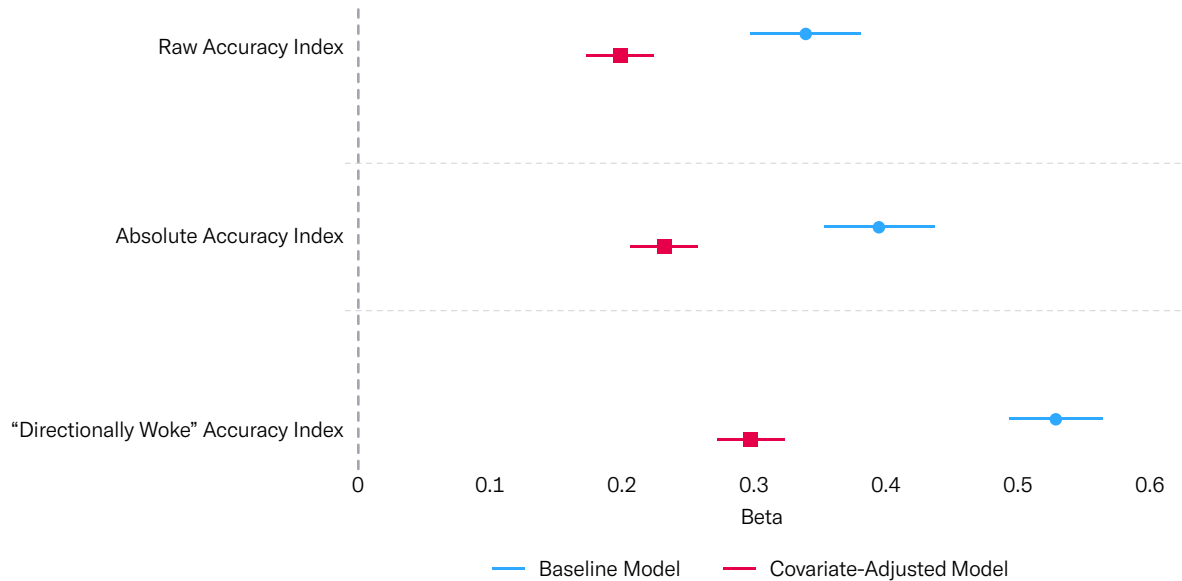
For present purposes, there are two key findings. First, all accuracy indexes are significantly positively predictive of scores on the perceptions index. While these effects are substantially moderated after adjusting for control variables—as would be expected, due to the relationship between accuracy and ideology—they remain sizable and statistically significant. Thus, irrespective of respondents' political orientations and other background/demographic variables, larger criterion overestimates tend to correspond with higher values on the perceptions items.

Second, of the three accuracy indexes, the directionally woke index is most predictive. Alone (i.e., in the baseline models), it explains 36.6% of the variance in perceptions, as compared with 15.0% for the raw index and 20.4% for the absolute index.¹¹ For comparison, ideology alone accounts for 42.1% of the variance while party identification accounts for 37.9%. Thus, the size of the directionally woke index's bivariate relationship with perceptions is in the same ballpark as that of the latter's relationships with ideology and party, respectively. In the adjusted model, the effect on perceptions for a 1 SD increase on the directionally woke index approaches three times the size ($\beta=0.290$) as the effect of moving two categories, or from the "pure independent" to "strong Democrat" category on the seven-category party-ID scale ($\beta=0.102$), and comparable with the effect of moving from the "very conservative" to "moderate" category on the seven-category ideology scale ($\beta=0.286$). Relative to a "covariate-only" model (adjusted $R^2=0.500$) that excludes the accuracy indexes, the directionally woke index uniquely accounts for an additional 8.5 points of the variance (adjusted $R^2=0.585$) vs. an additional 4.6 points (adjusted $R^2=0.546$) and 5.9 points (adjusted $R^2=0.559$) for the raw and absolute indexes, respectively.



Figure A.6A

Baseline and Covariate-Adjusted Effects of Estimation Accuracy on the Six-Item Perceptions Index



Note: N=1,499. Nine respondents were dropped from the data due to missing information on pretreatment covariates. Markers represent the baseline (blue) and covariate-adjusted (red) change in the six-item perceptions index from an SD increase on a given accuracy index. Error bars are 95% confidence intervals. All three accuracy indexes are modeled separately. Covariate-adjusted models control for the treatment, respondent ideology, party ID, sex, age, race/ethnicity, educational attainment, marital status, household income, household presence of children, and census division.

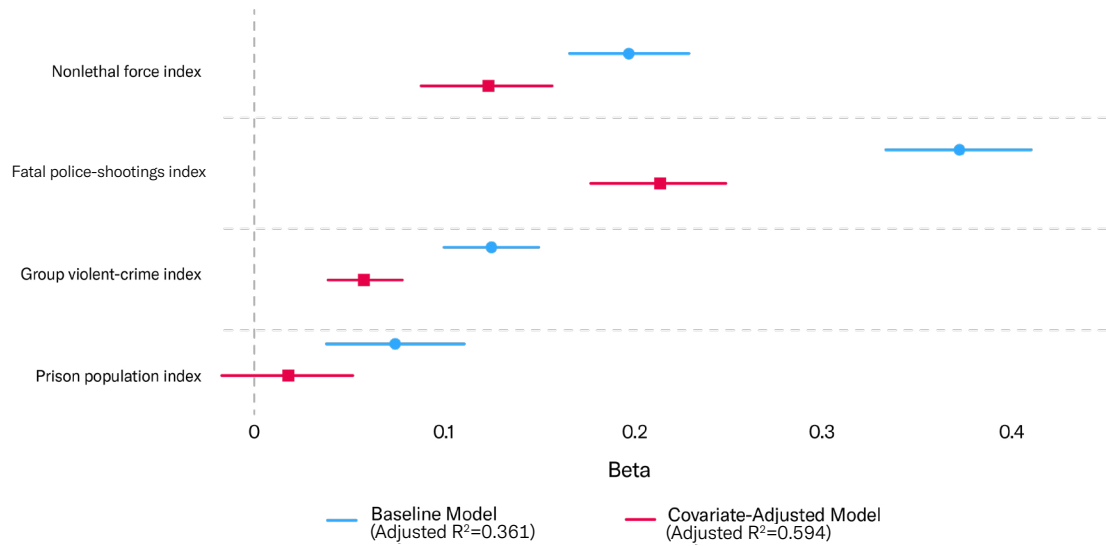
Source: Author survey

Figure A.6B decomposes the combined directionally woke accuracy index and plots the baseline and covariate-adjusted effects of its four constituent criterion subscales. When all four are entered together into the (baseline) model, each independently and significantly explains variation in the perceptions index, though some do so more than others. Specifically, the baseline effects on the perceptions index are strongest for the fatal police shootings accuracy index ($\beta=0.373$, $p < 0.001$), followed by the nonlethal force index ($\beta=0.198$, $p < 0.001$), the group violent-crime index ($\beta=0.125$, $p < 0.001$), and the prison population index ($\beta=0.074$, $p < 0.001$). As the first two are most directly related to the content of the perceptions indicators (i.e., police brutality and racism), this is not surprising. Finally, when all pretreatment covariates are entered into the model, all but the effects of the prison population index ($\beta=0.018$, $p=0.320$) remain statistically significant.



Figure A.6B

Baseline and Covariate-Adjusted Effects of the Directionally Woke Estimation Accuracy Subscales on the Six-Item Perceptions Index



Note: N=1,499. Nine respondents were dropped from the data due to missing information on pretreatment covariates. Markers represent the baseline (blue) and covariate-adjusted (red) change in the six-item perceptions index from an SD increase on a given directionally woke estimation accuracy subscale. Error bars are 95% confidence intervals. All four indexes are modeled together. Covariate-adjusted models add controls for the treatment assignment, respondent ideology, party ID, sex, age, race/ethnicity, educational attainment, marital status, household income, household presence of children, and census division.

Source: Author survey

In sum, respondents' estimation (in)accuracy is highly predictive of their general perceptions of police brutality and racism, regardless of their political leanings. Further, that this relationship is strongest with the directionally woke (in)accuracy index (which reverse-codes the criterion estimates for whites)—and is still strongest when the perceptions index is limited to the three race-neutral indicators—suggests that estimates of police force against whites factor relatively little,¹² if at all, into respondents' perceptions of the seriousness of the problem of police brutality. This is despite the fact that white Americans are the modal victims of police use of force. Given this stronger relationship, the directionally woke index is the one that I adopt in some of the experimental analyses that follow.



