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Perceived Discrimination against Black Americans and White Americans

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Abstract

A widely-cited study reported evidence that White Americans reported higher ratings of how much Whites are the victims of discrimination in the United States than of how much Blacks are the victims of discrimination in the United States. However, much fewer than half of White Americans rated discrimination against Whites in the United States today to be greater or more frequent than discrimination against Blacks in the United States today, in data from the American National Election Studies 2012 Time Series Study or in preregistered analyses of data from the American National Election Studies 2016 Time Series Study or from a 2017 national nonprobability survey. Given that relative discrimination against Black Americans is a compelling justification for policies to reduce Black disadvantage, results from these three surveys suggest that White Americans' policy preferences have much potential to move in a direction that disfavors programs intended to reduce Black disadvantage.

Keywords: race, discrimination, perceptions

From slavery through Reconstruction through the civil rights movement and modern times, race has been the "most difficult subject" in the United States (Kinder and Sanders, 1996, p. 11). The U.S. population has become more racially diverse, but comparison of the treatment of Black Americans to the treatment of White Americans has remained an important comparison for assessing racial discrimination in the United States. Empirical evidence of discrimination against Black Americans (e.g., Quillian et al., 2017) can be balanced at least partly with evidence of discrimination against White Americans (e.g., Axt et al., 2016), as can prominent claims of discrimination in particular domains, such as police disproportionately searching Black Americans (LaFraniere and Lehren, 2015) or affirmative action in college admissions disadvantaging White Americans (Hurley, 2016).

The presence of evidence of discrimination against Black Americans and of evidence of discrimination against White Americans raises the question of the direction and size of the net balance of Black/White discrimination in the United States. Perceptions of this balance have the potential to influence legal outcomes and influence support for race-targeted programs (Carter and Murphy, 2015, p. 274). Survey results reported in Norton and Sommers (2011) indicated that White Americans now perceive this balance of discrimination to disfavor Whites, in a finding that has been cited in media outlets such as the New York Times (2011) and NPR (2011) and has been frequently cited in social science publications (e.g., Todd et al., 2012; Mayrl and Saperstein, 2013; Cabrera, 2014; Hughey, 2014; Wilkins et al., 2015; Major and Kaiser, 2017; and West and Eaton, 2019).

However, the inference from Norton and Sommers (2011) that "Whites have now come to view anti-White bias as a bigger societal problem than anti-Black bias" (p. 215) might be due to the research design of that study. Participants in the Norton and Sommers (2011) study were asked to "indicate how much you

think [Blacks/Whites] [were/are] the victims of discrimination in the United States in each of the following decades" (p. 217), with participants reporting perceptions about discrimination against Blacks in each decade from the 1950s to the 2000s and then reporting perceptions about discrimination against Whites in each decade from the 1950s to the 2000s (p. 218). Consecutively rating discrimination against Blacks in a string of decades might have caused participants to use as their reference point the participant's perception of discrimination against Blacks in the immediately prior decade, instead of using as the reference point the participant's perception of discrimination against Whites in the corresponding decade; the same phenomenon might have occurred when participants subsequently rated discrimination against Whites, focusing on ratings of discrimination against Whites being sensible across decades for Whites instead of focusing on ratings being sensible in comparison to Blacks in a given decade. Comparing participant ratings of discrimination against Blacks in the 2000s to participant ratings of discrimination against Whites in the 2000s might thus produce an incorrect inference about relative perceived discrimination in the 2000s.

For assessing whether White Americans really do perceive there to be more discrimination in the United States today against Whites than against Blacks, the three studies below reported on data from large-sample surveys that permit more straightforward research designs that focus participants on the contemporary time period and/or on direct comparisons of discrimination against Blacks and Whites in the United States today.

Study 1: ANES 2012 Time Series Study [Non-preregistered]

Data were from the American National Election Studies (ANES) 2012 Time Series Study (American National Election Studies, 2016a). The author's Institutional Review Board does not require review and approval for analysis of de-identified datasets such as the ANES 2012 Time Series Study.

