

28 Public Attitudes on Implicit Bias

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Introduction

A quarter-century after it was introduced, the concept of implicit bias has become firmly entrenched in American society. Government institutions, business corporations, and professional associations require or recommend training for their employees and members to recognize and overcome their unconscious biases. Information disseminated by researchers, the media, government institutions, public officials and companies asserts that such biases are common, can be measured reliably, influence behavior, and are susceptible to intervention.

Yet these claims are not all well-supported by empirical evidence, according to presentations at the Conference on Implicit Bias convened under the aegis of the National Science Foundation, September 27–29, 2017, and reported in this volume. Presenters raised unsettled questions regarding the definition and independent existence of implicit bias, the validity and reliability of its measurement, the consistency and extent of its influence on behavior, and whether and how training can help to overcome it (see also Forscher et al., 2019).

The study presented in this chapter reports results of a national public opinion survey – the first of its kind, to the extent we can ascertain – designed to measure public understanding of implicit (or “unconscious”) bias. Results show that broad majorities of Americans think implicit biases are prevalent, influence behavior, and can be mitigated through training, in

line with many representations in the public sphere. Confidence in its accurate measurement is comparatively lower. The public sees unconscious biases as more prevalent than biases that are consciously held and as worthy of mitigation efforts by businesses and government.

We find that self-reported exposure to information about implicit bias relates to these views. People who report having heard or read a “great deal” or “a lot” about implicit bias are more apt than those with little or no information exposure to think that all or most people have such biases, to think that implicit biases strongly influence people’s behavior, and to think that such biases against Black people are highly prevalent among White people. Other factors beyond information exposure also predict attitudes on implicit bias; these include political and ideological predispositions, age, education, and recognition of one’s personal prejudices.

Research Questions

The study reported in this chapter, produced independently and without external funding,¹

¹ Research design, management, and analysis services were donated by Langer Research Associates, a New-York-based survey research firm whose president, Gary Langer, is a member of the Reporting Committee of the National Science Foundation Conference on Implicit Bias. Data collection and tabulation services were donated by SSRS of Glen Mills, PA.

used a brief (thirteen-question) questionnaire² in a national, random-sample omnibus telephone survey to measure views of claims about implicit bias made in the public sphere. Our research questions are presented here:

- What information on implicit bias has been reported to the public?
- What is the extent of public exposure to this information?
- How many Americans believe that implicit bias is widely distributed, can be measured reliably, influences behavior, and is susceptible to intervention?
- How are these understandings distributed among population groups defined by information levels, political partisanship, ideology, and demographics including age, race, sex, and education?
- Can we identify discrete sets of attitudes on implicit bias and the factors that influence them?
- What are views on racial bias in the United States more generally – conscious as well as unconscious? How widespread is bias perceived to be, and how do these perceptions relate to opinions about implicit bias?
- To what extent do Americans self-report race-based personal prejudice (i.e., conscious bias)? How are these self-reports distributed demographically and attitudinally, and to what extent do they relate to attitudes on implicit bias?

In addition to the survey, we conducted web searches to gain a qualitative understanding of representations about implicit bias made by experts and others in the public sphere, as well as to assess public interest in the topic. These findings are summarized in the next section.

Information on Implicit Bias in the Public Sphere

We sought to assess the dynamics of public interest in implicit bias using Google Trends,

which documents the number of U.S.-based Google searches on a particular topic in a given month as a percentage of the maximum number of such searches on that topic in any month during the period studied. We then correlated search frequencies with background events.

Tracking web searches for the terms “unconscious bias” and “implicit bias” from February 2009 to August 2023 reveals little interest until 2014, followed by an increasing number of such searches, with peaks in 2016 and 2018 (Figure 28.1).

The spike in searches for the term “implicit bias” in September and October 2016 coincided with prominent discussion of the issue during that year’s presidential election campaign, beginning with the September 26, 2016, presidential debate at Hofstra University, at which Democratic candidate Hillary Clinton declared, “I think implicit bias is a problem for everyone, not just police” (Hensch, 2016, para. 2). The debate was the most-watched in television history (Kennedy, 2016). Two days later, Republican candidate Donald Trump suggested Clinton was accusing “the entire country – including all of law enforcement – of implicit bias, essentially suggesting that everyone, including our police, are basically racist and prejudiced” (Johnson, 2016, para. 3). Focus on the issue continued in the subsequent vice-presidential debate on October 5, 2016 (Berman, 2016).

