

An Experimental Investigation of Possible Memory Biases Affecting Support for Racial Health Care Policy

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Racial disparities in the health care domain have been well documented¹ and would seem to justify proactive remedial policies (i.e., race-focused health care policies). Public opposition to race-focused policies, however, can threaten the existence of racial health care initiatives by swaying the actions of health care providers, insurers, and lawmakers. We theorized that opposition to race-focused health care policies may reflect, in part, the operation and existence of basic cognitive and belief-based mechanisms.

Generally speaking, race-focused policies are more likely to be deemed unnecessary to the extent that racial disparities are perceived to be minimal.²⁻⁵ Recent studies have confirmed that many Whites tend to perceive racial disparities as trivial,⁶ especially compared with the typical views of racial minorities.⁷

Clearly, most individuals do not possess encyclopedic knowledge regarding the true statistical nature of racial disparities. Instead, people may seek to generalize from available individual examples to form estimates of racial disparities. Such a strategy is hypothesized to take place in 3 steps. The first step involves the generation of a short list of example individuals for each race being considered (e.g., Blacks vs Whites). In the second step, individuals are thought to form a basic impression of the general levels of wealth and opportunity of the recalled individuals. Finally, in the third step, these impressions would be used to form a view of racial disparities in general.

We attempted to examine the operation of this strategy among a sample of White adults. We predicted that because of continuing racial separation, the average White person would be less likely to have available examples of personally known Black individuals. Instead, we predicted that famous and wealthy Black individuals such as Barack Obama and Oprah Winfrey would be more likely to come to mind. By contrast, we predicted that when a White person generated an analogous list of White individuals, relatively less-privileged, personally

Objectives. We aimed to test the theory that estimates of racial disparities may be based on small recalled samples of specific individuals (Black vs White), a strategy likely to lead to underestimates of true racial disparities and a corresponding opposition to race-focused health care policies.

Methods. We asked a sample of White adults to list the first 5 Black and White individuals who came to mind, and then measured support for various race-focused health care policies.

Results. Analyses indicated that the Black individuals recalled by participants tended to be more famous and wealthy than their White counterparts. Furthermore, the tendency to list wealthier Black individuals predicted opposition to progressive racial health care programs. A follow-up study demonstrated that support for certain race-focused health care policies could be increased by informing Whites of potential memory biases.

Conclusions. The survival and success of minority health care policies depend partially on public acceptance. Education regarding continuing racial disparities may help to increase support for race-focused health care policies. (*Am J Public Health*. 2012;102:1002-1005. doi:10.2105/AJPH.2011.300556)

known individuals such as friends, family members, neighbors, and coworkers would be more likely to be recalled.

In general, the influence of recalled examples on estimates of more general rates or frequencies is consistent with classic research on the availability heuristic, in which the ease or difficulty of recall is used to make inferences about likelihoods.^{8,9} Work on the availability heuristic applies to situations in which processors attempt to make likelihood judgments based on a simple memory search. When information relating to a particular category or outcome is easy to generate, this will result in perceptions of increased likelihoods. By contrast, when information relating to a particular category or outcome is difficult to generate, this will result in perceptions of decreased likelihood. In the present scenario, if it is perceived to be either difficult to generate specific examples of poor Blacks or easy to generate specific examples of wealthy Blacks (or both), this should result in a correspondingly biased perception of Blacks' levels of wealth and privilege in general.

Of course, the typical person is presumably aware that a small, idiosyncratic sample of

recalled individuals may not adequately represent the respective populations from which they were drawn. Hence, the generalization step of the estimation strategy would likely be accompanied by some form of adjustment—yet another process that is likely to be biased by a common cognitive tendency. When individuals attempt to generalize estimates based on small idiosyncratic samples to a larger population, they often make use of the anchor-and-adjust heuristic.¹⁰ This heuristic involves beginning with a given reference value (the anchor) and then attempting to adjust up or down to a more appropriate estimate. For example, when asked to guess the number of nations on Earth, a given individual may begin by reckoning that the number has to be larger than 100. That person would then adjust upward to arrive at a final guess. Previous research has demonstrated that adjustment is typically insufficient, leading to final estimations or judgments that are biased in the direction of the chosen anchor.¹¹ In the present context, we hypothesized that Whites would use their generated list of highly privileged Blacks as an initial anchor, and then to adjust

insufficiently when trying to estimate the actual level of racial disparities in present-day America.