Participants

Data analysis was limited to participants coded as non-Hispanic White who provided substantive responses to the analyzed items. Per ANES documentation (2016b, p. 7): the target population for the survey was adult U.S. citizens; the key item is from post-election interviews, which were conducted between 7 November 2012 and 24 January 2013; and the estimated AAPOR RR1 response rates for pre-election interviews were 38% for the face-to-face mode and 2% for

the internet mode, with respective re-interview rates for the post-election interview of 94% and 93%.

Measures

The key item for this analysis is: "How much discrimination is there in the United States today against each of the following groups?". Target groups presented in random order included Blacks and Whites. Response options were: "A great deal", "A lot", "A moderate amount", "A little", and "None at all". The key item was used to construct three dichotomous variables, respectively coded 1 if a participant rated discrimination against Blacks greater than discrimination against Whites, rated discrimination against Blacks equal to discrimination against Whites, and rated discrimination against Whites greater than discrimination against Blacks. The 15 non-Hispanic White post-election interview cases without a substantive rating of both discrimination against Blacks and discrimination against Whites were excluded from the analysis, producing a sample size of 3260 non-Hispanic Whites.

Results

For non-Hispanic White participants, weighted point estimates and 95% confidence intervals indicated that 54% [51, 56] rated discrimination against Blacks greater than discrimination against Whites, 37% [35, 39] rated discrimination against Blacks equal to discrimination against Whites, and 10% [9, 11] rated discrimination against Whites greater than discrimination against Blacks. The finding that only a small percentage of non-Hispanic Whites rated discrimination against Whites greater than discrimination against Blacks held when the analysis was limited to participants who responded online, in which concern about social desirability biasing reporting is lessened: 11% [10, 13] of non-Hispanic Whites with substantive responses to the discrimination items reported greater perceived discrimination against Whites than against Blacks. Moreover, weighted analyses of the general discrimination item coded from 0 for discrimination rated at "None at all" to 1 for discrimination rated at "A great deal" indicated that, among non-Hispanic White participants in the online survey, respective mean ratings were 0.31 and 0.48 for discrimination against Whites and discrimination against Blacks, with respective means of 0.24 and 0.73 among non-Hispanic Black participants.

Study 2: ANES 2016 Time Series Study [Confirmatory with Modifications Indicated]

In assessing whether the Study 1 finding replicated in the ANES 2016 Time Series Study, data analyses followed a plan preregistered at the Open Science Framework (https://osf.io/n7z4a). Data were from the ANES 2016 Time Series Study (American National Election Studies, 2018a). The author's Institutional Review Board does not require review and approval for analysis of de-identified datasets such as the ANES 2016 Time Series Study.

Hypotheses

The ANES 2016 Time Series Study included the Study 1 item and items regarding police and federal government discrimination against Blacks relative to Whites. The corresponding preregistered hypotheses were:

- 1. H1 [directional]: White Americans will report perceiving more discrimination in the United States today against blacks than against whites.
- 2. H2 [directional]: White Americans will report perceiving that the police treat whites better than blacks
- 3. H3 [non-directional]: White Americans might or might not report perceiving that the federal government treats blacks better than whites.

H2 is directional and reflects the expectation that participants will perceive more police discrimination against Blacks than against Whites, given factors such as thenrecent prominent media coverage of police shootings of Black Americans after the 2014 killing of Michael Brown in Ferguson, Missouri (e.g., "Study finds police fatally shoot unarmed black men at disproportionate rates", Lowery, 2016). H3 is non-directional, reflecting a lack of similarly prominent media coverage suggesting anti-Black discrimination by the federal government and the possibility that some participants might perceive government assistance to equally or disproportionately benefit Blacks, such as an association between Blacks and welfare receipt (Brown-Iannuzzi et al., 2017). H1 is directional and reflects the expectation that the ANES 2012 Time Series Study pattern will replicate and the expectation that perceived discrimination against Blacks will be greater than perceived discrimination against Whites given the relative prominence of discrimination against Blacks in police shootings and other domains, coupled with Black disadvantage in education (Sablich, 2016) and wealth (Traub et al., 2016).