Table A.6A

Effects of (In)accuracy Indexes on Perception Subindexes

| | General/Race-Neutral Index ($\alpha=0.812$) | | | | Black-Explicit Items ($\alpha=0.919$) | | | |
|--------------------|--|-------------------------|---------------------|-------------------------|---|-------------------------|---------------------|-------------------------|
| | 1. How often do you think police officers use more force than is necessary when responding to a possible criminal situation? 2. In your view, in the U.S. today, how much of a problem is the unjustified killing of criminal suspects by police? 3. The media exaggerates the amount of police brutality in this country (reverse-coded). | | | | 1. Cases in which the police unlawfully kill black suspects are very rare and blown out of proportion by the media (reverse-coded). 2. There is an epidemic of police racism and violence against black people in this country. 3. Black people are regularly preyed upon by racist police. | | | |
| (In)accuracy Index | Baseline | | Covariate-Adjusted | | Baseline | | Covariate-Adjusted | |
| | Beta | Adjusted R ² | Beta | Adjusted R ² | Beta | Adjusted R ² | Beta | Adjusted R ² |
| Raw | 0.319*** (0.021) | 0.139 | 0.192*** (0.016) | 0.467 | 0.344*** (0.022) | 0.137 | 0.198*** (0.012) | 0.542 |
| Absolute | 0.365*** (0.022) | 0.183 | 0.218*** (0.016) | 0.478 | 0.407*** (0.022) | 0.193 | 0.234*** (0.012) | 0.556 |
| Directionally Woke | 0.473*** (0.018) | 0.308 | 0.269*** (0.016) | 0.496 | 0.560*** (0.021) | 0.365 | 0.312*** (0.015) | 0.586 |
| Covariates-Only | --- | --- | --- | 0.423 | --- | --- | --- | 0.502 |

Note: N=1,499 respondents. Cell entries in “Beta” column represent the standardized (z-score) change in each outcome index for an SD increase on a given estimation (in)accuracy index. Robust standard errors are in parentheses. Covariate-adjusted models control for treatment assignment, respondent ideology, party ID, sex, age, race/ethnicity, educational attainment, marital status, household income, household presence of children, and census division.

Source: Author survey

†p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001



Table A.6B

Effects of Nonlethal and Lethal Force Criterion Estimates on Perception Indexes

| | Criterion Estimate | General/Race-Neutral Index ($\alpha=0.812$) | | Black-Explicit Items ($\alpha=0.919$) | | Six-Item Perceptions Index ($\alpha=0.926$) | |
|---|---------------------------|---|--------------------|---|--------------------|---|--------------------|
| | | Baseline | Covariate-Adjusted | Baseline | Covariate-Adjusted | Baseline | Covariate-Adjusted |
| Reported nonlethal force | All PPC respondents (%) | 0.003 (0.002) | 0.002* (0.001) | 0.002 (0.002) | 0.002 (0.001) | 0.002 (0.002) | 0.002* (0.001) |
| | White PPC respondents (%) | -0.004** (0.001) | -0.002 (0.001) | -0.005*** (0.001) | -0.001 (0.001) | -0.005** (0.001) | -0.002 (0.001) |
| | Black PPC respondents (%) | 0.009*** (0.001) | 0.003** (0.001) | 0.010*** (0.001) | 0.004*** (0.001) | 0.010*** (0.001) | 0.004*** (0.001) |
| Fatal police-shooting victim shares | White share (%) | -0.011*** (0.003) | -0.004* (0.002) | -0.013*** (0.002) | -0.004* (0.002) | -0.012*** (0.002) | -0.004* (0.002) |
| | Black share (%) | 0.009** (0.002) | 0.006** (0.002) | 0.012*** (0.003) | 0.008*** (0.002) | 0.010*** (0.003) | 0.007*** (0.002) |
| | Asian share (%) | 0.004 (0.004) | 0.007** (0.003) | 0.006 (0.005) | 0.011*** (0.002) | 0.005 (0.004) | 0.009*** (0.002) |
| Logged implied # of fatal police-shooting victims | White | -0.249*** (0.019) | -0.140*** (0.018) | -0.299*** (0.025) | -0.162*** (0.019) | -0.274*** (0.021) | -0.151*** (0.017) |
| | Black | 0.280*** (0.019) | 0.132*** (0.019) | 0.326*** (0.026) | 0.143*** (0.022) | 0.303*** (0.021) | 0.138*** (0.019) |
| | Asian | 0.003 (0.016) | 0.019 (0.016) | 0.020 (0.017) | 0.037* (0.014) | 0.011 (0.015) | 0.028* (0.013) |
| Unarmed share of fatal police-shooting victims | All victims (%) | 0.008*** (0.001) | 0.006*** (0.001) | 0.007*** (0.001) | 0.004*** (0.009) | 0.007*** (0.001) | 0.005*** (0.001) |
| | White victims (%) | -0.003* (0.001) | -0.001 (0.001) | -0.003** (0.001) | -0.001 (0.001) | -0.003** (0.001) | -0.001 (0.001) |
| | Black victims (%) | 0.010*** (0.001) | 0.003** (0.001) | 0.014*** (0.001) | 0.006*** (0.001) | 0.012*** (0.001) | 0.005*** (0.001) |
| | Asian victims (%) | 0.001 (0.001) | 0.000 (0.001) | 0.000 (0.001) | 0.000 (0.001) | 0.000 (0.001) | 0.000 (0.001) |

Note: N=1,499. Cell entries represent the standardized (z-score) change in each outcome index for a one-unit increase in a predictor variable. Robust standard errors are in parentheses. All predictor variables are modeled together. Covariate-adjusted models control for treatment assignment, respondent ideology, party ID, sex, age, race/ethnicity, educational attainment, marital status, household income, household presence of children, and census division. “Implied” estimates are calculated by multiplying respondents’ estimates of the average annual number of fatal police-shooting victims by their estimates of racial-group victim shares.

†p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001

Source: Author survey

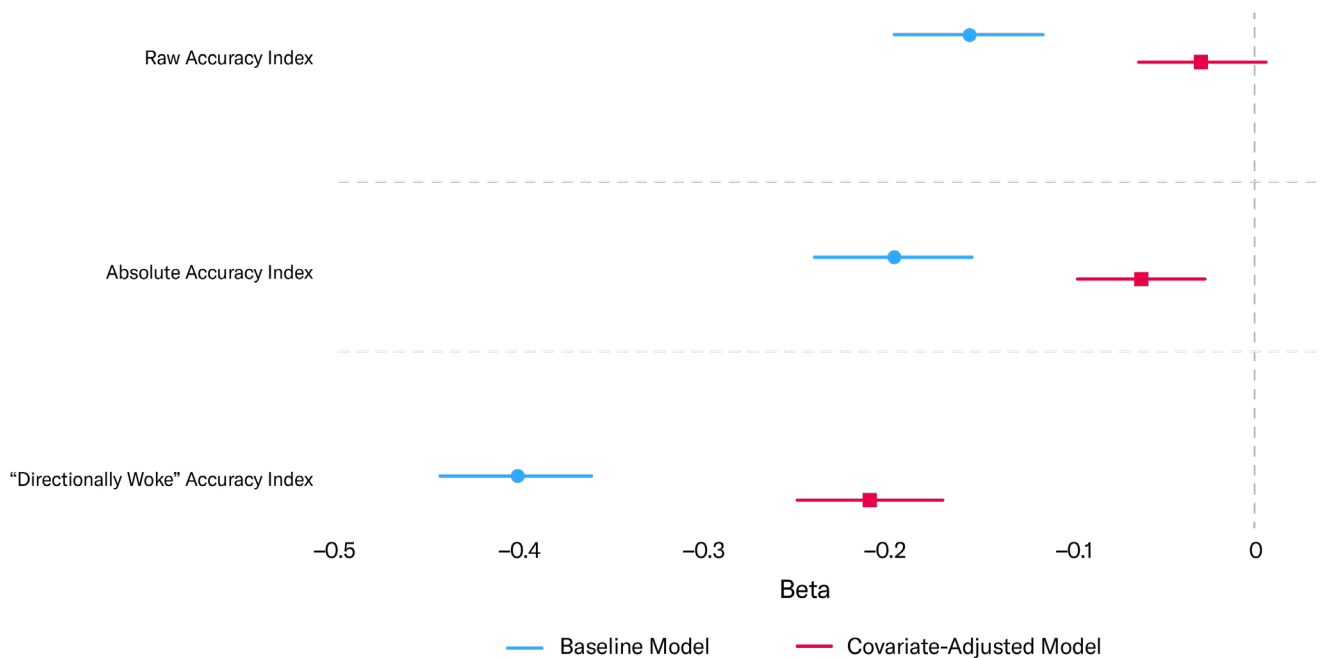


Appendix A.7. The Relationship Between Estimation Accuracy and Policy Preferences

As stated above, it is important to first assess whether estimation accuracy is independently predictive of policing policy preferences. I thus regress the combined policy index onto each of the three accuracy indexes. **Figure A.7A** displays the standardized baseline and covariate-adjusted changes on the policy index from an SD increase in each accuracy index. Skipping to the covariate-adjusted results, we see that the directionally woke accuracy index ($\beta=-0.210$, $p < 0.001$) is once again associated significantly more strongly with the policy index than the raw ($\beta=-0.029$, $p=0.112$) and absolute accuracy indexes ($\beta=-0.062$, $p=0.001$).