As a final note, it is possible that individuals may make a simple inference about race and opportunity when considering wealthy or privileged Black Americans. Namely, these examples may be taken as living proof that it is at least possible to overcome lingering prejudice and discrimination. This belief, in turn, would likely lend credence to the conviction that Blacks no longer require special consideration in terms of remedial policies. In fact, Kaiser et al.¹² reported that Barack Obama's 2008 election was associated with perceptions of increased racial equality since the 1960s, and with decreases in support for affirmative action among White college students.

We conducted 2 studies to examine the relationship between racial disparity perceptions and racial health policy attitudes. In study 1, we tested the hypothesis that Whites who use famous and wealthy Black Americans as reference points would be less likely to support race-focused health care policies. In study 2, we attempted to increase support for race-focused health care policies by informing participants of the potential effect of the heuristic-based recall strategy.

METHODS

The procedures employed in study 1 and study 2 constituted 2 independent data collections and are presented separately.

Study 1

In study 1, we sought to determine whether there were reliable differences among White participants regarding the characteristics of recalled Blacks and Whites. Specifically, we predicted that, through lack of personal exposure, our White participants would tend to list Blacks who were more famous, more wealthy, and less personally known than corresponding White exemplars. We further predicted that the extent of this tendency would predict support or opposition to race-focused policy initiatives.

Participants in study 1 were 43 White male ($n = 16$) and female ($n = 27$) adults recruited from Amazon.com's online Mechanical Turk (MTurk) participant pool. Buhrmester et al. examined the reliability of data collected using

MTurk compared with the reliability of data from typical college student studies and comparable Internet samples.¹³ They concluded that MTurk participants were slightly more representative of the general population than Internet samples in general, and especially more representative than college student samples, and that MTurk data quality was virtually identical to that of comparable Internet samples and college student samples.

Mean participant age was 38.91 years ($SD = 12.80$, range = 20–60). The main design included 1 experimental factor: race of target consideration group (Black vs White). In addition, we randomly assigned each participant to 1 of 2 target race order conditions (Black first vs White first).

Participants were directed from the MTurk Web site to a separate online data collection Web site. Participants were led to believe that the study was focused on memory for various social categories. Specifically, they were told they would be given a series of social categories, and would be asked to list 5 individuals whom they either knew personally or knew of. Importantly, they were encouraged to list the first 5 individuals who came to mind. All participants completed this task for both "White people" and "Black people," although the order in which these 2 categories were presented varied between participants.

Following these listing tasks, participants made a series of judgments regarding their listings. Specifically, they responded to the following questions: "How many of the people you listed as [White or Black] would you categorize as 'wealthy?'; "How many of the people you listed as [White or Black] would you categorize as 'famous?"; and finally, "How many of the people you listed as [White or Black] do you personally know?" For each of the 6 items, participants provided a number from 0 to 5.

Following these rating tasks, participants indicated their level of agreement with the following 2 statements using a 10-point scale (1 = strongly disagree, 10 = strongly agree): "I would support health policies and programs aimed at minorities" and "I would support health policies and programs aimed at combating discrimination against Blacks in the health care domain." Finally, after providing basic demographic information (gender, age, race), participants read a debriefing statement.

In both studies 1 and 2, participants indicated their racial category by selecting from a standard list of racial descriptors that included "White-American" (a criterion for inclusion in the study).

Study 2

In study 2, we sought to capitalize on the findings of study 1 by using a very simple and straightforward bias-reduction paradigm. Specifically, we created a communication that described the general findings and rationale of study 1 to experimental participants in study 2. We included 2 debiasing conditions. In the first, participants read the communication and were then informed that they would subsequently be indicating support for various racial policies. This subtle debiasing cue left it up to participants to draw the connection between what they had just read about racial biases and their own attitudes. In a second blatant debiasing cue condition, the communication informed participants that the study was focused on whether their health care policy attitudes would be influenced by the message they had just read. Past research has demonstrated that such blatant inductions might lead to rebound effects such that participants who resent the attempt at social control might actually respond in a manner that is the opposite of that intended by the communication.¹⁴ Conversely, it was possible that in the context of race-focused health care attitudes, a blatant correction cue might be necessary to induce participants to change their attitudes.