Participants

Data analysis was limited to participants coded as non-Hispanic White or non-Hispanic Black and who provided substantive responses to the analyzed items, which were asked in the post-election interview. Per ANES documentation (2018b, pp. 4-5): target populations for the surveys were adult U.S. citizens in D.C. and the 48 contiguous states for the face-to-face mode and adult U.S. citizens in D.C. and the 50 states for the internet mode; the key items are drawn from post-election interviews, which were conducted between 9 November 2016 and 8 January 2017; and the estimated AAPOR RR1 response rates for pre-election interviews were 50% for the face-to-face mode and 44% for the internet mode, with respective re-interview rates for the post-election interview of 90% and 84%.

Measures

The post-election interview items analyzed were:

- 1. "How much discrimination is there in the United States today against each of the following groups?". Target groups presented in random order included Blacks and Whites. Response options were: "A great deal", "A lot", "A moderate amount", "A little", and "None at all". Postelection interview cases without a substantive response to both items were excluded from the analysis: 99 non-Hispanic Whites (4%) and 26 non-Hispanic Blacks (8%).
- 2. "In general, do the police treat whites better than blacks, treat blacks better than whites, or treat them both the same?". Response options were: "Treat whites better", "Treat both the same", and "Treat blacks better". Post-election interview cases without a substantive response to this item were excluded from the analysis: 34 non-Hispanic Whites (1%) and 7 non-Hispanic Blacks (2%).
- 3. "In general, does the federal government treat whites better than blacks, treat blacks better than whites, or treat them both the same?". Response options were: "Treat whites better", "Treat both the same", and "Treat blacks better". Post-election interview cases without a substantive response to this item were excluded from the analysis: 41 non-Hispanic Whites (2%) and 8 non-Hispanic Blacks (2%).

The software used in the analysis (StataCorp, 2017) did not report standard errors or confidence intervals using the preregistered commands with weighting, because at least one stratum had a single sampling unit

Table 1
Reported Perceptions of Discrimination [ANES 2016 Time Series Study].

	Non-Hispanic White Americans	Non-Hispanic Black Americans
	0.66	0.79
Greater discrimination against Blacks than Whites		
	[0.64, 0.69]	[0.72, 0.86]
	[0.64, 0.68]	[0.71, 0.85]
Equal discrimination against Whites than Black	0.27	0.19
	[0.25, 0.29]	[0.13, 0.26]
	[0.25, 0.29]	[0.13, 0.27]
	0.07	0.02
Greater discrimination against Whites than Blacks	[0.05, 0.08]	[0.00, 0.04]
	[0.06, 0.08]	[0.01, 0.05]
	0.51	0.83
The police treat Whites better than Blacks	[0.48, 0.53]	[0.78, 0.88]
	[0.48, 0.53]	[0.78, 0.88]
The police treat Whites and Blacks the same	0.48	0.14
	[0.46, 0.51]	[0.09, 0.19]
	[0.46, 0.51]	[0.10, 0.20]
The police treat Blacks better than Whites	0.01	0.03
	[0.01, 0.02]	[0.00, 0.05]
	[0.01, 0.02]	[0.01, 0.07]
	0.30	0.77
The federal government treats Whites better than Blacks	[0.28, 0.32]	[0.69, 0.84]
	[0.28, 0.32]	[0.68, 0.83]
The federal government treats Whites and Blacks the same	0.47	0.20
	[0.45, 0.49]	[0.13, 0.28]
	[0.45, 0.49]	[0.14, 0.29]
The federal government treats Blacks better than Whites	0.23	0.03
	[0.21, 0.25]	[0.00, 0.06]
	[0.21, 0.25]	[0.01, 0.08]