The second spike appeared in April 2018 in searches for both terms “unconscious bias” and “implicit bias.” This followed an announcement by the coffee-shop chain Starbucks that it was shuttering more than 8,000 outlets in the United States for a day to offer anti-bias training to more than 175,000

² The questionnaire, dataset, and open-access materials cited in this chapter can be found at <https://bias-study.parc.us.com>.

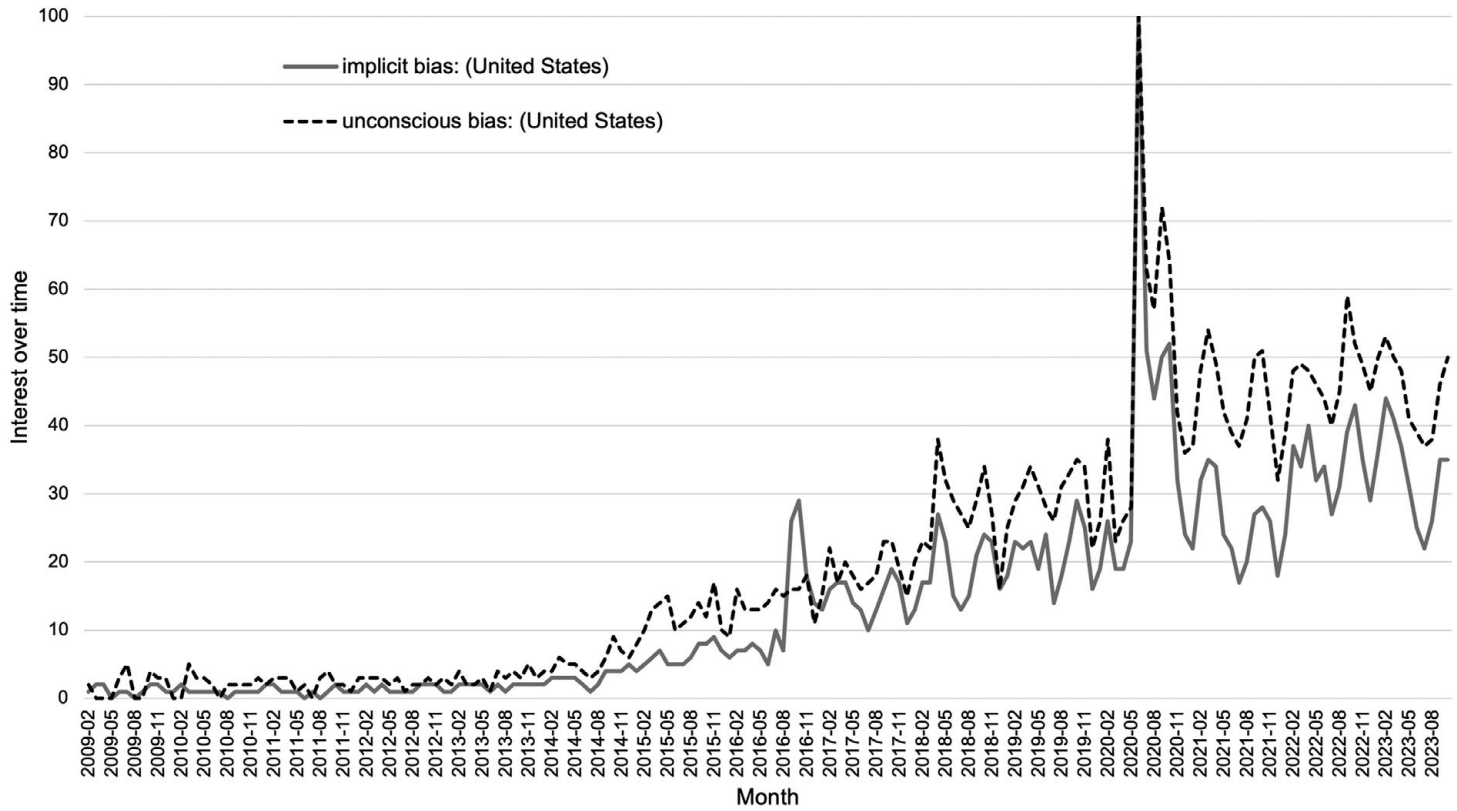


Figure 28.1 Google Trends searches of implicit bias and unconscious bias.

employees following a racial incident at a store in Philadelphia (Scheiber & Abrams, 2018).