Figure A.7A

Baseline and Covariate-Adjusted Effects of Estimation Accuracy on the Policy Index



Note: $N=1,499$. Nine respondents were dropped from the data due to missing information on pretreatment covariates. Markers represent the baseline (blue) and covariate-adjusted (red) change in the policy index from an SD increase on a given accuracy index. Error bars are 95% confidence intervals. All three accuracy indexes are modeled separately. Covariate-adjusted models control for the treatment, respondent ideology, party ID, sex, age, race/ethnicity, educational attainment, marital status, household income, household presence of children, and census division.

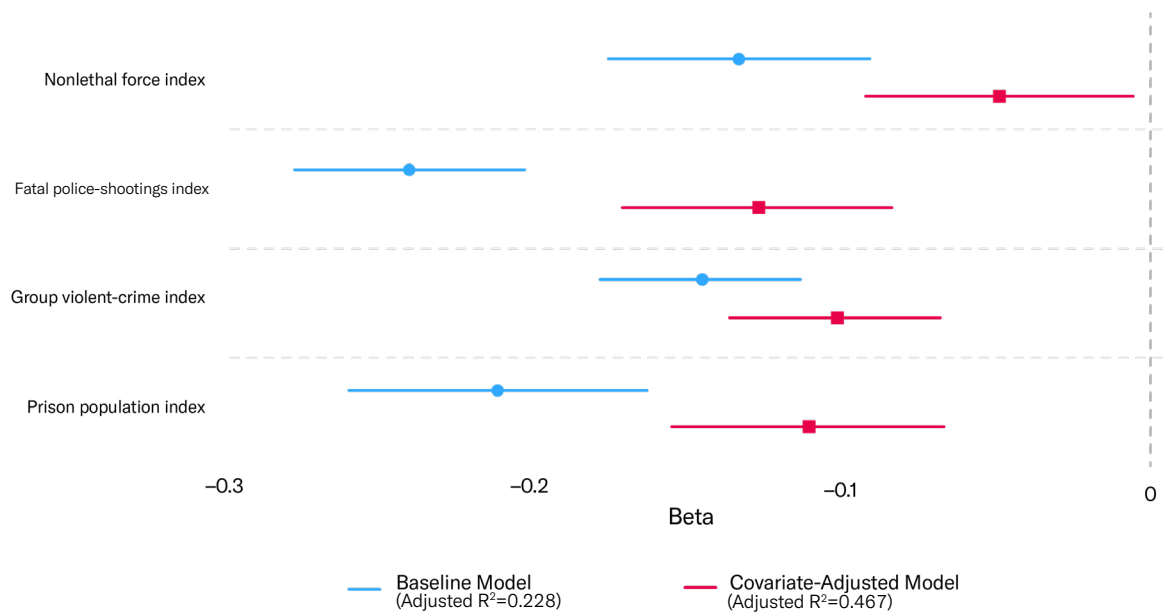
Source: Author survey



Figure A.7B visualizes the effects for each of the directionally woke accuracy index’s constituent scales. All are significantly (negatively) predictive of policy preferences, and all remain so after adjusting for pretreatment covariates. In terms of strength, the police-shootings index ($\beta=-0.128$, $p < 0.001$), the prison population index ($\beta=-0.111$, $p < 0.001$), and the group violent-crime index ($\beta=-0.103$, $p < 0.001$) are virtually equally strongly predictive, while the nonlethal force index is the least (but still significantly) predictive ($\beta=-0.049$, $p=0.029$).

Figure A.7B

Baseline and Covariate-Adjusted Effects of the Directionally Woke Estimation Accuracy Subscales on the Policy Index



Note: N=1,499. Nine respondents were dropped from the data due to missing information on pretreatment covariates. Markers represent the standardized baseline (blue) and covariate-adjusted (red) change in the policing policy index from an SD increase on a given directionally woke estimation accuracy subscale. Error bars are 95% confidence intervals. All four indexes are modeled together. Covariate-adjusted models add controls for the treatment assignment, respondent ideology, party ID, sex, age, race/ethnicity, educational attainment, marital status, household income, household presence of children, and census division.

Source: Author survey

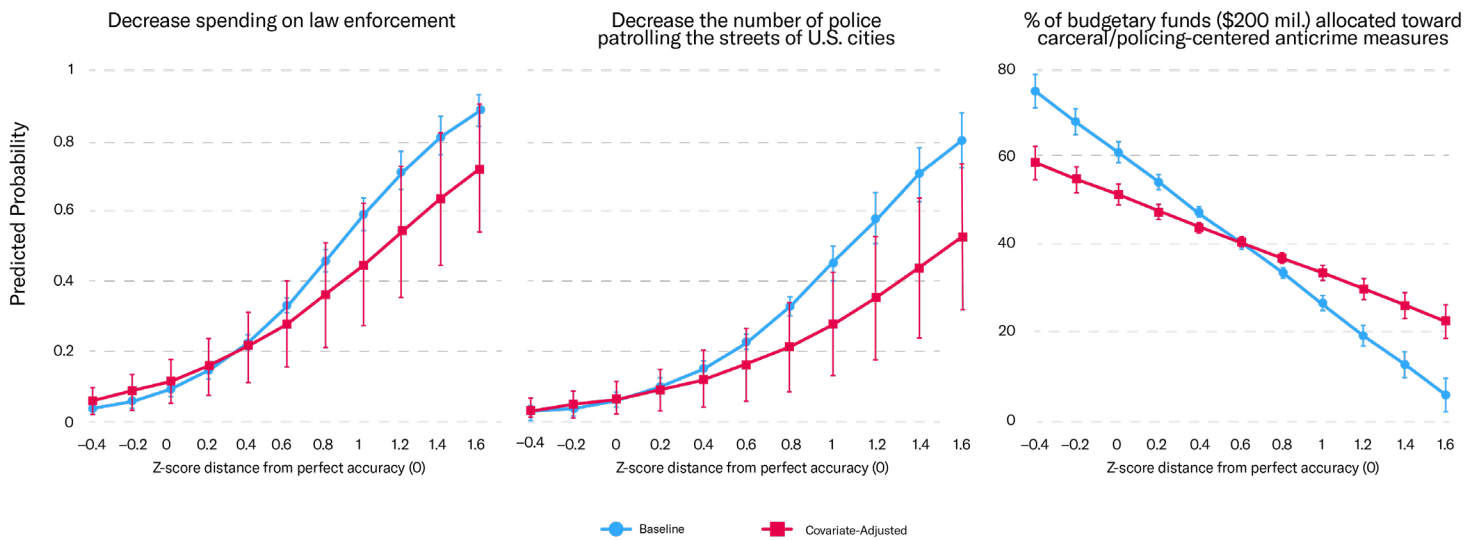
To give the reader a better sense of its substantive impact on policy preferences, the left and middle panels of **Figure A.7C** display the predicted probability of a respondent favoring decreases in police spending and decreases in the number of police patrolling city streets at different points along the directionally woke accuracy index. Holding ideology, party ID, and all other covariates constant, a perfectly accurate respondent (0 on the x-axis) is expected to have an 11.7% and a 6.1% chance of supporting decreases in police spending and decreases in the street police presence, respectively. But among the largest directionally woke estimators, these odds shoot up to 70.6% and 50.2%, respectively.



In the right panel, we see that perfectly accurate estimators are expected to allocate just over half of budgetary funds (\$200 million) toward carceral or policing-centered anticrime measures (e.g., hiring more police officers and installing more police surveillance cameras). The largest directionally woke misestimators, in contrast, are expected to allocate just 22.4% of funds to these initiatives.