Note. Top cell values indicate point estimates for decimal percentages in weighted analyses based on preregistered use of the Stata svy: mean command, middle cell values are 95% confidence intervals from the Stata svy: mean command with non-preregistered use of the scaled option, and bottom cell values are 95% confidence intervals based on non-preregistered use of the Stata svy: prop command for proportions. Sample sizes for the general discrimination item, the police discrimination item, and the federal government discrimination item were 2530, 2595, and 2588 for non-Hispanic White participants and 316, 335, and 334 for non-Hispanic Black participants.

so that a variance could not be estimated for that stratum. Non-preregistered analyses were therefore conducted with each known available non-missing option in the software for handling weighting for strata with a single sampling unit (centered, certainty, and scaled); results are reported for the option that produced the largest standard errors, which was the scaled option.

Results

Results in Table 1 and Figure 1 indicate that, among non-Hispanic Whites, 66% reported greater perceived discrimination against Blacks than against Whites, 27%

reported equal perceived discrimination against Blacks and Whites, and 7% reported greater perceived discrimination against Whites than against Blacks; respective percentages were 51%, 48%, and 1% for the police discrimination item and 30%, 47%, and 23% for the federal government item. Results regarding Whites' general perceptions of discrimination and Whites' perceptions of discrimination by police were consistent with the preregistered directional hypotheses. Ends of 95% confidence intervals for the paired percentages did not overlap for any of the three comparisons of the percentage that reported better treatment of Black Americans to the percentage that reported better treatment

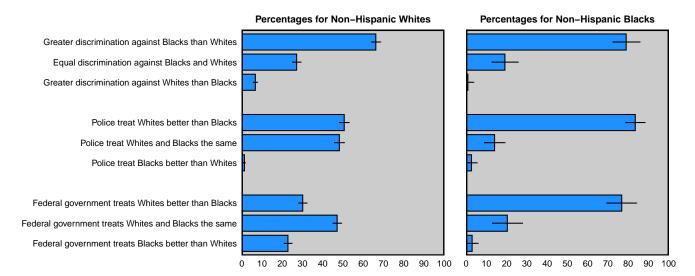


Figure 1. Non-Hispanic White Americans' and Non-Hispanic Black Americans' reported perceptions of discrimination [ANES 2016 Time Series Study]

Note. Error bars indicate ends of the 95% confidence intervals for weighted analyses based on the Stata svy: mean command. Source: ANES 2016 Time Series Study. Graph produced in R (R Core Team, 2017) using ggplot2 (Wickham, 2017).

of White Americans. Moreover, in a non-preregistered analysis, the p-value was less than p=.001 for a Wald test of the hypothesis that the constant in a linear regression predicting a dichotomous variable coded 1 for participants who reported greater discrimination against Black Americans equaled the constant in a linear regression predicting a dichotomous variable coded 1 for participants who reported greater discrimination against White Americans. Table 1 results also indicated that, in all three items, Black Americans perceived more favorable treatment for Whites than for Blacks, with ends of the 95% confidence intervals not overlapping for any comparison of the percentage that reported better treatment of Black Americans to the percentage that reported better treatment of White Americans.

Non-preregistered weighted analyses indicated that the key inference held when limiting the analysis to participants who responded online: 7% [5, 8] of non-Hispanic Whites with substantive responses to the general discrimination items reported greater perceived discrimination against Whites than against Blacks. Moreover, non-preregistered weighted analyses of the general discrimination item coded from 0 for discrimination rated at "None at all" to 1 for discrimination rated at "A great deal" indicated that, among non-Hispanic White participants in the online survey, respective mean ratings were 0.27 and 0.58 for discrimination against Whites and discrimination against Blacks, with respective means of 0.20 and 0.79 among non-Hispanic Black participants.