Participants in study 2 were 108 White male ($n = 47$) and female ($n = 61$) adults recruited from the same online participant pool used for study 1. Mean participant age was 37.65 years ($SD = 12.63$, range = 18–67). We randomly assigned participants to 1 of 3 conditions (blatant correction cue, subtle correction cue, no communication control).

An initial description of the study led participants to believe the study involved social policy opinions. Participants in the experimental conditions first read several paragraphs regarding the tendency documented in study 1. A key portion of the communication was as follows:

[R]esearch has shown that many White individuals have trouble thinking of specific African-Americans that they know due to lack of

exposure. In other words, most Whites spend relatively little time with African-Americans, and so would have trouble thinking of specific individuals they know. To fill this void, they often instead think of famous African-Americans people who, of course, tend to be privileged and wealthy. This can create a biased view of the “average” African-American.

Following this induction, participants in the subtle correction cue condition read the following text:

On the next screen, you will be asked to report your views and beliefs relating to various racial issues. Your responses to the questions that follow are completely anonymous, so please report your views honestly and openly.

Participants in the blatant correction cue condition read similar information but with the following addition: “Specifically, we are interested in whether the preceding information might influence your support for various race-related social programs.” Participants in the control condition were given no opening text to read and proceeded directly to the attitudinal dependent measures.

All participants completed the same 2 health care policy measures (support for “health policies and programs aimed at minorities” and “combating discrimination against Blacks in the health care domain”) used in study 1. To control for possible differences in social suggestibility, all participants completed a 4-item version of the Social Desirability Scale¹⁵ ($\alpha = 0.72$), which assesses the degree to which participants’ responses are likely to be influenced by impression-management concerns. Representative items include “I’m always willing to admit it when I make a mistake” and “When I don’t know something I don’t at all mind admitting it.” The purpose of this scale was to probe whether mere experimental demand, as opposed to knowledge of possible cognitive biases, might influence the manner in which participants reported their attitudes toward racial health care policies.

RESULTS

Because the 2 measures of support for minority health care programs were highly correlated in study 1 ($r = 0.92$), we averaged them into a composite for ease of analysis and presentation. The manipulation of list order (White vs Black) yielded no significant effects

on any of our dependent measures ($P > .10$ for all measures), and so we did not include the list order manipulation in the remainder of the study 1 analyses.

Using a series of paired-sample *t* tests, we first examined whether there were differences between the recalled-person ratings for “White people” vs “Black people.” As predicted, compared with the listed Whites, the listed Blacks were rated as significantly more wealthy (Black mean [SD] = 4.05 [1.96]; White = 3.56 [2.14]; $t = -2.43$; $P = .021$) and famous (Black = 3.95 [2.14]; White = 3.28 [2.31]; $t = -3.34$; $P = .002$). In addition, fewer of the listed Blacks than the listed Whites were personally known to the participants (Black mean [SD] = 2.84 [2.07]; White = 3.53 [2.38]; $t = 2.98$; $P = .005$).

We next examined whether the ratings of the Black listings correlated with support for race-focused health care initiatives. As predicted, results indicated greater support for such initiatives to the extent that the listed Black exemplars were less wealthy ($r = -0.33$, $P = .031$), less famous ($r = -0.33$, $P = .033$), and more personally known ($r = 0.32$, $P = .036$).

In study 2, because of the possibility that the experimental messages designed to minimize racial biases might affect 1 health care policy item and not the other (support for health care policies aimed at minorities vs support for discrimination reduction programs), we analyzed these 2 items separately. We entered each item into an analysis of variance, with the experimental message manipulation (blatant correction cue vs subtle correction cue vs no message control) as the main factor and the social desirability composite as a covariate.

Regarding the general minority support measure, there was no significant effect of the manipulation ($F = 0.45$; $P = .64$); the mean (SD) effects were 6.19 (2.98) for the blatant condition, 6.11 (2.53) for the subtle condition, and 5.58 (3.33) for the control condition. There was, however, a significant effect of the manipulation on the discrimination reduction item ($F = 3.18$; $P = .046$). Posthoc Tukey testing indicated that the blatant condition (mean [SD] effect = 7.31 [2.25]) differed significantly from the control condition (mean [SD] effect = 5.67 [3.43]; $P = .039$), but not from the subtle condition (mean [SD] effect = 6.47 [2.44]; $P = .41$). In addition, the subtle condition did not differ significantly from the control condition ($P = .43$).