Figure A.7C

Predicted Probability of Favoring Soft vs. Carceral Policing Policies, at Respondents' Varying Levels of Accuracy



Note: N=1,499. Nine respondents were dropped from the data due to missing information on pretreatment covariates. Lines in left and middle panels represent the baseline (blue) and covariate-adjusted (red) odds of endorsing the listed policy outcome at differing levels of the directionally woke accuracy index. Lines in right panel represent the baseline (blue) and covariate-adjusted (red) expected percentage of budgetary funds allocated toward carceral/policing-centered anticrime measures (e.g., hiring more police officers and installing more police surveillance cameras). Error bars are 95% confidence intervals. Covariate-adjusted models control for treatment assignment, respondent ideology, party ID, sex, age, race/ethnicity, educational attainment, marital status, household income, household presence of children, and census division.

Source: Author survey

To sum up, the preceding results suggest that—regardless of political orientation and other background variables—people’s policing policy preferences are substantially influenced by their (mis)estimates of the prevalence of police use of force and related criteria.

Appendix A.8. Mediation Analyses

If the treatment increased support for traditional policing measures by reducing perceptions of pervasive police brutality, it follows that the treatment’s effects on policy preferences were at least partially mediated through its effects on perceptions of police. As a formal test of this causal mechanism, I conduct a mediation analysis that begins with a fit of two linear regression

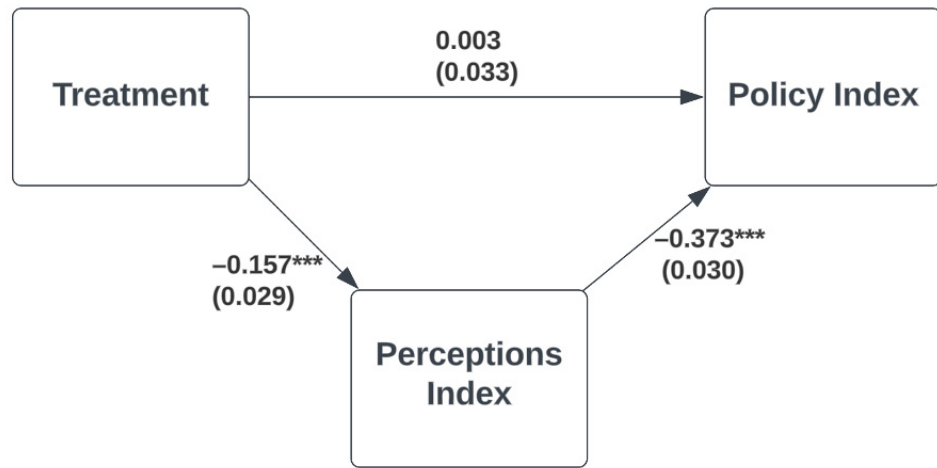


models. The first—the mediator model—regresses the perceptions index onto the treatment and all pretreatment covariates. The second—the outcome model—regresses the policy index onto the treatment, the perceptions index (the anticipated mediator), and all pretreatment covariates.

The results of these models are depicted in Figure A.8A. As expected, when the perceptions index ($b=-0.373$, $p < 0.001$) enters the outcome model, the direct effects of the treatment on the policy index are reduced to zero ($b=0.007$, $p=0.925$), suggesting full mediation.

Figure A.8A

Treatment Effects on Policy Preferences, Mediated by Perceptions



Note: $N=1,499$. The diagram depicts the standardized path coefficients from Seemingly Unrelated Regression (SUR) models. In the mediator model (treatment \rightarrow perceptions), the perceptions index is regressed on the treatment and all pretreatment covariates. In the outcome model (treatment, perceptions \rightarrow policy), the policy index is regressed on the perceptions index, the treatment, and all pretreatment covariates.

† $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source: Author survey

I next calculate the indirect or mediated effects of the treatment by multiplying the treatment’s effects on the perceptions index ($b=-0.178$, $p < 0.001$) by the latter’s effects on the policy index ($b=-0.364$, $p < 0.001$).¹³ The resulting indirect coefficient ($b=0.059$, $p < 0.001$) is statistically significant and approaches the size of the total effect ($b=0.061$, $p=0.076$), which suggests that the experimental decreases in the perceptions index account for virtually all (95.7%) of the treatment’s main effects on policy attitudes.

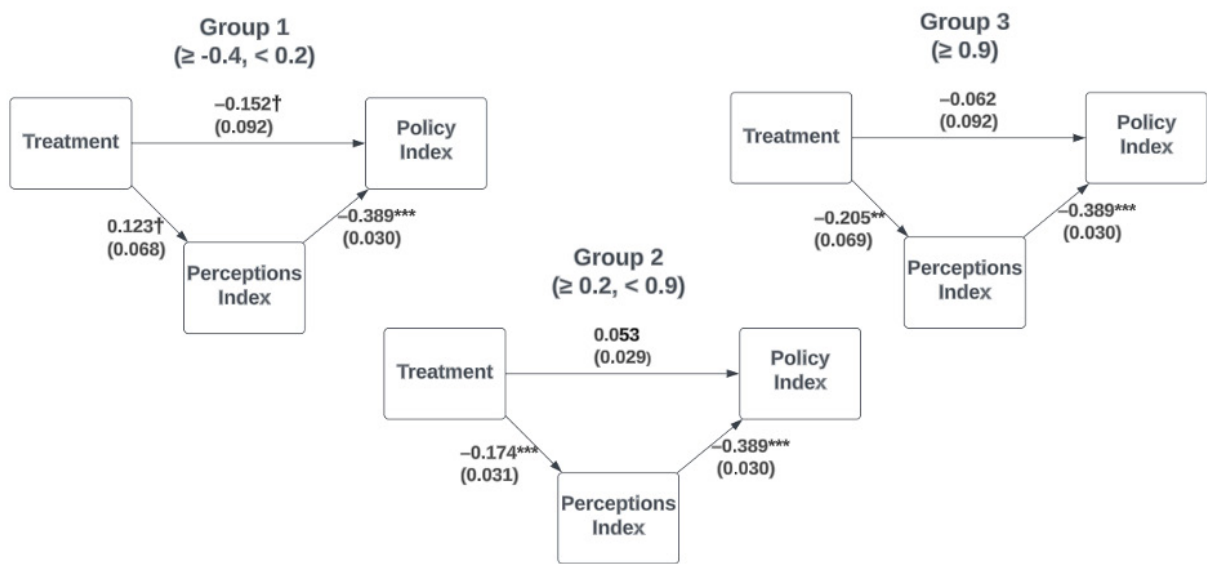
Given that the size and direction of the treatment effects on the perceptions and policy indexes exhibit variation across different regions of the accuracy index, I additionally test a moderated-mediation model. First, and because the treatment’s effects did not meaningfully differ at the four middle interval categories, I collapse the six-category accuracy variable into a three-category variable where 1, 2, and 3 represent the bottom interval (≥ -0.4 , < 0.2), the four middle intervals (≥ 0.2 , < 0.9), and the top interval (≥ 0.9), respectively. I then interact this variable with the treatment in the outcome and mediator models described above.



The results from this moderated-mediation model, the path coefficients of which are shown in Figure A.8B, can be briefly summarized as follows. For the middle accuracy category ($\geq 0.2, < 0.9$), the indirect effects ($b=0.068, p < 0.001$) of the treatment via the perceptions index are statistically significant and positive, accounting for two-thirds (66%) of the treatments' total effects ($b=0.102, p=0.012$) on the policy index. But for the remaining accuracy categories, the estimates are imprecise and not very meaningful, which is likely at least partly due to their substantially smaller sample sizes. In the bottom accuracy category ($\geq -0.4, < 0.2$), the indirect effects ($b=-0.048, p=0.158$) via perceptions are negative but statistically insignificant. They account for just under a quarter of the size of the treatment's total effects ($b=-0.200, p=0.059$), which fall short of significance at the 95% threshold. Lastly, in the top accuracy category (≥ 0.9), the indirect effects via perceptions are significantly positive ($b=0.080, p=0.002$) while the treatment's total effects on the policy index are positive but indistinguishable from zero ($b=0.018, p=0.838$).

Figure A.8B

Accuracy-Conditioned Treatment Effects on Policy Preferences, Mediated by Perceptions



Note: N=1,499. The diagram depicts the standardized path coefficients from Seemingly Unrelated Regression (SUR) models. In the moderated-mediator model (treatment \rightarrow perceptions), the perceptions index is regressed on a treatment x categorical accuracy interaction term and all pretreatment covariates. In the outcome model (treatment, perceptions \rightarrow policy), the policy index is regressed on the perceptions index, a treatment x categorical accuracy interaction term, and all pretreatment covariates.