Study 3: 2017 YouGov Survey [Confirmatory with Modifications Indicated]

The ANES general discrimination items analyzed in Study 1 and Study 2 asked participants to respond to an item about the level of discrimination against Blacks and to a separate item about the level of discrimination against Whites; the ANES items also referred to "discrimination" in a way that could permit participants to respond based on a combination of the perceived frequency of discrimination and the perceived strength of discrimination. Providing a clearer inference about participant perceptions, the key item in Study 3 asked participants to directly compare their perceived frequency of discrimination against Blacks to their perceived frequency of discrimination against Whites.

Data analysis of the 2017 survey followed a plan preregistered at the Open Science Framework (https://osf.io/q7ufz), with one hypothesis, reflecting the expectation that the key pattern in Study 1 and Study 2 will replicate:

1. H1: A higher proportion of non-Hispanic Whites will report that Black Americans are more often the victim of discrimination in the United States today than White Americans are, compared to the proportion of non-Hispanic Whites that report that White Americans are more often the victim of discrimination in the United States today than Black Americans are.

U.S. resident adult participants from a YouGov opt-in

Table 2
Reported Perceptions of Discrimination [2017 YouGov Survey].

	Non-Hispanic	Non-Hispanic
	White Americans	Black Americans
Black Americans are more often the victim of discrimination	0.43	0.90
	[0.36, 0.51]	[0.81, 0.98]
	[0.36, 0.51]	[0.78, 0.96]
Equal often discrimination	0.42	0.07
	[0.35, 0.50]	[0.00, 0.15]
	[0.35, 0.50]	[0.03, 0.19]
White Americans are more often the victim of discrimination	0.12	0.01
	[0.07, 0.16]	[-0.01, 0.02]
	[0.08, 0.17]	[0.00, 0.05]

Note. Top cell values indicate point estimates for corresponding decimal percentages in weighted analyses and middle cell values are 95% confidence intervals from the Stata svy: mean command, both based on preregistered use of the Stata svy: mean command. Bottom cell values are 95% confidence intervals based on non-preregistered use of the Stata svy: prop command for proportions. The sample size was 359 for non-Hispanic White Americans and 52 for non-Hispanic Black Americans, which included 8 non-Hispanic White participants and 1 non-Hispanic Black participant who were coded as skipping the item.

survey panel completed an online survey fielded between 27 July 2017 and 31 July 2017, with a final sample of 2,000 participants, of which the randomization assigned 359 non-Hispanic Whites and 52 non-Hispanic Blacks to the item for this study; see Appendix A for more information on the construction of the sample. The key item was: "In the United States today, which of the following two groups is more often the victim of discrimination, compared to the other group?". Response options were "Black Americans", "White Americans", and "Both groups are the victim of discrimination equally often in the United States today", with the order of the first two response options randomly reversed and the third response option always third. The key item was used to construct three dichotomous variables, respectively coded 1 if the participant selected the "Black Americans", "White Americans", and "Both groups..." options. The research for Study 3 received approval from the author's Institutional Review Board.

Results for weighted analyses reported in Table 2 indicate that a larger percentage of non-Hispanic Whites selected the option indicating that Black Americans are more often the victim of discrimination in the United States today (43%), compared to the percentage that selected the option indicating that White Americans are more often the victim of discrimination in the United States today (12%); the p-value was less than p=.001 for a Wald test of the hypothesis that the constant in a linear regression predicting the "Black Americans" outcome variable equaled the constant in a linear regression predicting the "White Americans" outcome variable, supporting the preregistered directional hypoth-

esis. Moreover, results indicated that 42% of non-Hispanic Whites selected the option that both groups are the victim of discrimination equally often in the United States today.

General Discussion

Results reported in Norton and Sommers (2011) indicated that, in the United States today, Whites perceive that Whites are the victims of discrimination more than Blacks are the victims of discrimination. However, analyses of data from three recent large-sample national surveys indicated that White Americans do not perceive discrimination the United States today against Whites to be greater or more frequent than discrimination against Blacks. This discrepancy might be due to the research design of Norton and Sommers (2011), in which participants rated discrimination against Blacks in a series of decades and then rated discrimination against Whites in a series of decades, but were not asked to directly compare discrimination in the United States today against Whites to discrimination in the United States today against Blacks.