While these events appear to have incited transient widespread interest in the topic, searches for information began to rise years earlier, and continued subsequently. What do such searches produce? Our review suggests awareness of broad research claims about implicit bias, including its independent existence, measurability, impacts on behavior, and susceptibility to mitigation through training from authoritative organizations, individuals, and businesses.

The terms “unconscious,” “implicit,” “intuitive,” and “automatic” bias are used interchangeably. Typically, when elaborated, these terms are said to refer to any type of unconscious mental process or stereotype that produces a biased outcome. Evidence of implicit bias is said to come from measures of implicit associations (most prominently, the Implicit Association Test, hosted on the Harvard.edu website), as well as other research, e.g., gender- and race-blind studies on perceptions, hiring outcomes, and performance evaluations. Disparate outcomes for women, minorities, and other groups are attributed to implicit bias.

The National Science Foundation included this information on its website: “Implicit Association Tests can help individuals identify their own unconscious biases, and use that knowledge to help avoid discriminatory behavior” (“Unmasking Bias,” 2005). It went on to describe the IAT as “a unique and statistically powerful tool to identify and quantify either hidden or unconscious attitudes.”

The Project Implicit website at Harvard.edu invited visitors to take Implicit Attitudes Tests, sought donations and offered consulting services, lectures, and workshops on implicit bias. Its fundraising page (“Support Our Efforts to Uncover Hidden Biases”) stated:

“Project Implicit advises universities, corporations, medical schools, law firms, and

courts about how to identify unintended bias and how to reduce its undesired outcomes.” (“Support Our Efforts to Uncover Hidden Biases,” n.d.).

The Harvard site linked to a separate Project Implicit website that offered consulting services to organizations; among other elements, “practical steps to manage implicit bias are discussed” (“Project Implicit Lectures and Workshops,” 2011).

Highly prominent in web search results is the Kirwan Institute for the Study of Race and Ethnicity at The Ohio State University, which offers research articles; online modules designed by “the nation’s leading experts on implicit bias” to “uncover some of your own biases and learn strategies for addressing them” (“Implicit Bias Module Series,” n.d.); and in-person training services to “equip attendees with a deeper understanding of our unconscious mental processing; the ways in which implicit associations impact our decision-making; and strategies to prevent and respond to the emergence of bias” (“Close-Up on Implicit Bias,” 2019, para. 1). The Kirwan Institute is one of many organizations to present efforts to measure and mitigate implicit bias as a social justice imperative.

Describing conscious and unconscious bias, the Kirwan site asserted the two biases are “related but distinct mental constructs,” a position at odds with some of those heard in presentations to the National Science Foundation panel (Kirwan Institute for the Study of Race and Ethnicity, n.d.). Elsewhere, in its 2016 State of the Science: Implicit Bias Review, Kirwan reported: “Implicit bias matters because everyone possesses these unconscious associations, and implicit bias affects our decisions, behaviors, and interactions with others” (Staats et al., 2016, p. 15). It added: “Fortunately, our implicit biases are not permanent; they can be changed” (p. 15).

The Kirwan website in some cases made broad claims about implicit bias, and in other

cases made more balanced claims. At one point, as noted above, it said that its training provides strategies to prevent the emergence of bias; at another, it said its training modules “are not designed to eliminate bias” but “will help participants engage in more equitable decision-making practices and behaviors.” It said implicit bias “has been shown to impact decision-making across a wide array of sectors,” while adding, “there are limitations to the extent to which unconscious biases can predict individual behavior. People with an implicit preference for one identity may not act on this bias or make biased decisions, much of this depends on the circumstance” (“Implicit Bias Module Series,” n.d.).

In an example of Kirwan’s presence in popular media, MTV’s “Look Different” campaign reported having been advised by the Institute (and Project Implicit alike) in its production of a “Bias Cleanse” program. Per the site:

“Interested in working on your own biases? With input from the Kirwan Institute for the Study of Race and Ethnicity, we’ve created seven-day bias cleanses on race, gender and anti-LGBTQ bias that will provide you with daily tasks that will help you begin to change your associations.” (“Bias Cleanse,” 2014)

The site also invited users to take five-minute implicit association tests on race, gender, and sexual orientation – “featuring Daniel Radcliffe, Kendrick Lamar, Kelly Rowland, Cara Delevingne and more – to uncover your own biases. This quiz, created in partnership with Project Implicit, requires you to sort pictures or words into groups as fast as you can. At the end, you will receive your results and some information about what they mean.”