$^\dagger p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001$

Source: Author survey



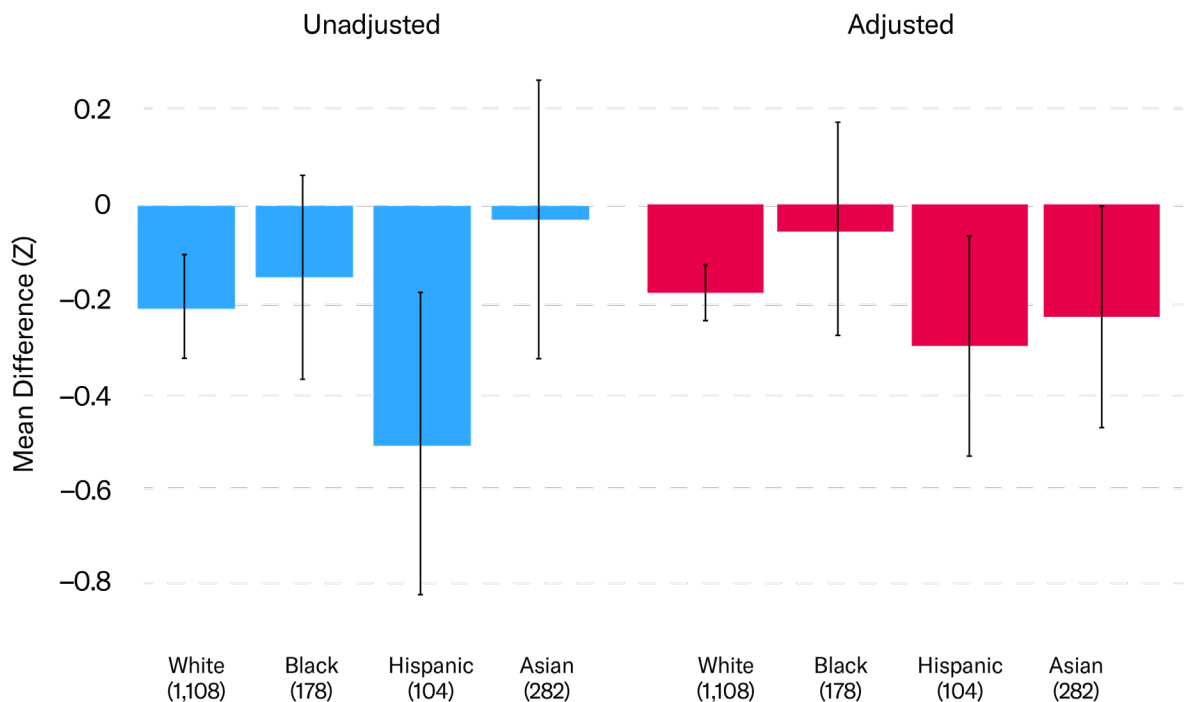
In all, the mediation analysis suggests that the treatment’s modest but positive main effects on policy preferences were fully mediated by its (negative) effects on perceptions of police brutality and racism. For the moderated-mediation analysis, the most that can be said is that the treatment’s effects on the policy preferences of those in the intermediate accuracy interval were mostly mediated by perceptions. Estimates for the remaining accuracy intervals were underpowered and not very meaningful. Further research is thus needed to determine whether the effects for these intervals remain null in larger samples.

Appendix B. Supplemental Charts and Tables

Appendix B.1. Average Treatment Effects

Figure B.1A

Average Treatment Effect on Perceptions, by Respondent Race/Ethnicity



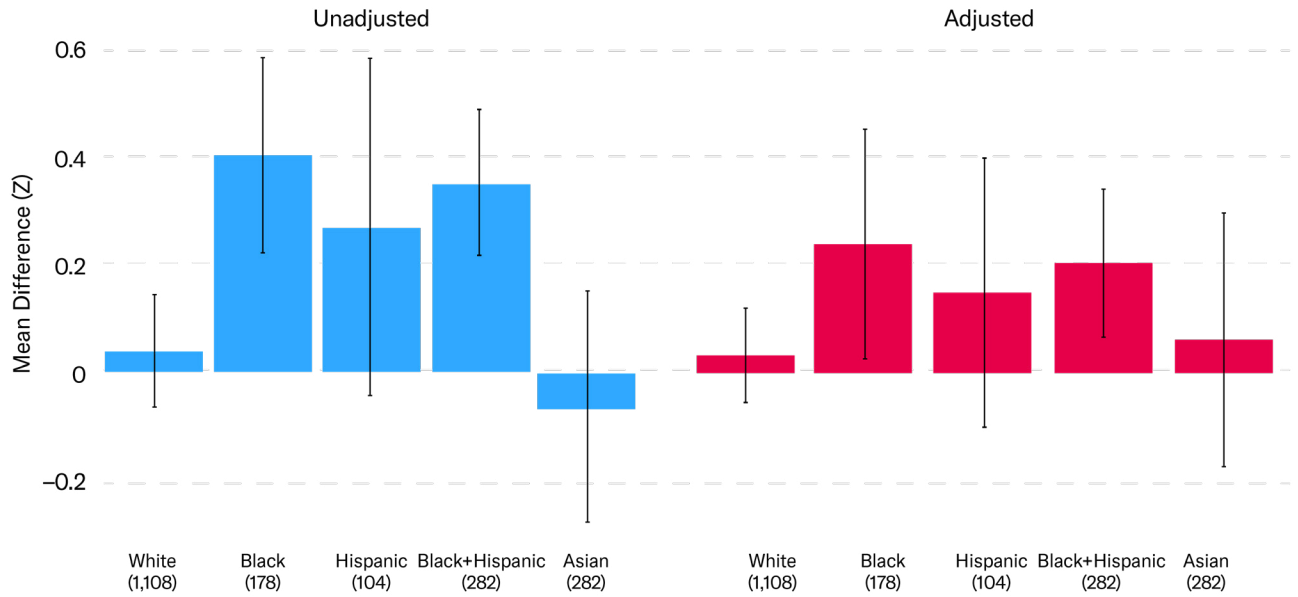
Note: Bars represent the standardized unadjusted (blue) and covariate-adjusted (red) differences between the treatment and control group on the six-item perceptions index by respondent race/ethnicity. Error bars are 95% confidence intervals. Sample sizes are in parentheses. Covariate-adjusted models control for the directionally woke estimation accuracy index, ideology, party ID, sex, age, educational attainment, marital status, household income, household presence of children, and census division.

Source: Author survey



Figure B.1B

**Average Treatment Effect on Policy Preferences,
by Respondent Race/Ethnicity**



Note: Bars represent the standardized unadjusted (blue) and covariate-adjusted (red) differences between the treatment and control group on the policing policy index by respondent race/ethnicity. Error bars are 95% confidence intervals. Sample sizes are in parentheses. Covariate-adjusted models control for the directionally woke estimation accuracy index, ideology, party ID, sex, age, educational attainment, marital status, household income, household presence of children, and census division.

Source: Author survey



Table B.1A

Average Treatment Effect Among Respondents Who Underestimated vs. Overestimated the Average Annual Number of FOIS Victims

| | Perceptions Index | | Policy Index | |
|---|----------------------|----------------------|--------------------|-------------------|
| | Baseline | Adjusted | Baseline | Adjusted |
| Underestimated # of fatal police-shooting victims | -0.177*** (0.041) | -0.126*** (0.029) | 0.125** (0.041) | 0.071* (0.033) |
| Overestimated # of fatal police-shooting victims | -0.230** (0.071) | -0.200** (0.054) | 0.007 (0.104) | 0.019 (0.087) |

Note: N=1,499 across all models. Cell entries are the conditional average standardized differences between the control and treatment groups on the perceptions and policy indexes for respondents who underestimated vs. overestimated the average annual (2015–22) number of fatal police-shooting victims. Covariate-adjusted models control for ideology, party ID, sex, age, educational attainment, marital status, household income, household presence of children, and census division.