Discussing results from the 2016 PRRI/Brookings Immigration Survey, Jones et al. (2016) reported that 57% of White Americans agreed that "Today discrimination against whites has become as big a problem as discrimination against blacks and other minorities" (p. 2). This result might be perceived to be in tension with the patterns reported for non-Hispanic Whites in the studies above, but this finding does not indicate that Whites believe that Whites face more discrimination than Blacks face; the 57% estimate is consistent with Study 3 re-

sults in which a combined 54% of non-Hispanic Whites reported the perception that, relative to the frequency of discrimination against Black Americans, White Americans are more often (12%) or equally often (42%) the victim of discrimination in the United States today.

This 42% estimate from Study 3 of the percentage of White Americans who perceive equality in the frequency of Black/White discrimination can be paired with estimates of Black/White discrimination equality of 37% and 27% from Study 1 and Study 2 to produce the inference that a nontrivial percentage of White Americans perceive there to be similar levels of discrimination against Blacks as against Whites. This perception and the perception of more discrimination against White Americans than against Black Americans can have important consequences for attitudes and policy preferences. For example, Wellman, Liu, and Wilkins (2016) reported results suggesting that "when White people perceive increased anti-White bias, it leads them to view interracial relations as zero-sum and to reject Affirmative Action" (p. 433), and Wilkins et al. (2015) reported results suggesting that "perceiving greater bias against men or Whites may be associated with favoring policies that ultimately hurt women and Blacks" (p. 11). To the extent that Norton and Sommers (2011) overestimated the percentage of White Americans who perceive there to be more discrimination against Whites than against Blacks in the United States today, Norton and Sommers (2011) might cause an overestimate of the potential change in White Americans' attitudes that might have already occurred due to increases in perceived anti-White discrimination. Discrimination against Black Americans is a compelling justification for policies to reduce Black disadvantage, and results from Studies 1 through 3 suggest that White Americans' preferences have more potential to become less favorable about programs that are intended to reduce Black disadvantage, compared to estimates of this potential based on Norton and Sommers (2011).

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Author Contributions

L.J Zigerell is the sole author of this contribution.

Open Science Practices



This article earned the Preregistration plus, Open Data and the Open Materials badge for preregistering the hypothesis and analysis before data collection, and for making the data and materials openly available. It has been verified that the analysis reproduced the results presented in the article. The entire editorial process, including the open reviews, are published in the online supplement.

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Appendix A

Text description of the 2017 survey, drawn from the data deliverables from YouGov:

YouGov interviewed 2040 respondents who were then matched down to a sample of 2000 to produce the final dataset. The respondents were matched to a sampling frame on gender, age, race, education, ideology, and political interest. The frame was constructed by stratified sampling from the full 2010 American Community Survey (ACS) sample with selection within strata by weighted sampling with replacements (using the person weights on the public use file). Data on voter registration status and turnout were matched to this frame using the November 2010 Current Population Survey. Data on interest in politics and party identification were then matched to this frame from the 2007 Pew Religious Life Sur-

The matched cases were weighted to the sampling frame using propensity scores. The matched cases and the frame were combined and a logistic regression was es-

timated for inclusion in the frame. The propensity score function included age, gender, race/ethnicity, years of education, region, voter registration status, political interest, and ideology. The propensity scores were grouped into deciles of the estimated propensity score in the frame and post-stratified according to these deciles. The weights were then post-stratified to a fourway stratification of gender, four-category age, four-category race, and four-category education, to produce the final weight.

Further details on the 2017 YouGov survey sample:

100%	Eligibility rate
64.4%	RR3
3,349	Invitations
-970	Non-responses
2,379	Starts
-134	Refusals
-88	Partial completions
2,157	Completions
-117	Completions screened out for speeding
	through the items/high refusal rates
2,040	Sample matched down to 2,000