Although this discrepancy between the 2 health care policy measures was not predicted, it can be interpreted in hindsight. The main idea conveyed by the experimental intervention was that Blacks and other minorities may be the targets of a very subtle form of (presumably) unintentional discrimination that can influence attitudes regarding a range of racial issues. Such a message is clearly more relevant to the discrimination reduction measure than to the general minority support measure. In other words, Whites in our sample may have reasoned, “I won’t support any additional assistance to minorities above and beyond discrimination reduction programs.”

DISCUSSION

We sought to postulate and provide initial confirmation for a simple cognitive account of White opposition to race-focused health care policies. Lacking detailed statistical information on racial health disparities, Whites may in some instances seek to generalize on the basis of a sample of recalled Black individuals. We theorized that this process might produce distorted estimates of actual racial disparities through several well-known cognitive biases, such as the availability heuristic and the anchor-and-adjust heuristic. Specifically, we predicted and found in study 1 that White participants who recalled a greater percentage of Black individuals who were famous and wealthy were more likely to oppose race-focused health care programs.

In study 2, we demonstrated that support for a discrimination-reduction health care policy could be increased merely by encouraging White participants to consider the effect on their attitudes and beliefs of the memory-based tendency demonstrated in study 1. This finding is consistent with previous work showing that Whites who base their opposition to affirmative action programs on the principle of meritocracy will choose to support them given evidence of discrimination.¹⁶ Because the memory tendency described to participants in study 2 can be construed as a kind of subtle discrimination that continues to create difficulties for Blacks and other minorities, it perhaps makes sense that White participants became more willing to support antidiscrimination efforts in the health care domain, but not

general minority support programs, after being made aware of potential racial biases.

This finding has important implications for the applicability of this work in creating support for progressive racial health care programs in the real world. Namely, the results of study 2 suggest that simple education regarding the existence of racial disparities in health and health care might not be sufficient to influence policy attitudes. Instead, such education may need to be accompanied by attributions of disparities to various forms of racial bias. Focusing on unintentional cognitive biases in judgment may be more productive—and cause less resistance—than explanations for racial disparities involving blatant prejudice. As study 2 demonstrates, people appear willing to correct for common biases in judgment, whereas labeling someone “a racist” may backfire and result in hostility and attitude retrenchment.

Future research should examine the extent to which Whites spontaneously engage in the person-sampling process when confronted with racial policy judgments. In the present research (study 1), Whites were compelled to engage in a memory-based search for specific racial exemplars. Additionally, more research is required to explain exactly why generating a list of Black individuals who are more privileged than the norm can influence racial policy opinions. We have discussed several potential mechanisms for such an effect, including the availability heuristic and the anchor-and-adjust heuristic, as well as a simple inference of equal opportunity. However, the present studies were not equipped to determine which combination of these potential mechanisms was operating. Furthermore, it would be enlightening to examine the interactive role that factors such as racial prejudice and racially biased explanations for racial disparities may play in the judgmental scenarios examined in this article.

Finally, although our 2 studies employed relatively heterogeneous samples of Whites (compared with typical social science studies), future research should attempt to replicate the present findings on samples that are more representative of the US population at large. Various demographic factors are likely to influence the operation of the heuristics detailed here. For example, variables such as level of education, economic status, and geographic

locality may influence both the likelihood of exposure to minorities and the degree of knowledge regarding racial disparities. The current studies demonstrated that racial perceptions, at least in the collected samples, were associated with racial policy attitudes. Future work based on more heterogeneous and diverse samples can probe the generality of these findings. Finally, additional work is required to determine whether our findings generalize to perceptions of other underrepresented minority groups. For example, do perceptions of interracial disparities involving Hispanics or Native Americans similarly predict health care policy attitudes?

In conclusion, White attitudinal opposition can create an important obstacle to race-focused health care policies. Such opposition is likely to be communicated to health care professionals themselves, as well as insurance brokers and even lawmakers. This work demonstrates that White opposition to progressive racial health care initiatives need not be rooted in antagonistic prejudice, suggesting that more nuanced educational campaigns that highlight the true nature of racial disparities in the health care domain may increase support for race-focused health care policies. ■

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Contributors

P. J. Mazzocco led the investigation, performed the analyses, and wrote the article. R. P. Brunner assisted with research design, materials development, and article writing.

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