Many large companies have expressed concern about implicit bias and confidence in interventions to reduce it. Facebook offered a “managing unconscious bias” web page with training videos aimed at “surfacing and

counteracting unconscious bias” (“Managing Unconscious Bias,” 2019). Microsoft offered an “eLesson” on implicit bias: “Because our unconscious biases are so hidden from ourselves, it takes some work to disrupt them, but it can be done through active reflection and practicing inclusive behaviors” (“eLesson: Unconscious Bias,” 2015). Airbnb offered an online Diversity Program describing its implicit bias training efforts and providing a toolkit for its hosts “exploring bias and other factors that influence people’s decisions, even without their knowledge” (“Diversity at Airbnb,” n.d.). It said:

“One of the few proven ways to actually reverse implicit bias is to seek out experiences and information that go against stereotypes. Get out of your comfort zone and meet diverse people—accept Airbnb guests from different walks of life. Positive contact and social interaction can reduce biases.” (“Understanding Bias and Belonging,” n.d.)

Among professional associations, the American Federation of Teachers described implicit biases as “pervasive”; “we are not even aware that they exist, yet they can have a tremendous impact on decision making. . . . everyone has implicit biases, regardless of race, ethnicity, gender, or age” (Staats, 2015, para. 8). It went on to say:

“Accumulated research evidence indicates that implicit bias powerfully explains the persistence of many societal inequities, not just in education but also in other domains, such as criminal justice, healthcare, and employment.” (Staats, 2015, para. 39)

The AFT and the American Bar Association, as well as the Southern Poverty Law Center, among others, have recommended individuals take the IAT. Per the “Understanding Implicit Bias” page on the AFT website, “Doing so will enable them to become consciously aware of some of the unconscious associations they may harbor” (Staats,

2015, para. 29). The SPLC, on its Teaching Tolerance web pages, reported, “A growing number of studies show a link between hidden biases and actual behavior” (“Test Yourself for Hidden Bias,” n.d.). (It noted that experiments are being conducted to measure the strength of this link.) It further declared, “If people are aware of their hidden biases, they can monitor and attempt to ameliorate hidden attitudes before they are expressed through behavior.”

The ABA, for its part, produced a video, *Hidden Injustice: Bias on the Bench*, “the first tool of its kind to raise awareness and provide practical tips for America’s judges on the damage caused by implicit bias and the necessary steps to combat it. . . . The ten-minute training video is the centerpiece of an upcoming toolkit designed by the ABA’s recently formed Diversity and Inclusion 360 Commission to help create a fair system of justice for all Americans” (“Hidden Injustice: Bias on the Bench,” 2016).

The National Initiative for Building Community Trust and Justice, established by a \$4.75 million grant from the U.S. Department of Justice in September 2014, went a step further:

“While conscious, “traditional” racism has declined significantly in recent decades, research suggests that “implicit attitudes may be better at predicting and/or influencing behavior than self-reported explicit attitudes.” (“Implicit Bias,” n.d., para 2)

Similarly, per the website of the National Implicit Bias Network of the Equal Justice Society:

“The mind sciences have found that most of our actions occur without our conscious thoughts, allowing us to function in our extraordinarily complex world. This means, however, that our implicit biases often predict how we’ll behave more accurately than our conscious values.” (“Introduction to Implicit Bias,” 2018, para. 2)

There’s been broad governmental, corporate, and association response. The Anti-Defamation League, on a page titled “Law Enforcement Trainings,” reported having worked with “every major federal, state, local and military law enforcement agency” to deliver trainings to “100,000 law enforcement personnel – at no cost to taxpayers.” This included trainings to provide “police with the skills and strategies to counter implicit bias” (“Law Enforcement Trainings,” 2019, para 1).

Indeed, the U.S. Department of Justice required implicit bias training for more than 33,000 prosecutors and law enforcement officers (Edwards, 2016). In 2018, the New Jersey attorney general, Gurbir Grewal, announced on Twitter that he was mandating implicit bias training for all New Jersey state prosecutors (Grewal, 2018). The New York City Police Department required all department members to undergo implicit bias training as part of a \$4.5 million contract with Fair and Impartial Policing, said to be one of the leading providers of implicit bias workshops (Baker, 2018).