†p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001

Source: Author survey



Table B.1B

Between-Condition Differences in Perceptions Indicators Across Response Categories

| How often do you think police officers use more force than is necessary when responding to a possible criminal situation? | | | | | |
|--|--------------------|------------------------------|-------------------|--------------------------------------|-------------------|
| % Most of/All the time | | % About half the time | | % Never/Rarely | |
| Unadjusted | Adjusted | Unadjusted | Adjusted | Unadjusted | Adjusted |
| -8.76*** (2.35) | -8.04** (2.42) | -1.69 (3.34) | -1.33 (3.16) | +10.45** (2.86) | +9.37** (2.62) |
| In your view, in the U.S. today, how much of a problem is the unjustified killing of criminal suspects by police? | | | | | |
| % A severe/big problem | | % Moderately big problem | | A minor problem/Not a problem at all | |
| Unadjusted | Adjusted | Unadjusted | Adjusted | Unadjusted | Adjusted |
| -8.52*** (2.06) | -7.16*** (1.69) | +4.03 † (2.05) | +3.80 † (2.00) | +4.49** (1.34) | +3.35** (1.08) |
| The media exaggerates the amount of police brutality in this country. | | | | | |
| % Disagree | | % Neither agree nor disagree | | % Agree | |
| Unadjusted | Adjusted | Unadjusted | Adjusted | Unadjusted | Adjusted |
| -11.28*** (2.20) | -9.25*** (1.87) | +4.56** (1.65) | +4.30** (1.58) | +6.72** (2.10) | +4.95** (1.40) |
| Cases in which the police unlawfully kill black suspects are very rare and blown out of proportion by the media. | | | | | |
| -8.56** (2.45) | -6.64** (1.96) | +1.91 (1.62) | +1.50 (1.64) | +6.65** (2.15) | +5.15** (1.46) |
| There is an epidemic of police racism and violence against black people in this country. | | | | | |
| +3.51 (2.25) | +1.51 (1.46) | 4.05* (1.80) | +3.80* (1.76) | -7.56*** (1.97) | -5.31* (1.73) |
| Black people are regularly preyed upon by racist police. | | | | | |
| +3.91 † (2.09) | +2.34 (1.85) | +5.09** (1.45) | +4.79** (1.35) | -9.00*** (2.19) | -7.13** (2.08) |

Note: Cell entries are percentage-point differences in a listed response category between control- and treatment-group respondents. Robust standard errors are in parentheses. Covariate-adjusted models control for the directionally woke accuracy index, respondent ideology, party ID, sex, age, race/ethnicity, educational attainment, marital status, household income, household presence of children, and census division.

†p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001

Source: Author survey



Table B.1C

**Between-Condition Differences in Policing Policy Preference Indicators
Across Response Categories, by Respondent Race/Ethnicity**

| Governments must make choices when making spending decisions on important programs. To what extent would you like to see the U.S. government increase or decrease the amount of money it spends on law enforcement? | | | | | | |
|--|--------------------|------------------|--------------------|-------------------|---------------------|--------------------|
| | % Decrease | | % Keep the same | | % Increase | |
| | Baseline | Adjusted | Baseline | Adjusted | Baseline | Adjusted |
| White (1.108) | -1.33 (2.68) | -0.431 (2.52) | +0.634 (2.37) | +1.16 (2.43) | +0.692 (2.90) | -0.729 (2.59) |
| Black (178) | -17.46** (5.08) | -9.68 (5.88) | +5.73 (5.56) | +5.27 (5.37) | +11.72* (5.12) | +4.41 (6.07) |
| Hispanic (104) | -12.84 (8.17) | -5.83 (8.38) | +5.04 (8.93) | +1.90 (10.21) | +7.80 (8.31) | +3.93 (8.28) |
| Black+Hispanic (282) | -15.47** (4.32) | -7.95 (4.75) | +5.53 (5.15) | +4.06 (5.47) | +9.94* (4.28) | +3.88 (4.37) |
| Asian (92) | +1.38 (6.44) | -3.37 (8.02) | +1.95 (8.31) | +0.709 (9.10) | -3.32 (7.29) | +2.66 (7.45) |
| Nonwhite (391) | -10.91** (3.83) | -6.25 (3.95) | +4.99 (3.98) | +3.72 (4.43) | +5.92 † (2.97) | +2.52 (3.22) |
| To what extent do you think the number of police patrolling the streets of U.S. cities should be increased or decreased? | | | | | | |
| White (1.108) | -1.54 (2.64) | -0.917 (2.28) | -3.15 (2.30) | -2.50 (2.27) | +4.69 (2.88) | 3.42 (2.62) |
| Black (178) | -10.36 (6.42) | -3.90 (5.77) | -10.31 † (5.98) | -7.12 (5.38) | +20.66*** (4.79) | +11.02* (5.33) |
| Hispanic (104) | -1.72 (8.48) | +2.73 (7.38) | -7.35 (8.34) | -8.09 (8.94) | +9.07 (8.84) | +5.36 (7.83) |
| Black+Hispanic (282) | -7.23 (4.70) | -1.52 (4.17) | -9.26 † (4.76) | -7.55 † (4.47) | +16.49*** (4.37) | +9.06* (4.09) |
| Asian (92) | 0.807 (5.82) | -2.81 (6.14) | +25.82** (8.36) | +24.13* (9.52) | -26.63** (8.06) | -21.32** (7.22) |
| Nonwhite (391) | -4.84 (3.38) | -1.35 (3.09) | -0.296 (4.93) | +0.639 (4.70) | +5.14 (4.50) | +0.715 (4.18) |

Note: Cell entries are percentage-point differences in a listed response category between the control and treatment groups by respondent race/ethnicity. Robust standard errors are in parentheses. Covariate-adjusted models control for the directionally woke accuracy index, respondent ideology, party ID, sex, age, race/ethnicity, educational attainment, marital status, household income, household presence of children, and census division.

†p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001

Source: Author survey



Table B.1D

Between-Condition Differences in Budgetary Allocations Toward Policing-Centered, Anticrime Initiatives, by Respondent Race/Ethnicity

| Allocations | | | | | | |
|-------------------------|------------------|------------------|---------------------|---------------------|--------------------|-------------------|
| | Officers | | Cameras | | Officers + Cameras | |
| | Baseline | Adjusted | Baseline | Adjusted | Baseline | Adjusted |
| White (1,108) | +1.71 (1.33) | +1.57 (1.17) | -0.655 (0.591) | -0.512 (0.587) | 1.06 (1.55) | 1.05 (1.43) |
| Black (178) | +4.24* (1.72) | +1.43 (2.26) | 5.02** (1.86) | 4.11* (1.87) | 9.26** (2.66) | 5.54 † (3.04) |
| Hispanic (104) | +5.04 (3.51) | +1.35 (3.28) | 4.51 (2.78) | 4.68 (2.80) | 9.55* (4.45) | 6.03 (3.92) |
| Black+Hispanic (282) | +4.65* (1.79) | +1.46 (1.93) | +4.67*** (1.21) | +4.17** (1.25) | +9.32*** (1.91) | +5.63** (1.93) |
| Asian (92) | -3.46 (3.03) | -0.270 (2.22) | 3.68 † (1.86) | +3.85 (2.36) | 0.214 (3.37) | 3.58 (3.48) |
| Nonwhite (391) | +2.39 (1.69) | +0.436 (1.63) | +3.89*** (0.922) | +3.57*** (0.902) | +6.28** (1.97) | +4.00* (1.84) |

Note: Cell entries are percentage-point differences in budgetary shares allocated to policing-centered (vs. “root-cause-oriented”) anticrime initiatives by respondent race/ethnicity. Robust standard errors are in parentheses. Covariate-adjusted models control for the directionally woke accuracy index, respondent ideology, party ID, sex, age, race/ethnicity, educational attainment, marital status, household income, household presence of children, and census division.

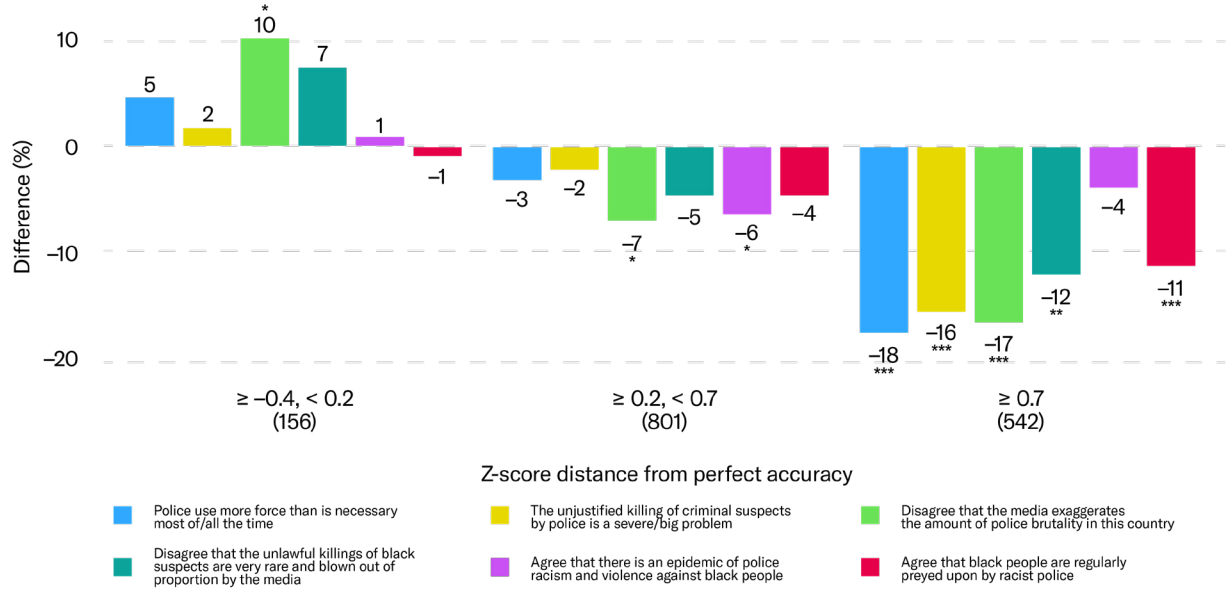
†p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001

Source: Author survey



Figure B.1C

Between-Condition Differences in Perceptions, by Directionally Woke Estimation (In)accuracy Interval



Note: Bars represent the percentage-point differences between the control and treatment groups on the listed response at differing directionally woke estimation (in)accuracy intervals (x-axis).

†p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001.

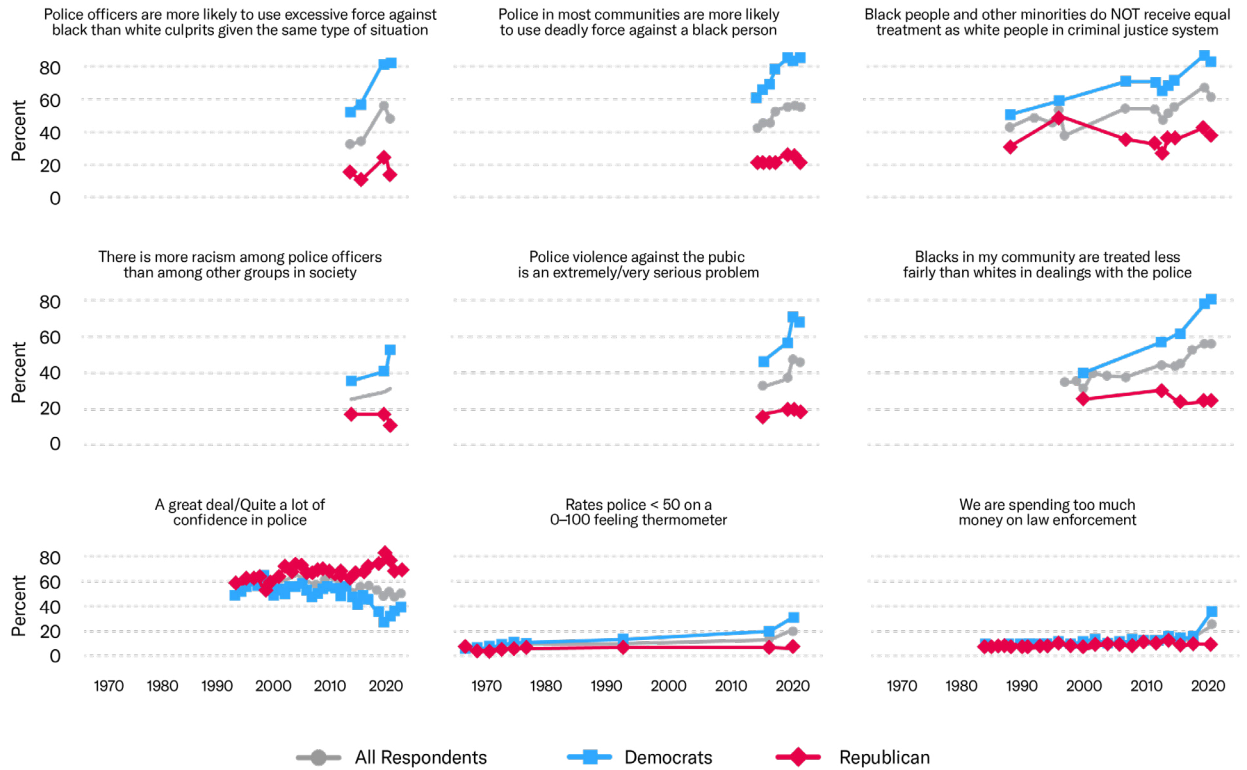
Source: Author survey



Appendix B.2. Time-Series Charts

Figure B.2A

Trends in Attitudes Toward Polices, Perceptions of Police Brutality, Racial Bias



Note: Data are weighted. Lines in each chart represent the share of all (gray line) respondents, Democratic respondents (blue line), and Republican respondents (red line) who gave the listed response.

Source: Author analysis of Table B.2A sources



Table B.2A

Data Sources for Attitudinal Trends

| Survey Item | Survey Organizer | Survey Years |
|---|---|--|
| When faced with a difficult or dangerous situation, are police officers more likely to use excessive force if the culprit is black, or are they just as likely to use excessive force against black and white culprits, given the same type of situation? | Monmouth University Polling Institute | 2014, 2016, 2020, 2021 |
| In general, do you think the police in most communities are more likely to use deadly force against a black person, or more likely to use it against a white person, or don't you think race affects police use of deadly force? | AP-NORC Center for Public Affairs Research, CBS News/New York Times/Social Science Research Solutions (SSRS). | 2014, 2016, 2017, 2019, 2020–21 |
| Do you think blacks and other minorities receive equal treatment as whites in the criminal-justice system, or not? (Version A) Please tell me whether you completely agree, mostly agree, mostly disagree, or completely disagree with the following statement: "Blacks and other minorities receive equal treatment as whites in the criminal-justice system." (Version B) | Media General/Associated Press (A), ABC News/Washington Post (A), Associated Press/Ipsos-Public Affairs (A), Public Religion Research Institute (B) | 1988, 1992, 1995–97, 2007, 2012–15, 2020–21 |
| Do you think there is more racism, less racism, or about the same amount of racism among police officers than among other groups in society? | Monmouth University Polling Institute | 2014, 2020–21 |
| How serious a problem do you think police violence against the public is in the United States?... Not at all serious, not too serious, moderately serious, very serious, extremely serious | AP-NORC Center for Public Affairs Research | 2015, 2019–21 |
| (Just your impression: Are black people in your community treated less fairly than white people in the following situations?) How about in dealing with the police, such as traffic incidents? | Gallup, New York Times, Pew Research Center | 1997, 1999–2001, 2004, 2013, 2015–16, 2018, 2020–21 |
| (Now I am going to read you a list of institutions in American society. Please tell me how much confidence you have in each one—a great deal, quite a lot, some, or very little?)...The police | Gallup, SSRS | 1993–2022 |
| I'd like to get your feelings toward some of our political leaders and other people who are in the news these days. I'll read the name of a person and I'd like you to rate that person using something we call the "feeling thermometer." Ratings between 50 degrees and 100 degrees mean that you feel favorable and warm toward the person. Ratings between 0 degrees and 50 degrees mean that you don't feel favorable toward the person and that you don't care too much for that person. You would rate the person at the 50-degree mark if you don't feel particularly warm or cold toward the person. If we come to a person whose name you don't recognize, you don't need to rate that person. Just tell me, and we'll move on to the next. (How would you rate:) Police | American National Election Studies | 1966, 1968, 1970, 1972, 1974, 1976, 1992, 2016, 2020 |
| We are faced with many problems in this country, none of which can be solved easily or inexpensively. I'm going to name some of these problems, and for each one I'd like you to tell me whether you think we're spending too much money on it, too little money, or about the right amount. First ... are we spending too much, too little, or about the right amount on (ITEM)? E. Law enforcement | General Social Survey | 1984–91, 1993–94, 1996, 1998, 2000, 2002, 2004, 2006, 2008, 2010, 2012, 2014, 2016, 2018, 2021, 2022 |

Source: Roper Center for Public Opinion database



Figure B.2B

Trends in FOIS Rates Across 12 Major Cities



Note: Solid aqua lines represent number of fatal officer-involved shootings (FOIS) per 100,000 people. Dashed gray lines represent LOESS-smoothed overtime trends.

Source: FOIS data gathered by Justin Nix, <https://github.com/jnixy/agency-level-fatal-OIS>; annual estimates of city population sizes obtained from the Census Bureau (population estimates for missing years are interpolated)



Appendix B.3. Police–Public Contact (PPC) Survey, Nonlethal Force Benchmarks

Table B.3A

Contact and Use of Force Reporting Rates in the 2018 vs. 2020 PPC Survey

| Survey Year | % Reporting police-initiated contact | | % Reporting use of nonlethal force (among those reporting police-initiated contact) | |
|-------------|--------------------------------------|-----------------|---|-----------------|
| | 2018 | 2020 | 2018 | 2020 |
| Sample | 11.3 (0.121) | 9.7 (0.125) | 3.0 (0.211) | 2.14 (0.221) |
| White | 11.9 (0.150) | 10.3 (0.155) | 2.0 (0.189) | 1.5 (0.205) |
| Black | 11.1 (0.378) | 9.2 (0.388) | 6.0 (0.905) | 5.6 (1.21) |
| N | 104,324 | 95,291 | 11,705 | 8,661 |

Note: Data are weighted. Cell entries in the “% Reporting police-initiated contact” group represent the percentage of PPC survey respondents who reported that they were stopped or approached by police in the past 12 months. Cell entries in the “% Reporting use of nonlethal force” group represent the percentage of PPC survey respondents who reported experiencing at least one form of nonlethal force (kicking, hitting, pushing, grabbing, tasing, pepper-spraying, handcuffing, or gun-pointing) subsequent to being stopped or approached by police in the past 12 months. Standard errors are in parentheses.

Source: PPC surveys



Appendix B.4. Balancing Tests

Table B.4A

Descriptive Statistics for Demographic/Background Covariates, by Experimental Condition

| | Control Group | Treatment Group |
|--------------------------------------|----------------------|------------------------|
| Mean age | 44.03 (0.575) | 44.97 (0.573) |
| % Male | 47.2 (1.82) | 47.5% (1.82) |
| % White | 74.5 (1.60) | 73.4 (1.60) |
| % \$50,000+ household income | 55.4 (1.85) | 55.0 (1.83) |
| % BA+ degree | 52.9 (1.82) | 53.8 (1.82) |
| % Married | 37.4 (1.77) | 37.4 (1.76) |
| % Children in household | 25.3 (1.57) | 23.9 (1.57) |
| % Northeast | 19.7 (1.41) | 16.8 (1.41) |
| % South | 37.1 (1.78) | 40.7 (1.77) |
| % West | 22.7 (1.50) | 20.3 (1.50) |
| 7-point party-ID/ strength score | 2.94 (0.073) | 3.10 (0.073) |
| % Democrat | 64.9 (1.75) | 63.1 (1.75) |
| % Republican | 23.5 (1.57) | 25.3 (1.56) |
| 7-point ideological self-ID score | 3.15 (0.065) | 3.30 (0.065) |
| % Liberal | 59.7 (1.80) | 55.4 (1.80) |
| % Conservative | 22.6 (1.56) | 25.4 (1.55) |
| N | 752 | 756 |

Note: Cell entries are percentages (or means), with standard errors in parentheses. None of the between-condition differences in the listed variables is significant at the 95% threshold.

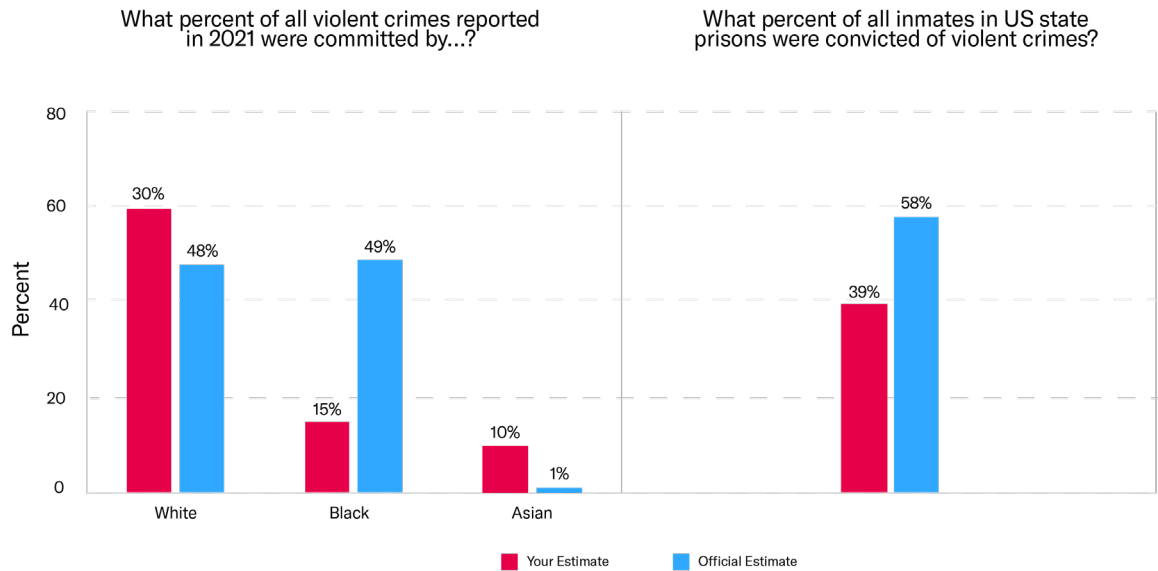
Source: Author survey



Appendix B.5. Informational Treatment

Figure B.5A

Example of Third Visualized Estimate Juxtaposition Page



Source: Federal Bureau of Investigation/National Incident-Based Reporting System; Bureau of Justice Statistics

Source: Author survey



Endnotes

- ¹ The reader should bear in mind that these white Prolific (a crowdsourcing platform) respondents are far more liberal than whites in the general population. With a more politically balanced sample, these differences would be even larger.
- ² David Klinger et al., “Race, Crime, and the Micro-Ecology of Deadly Force,” *Criminology and Public Policy* 15, no. 1 (Nov. 17, 2015): 193–222.
- ³ For a review of the literature, see Robert VerBruggen, “Fatal Police Shootings and Race: A Review of the Evidence and Suggestions for Future Research,” Manhattan Institute, March 2022.
- ⁴ E. Ann Carson, “Prisoners in 2020—Statistical Tables,” Bureau of Justice Statistics, NCJ 302776 (December 2021).
- ⁵ Though not shown, relative to those between ideological groups, estimation differences between respondents of different racial/ethnic backgrounds were more modest, with black respondents (53%) hitting somewhat closer to the mark than white (49%), Hispanic (50%), and Asian (45%) respondents.
- ⁶ Recall that estimates of the average annual number of fatal police shootings contained a nontrivial number of influential high outliers. Thus, for this case, I first took the log (+1) of the original continuous scale, which ran from 0 to 32 million. I then z-normed this log scale and regressed it onto the original to identify the z-score corresponding to the criterion value (1,012). Finally, the z-score for the criterion value is subtracted from the z-normed log scale to create a new scale indicating each estimate’s SD distance from a “perfectly accurate” estimate.
- ⁷ This scale adopts 2021 NIBRS benchmarks. As some readers may object that these benchmarks are biased, I opted to additionally generate and plot indexes that exclude the violent-crime items. As shown, though, the differences in scores between indexes are marginal.
- ⁸ Another consideration here is that some of the group criterion estimates—namely, the group shares of fatal police-shooting victims—are interdependent. In this case, large overestimates for one group inevitably entail large underestimates for another. And if each of these scales is unidirectionally coded—such that positive scores on each represent overestimates—averages of the two will portray less bias or accuracy than is the case individually.
- ⁹ This is because the treatment is expected to affect perceptions. Excluding it risks biasing parameter estimates.
- ¹⁰ A reasonable objection here is that the perceptions index combines items that refer to black Americans with those that do not; and that its use as an outcome variable thus implicitly and potentially wrongly assumes that the accuracy indexes are equally predictive of the general and black-focused items. While there is some merit to this complaint in that the directionally woke index does tend to be more strongly predictive of an index of the three black-focused items ($r=0.605$) than an index of the three general items ($r=0.556$), the differences are very marginal. In practical terms, relative to “covariates only” models, the directionally woke index explains 1.1 points more variance in the former than the latter. In the interest of



parsimony, I opt to focus on the combined six-item index. Readers interested in the effects of the accuracy indexes on each perceptions subscale (i.e., the general item index and the black-focused index) can refer to Table A.6A in Appendix A.6.

- ¹¹ That the absolute accuracy index is more predictive than the raw accuracy index despite being directionally neutral likely reflects the fact that respondents tended to more frequently overestimate than underestimate.
- ¹² In fact, as shown in Table A.6B in Appendix A.6, net of those for blacks, all the criterion estimates for whites are significantly negatively predictive of even the race-neutral perceptions indicators. These negative relationships are reduced to zero, though, when further adjusting for the treatment and all other pretreatment covariates.
- ¹³ For this analysis, I use Stata's "sureg" command for fitting Seemingly Unrelated Regression (SUR) models. Standard errors and associated p-values are calculated from 10,000 bootstrap samples.