Among various legal interpretations, in his opinion in *Texas Department of Housing and Community Affairs v. The Inclusive Communities Project*, U.S. Supreme Court Justice Anthony Kennedy interpreted “disparate impact,” or discrimination without intent, as a legitimate form of discrimination, connecting “unconscious prejudices and disguised animus” to discriminatory housing policies (*Texas Department of Housing and Community Affairs v. The Inclusive Communities Project, Inc.*, 2015).

We also found voluminous news reporting on the topic, with many articles making similar assertions on the presence, measurability, impact, and treatability of implicit bias.³

³ Investigators may wish to extend this analysis of news coverage, e.g., by producing a formal content analysis of mentions of implicit bias or unconscious bias in the news, e.g., via the Lexis-Nexis search platform.

A handful of examples:

- National Public Radio: “Implicit biases are just that — subtle, often subconscious stereotypes that guide our expectations and interactions with people.” (Turner, 2016)
- CNN: “The good news? We’re not helpless to combat implicit bias. It can be mitigated through intervention strategies.” (Grinberg, 2015, para. 11)
- Vox: The IAT “measures racial bias in ways that are very difficult to manipulate, and that have been shown, in study after study, to predict real-world racial bias, too.” (Chang & Klein, 2015, para. 2)
- Vox: “There is increasing evidence that implicit bias — including implicit racial bias, which the IAT measures — predicts behavior in the real world.” (Desmond-Harris, 2016, para. 29)
- *Huffington Post*: “One of the most important findings of implicit bias research is that these stereotypes can affect our behavior whether or not we believe in them. In fact, the less awareness we have of them, the more vulnerable we are to their influence.” (Mengel, 2018, para. 8)
- *New York Times*: “... the Implicit Association Test ... has become famous for its ability to measure biases that subjects either don’t care to acknowledge or don’t realize they have.” (Tingley, 2013, para. 24)
- *The Washington Post*: “According to experts, a key to curbing biases is to develop awareness and insight into them. The Implicit Association Test, for example, is one such tool to help uncover unconscious beliefs.” (Sahibzada, 2016, para. 13)
- Harvard Business Review: “There’s a growing skepticism about whether unconscious bias training is an effective tool to meet corporate diversity goals. Critics of such training contend that it doesn’t visibly move the needle on diversity numbers, and can even backfire. Some academic studies support this perspective.” (Emerson, 2017, para. 1)
- New York magazine: “The problem ... is that there’s very little evidence to support that claim that the IAT meaningfully predicts anything. In fact, the test is riddled with statistical problems – problems severe enough that it’s fair to ask whether it is effectively ‘misdiagnosing’ the millions of people who have taken it, the vast majority of whom are likely unaware of its very serious shortcomings. There’s now solid research published in a top journal strongly suggesting the test *cannot* even meaningfully predict individual behavior. And if the test can’t predict individual behavior, it’s unclear exactly what it *does* do or why it should be the center of so many conversations and programs geared at fighting racism.” (Singal, 2017, para. 4)
- BBC: “However, pretty much everything about implicit bias is contentious, including very fundamental questions. For example, there is disagreement about whether these states of mind are really unconscious. Some psychologists believe that at some level we are aware of our prejudices. Then there’s the IAT itself. There are two main problems with it. The first is what scientists call replicability. ... More fundamentally, there appears to a very tenuous relationship between the IAT and behaviour.” (Edmonds, 2017, para. 15)
- The Chronicle of Higher Education: “The link between unconscious bias, as measured by the test, and biased behavior has long been debated among scholars, and a new analysis casts doubt on the supposed connection. Researchers from the University of

There also has been some news coverage challenging some of these claims. Examples, all published in 2017:

Wisconsin at Madison, Harvard, and the University of Virginia examined 499 studies over 20 years involving 80,859 participants that used the IAT and other, similar measures. They discovered two things: One is that the correlation between implicit bias and discriminatory behavior appears weaker than previously thought. They also conclude that there is very little evidence that changes in implicit bias have anything to do with changes in a person's behavior. These findings, they write, "produce a challenge for this area of research." (Bartlett, 2017, para. 4,5)

- The Atlantic: "But a lack of standards for implicit-bias training—namely, what exactly courses should include and how to monitor their impact—means no one really knows how effective they actually are, even as they are adopted by more and more departments. To make things even more confusing, debate also swirls around which tests to use to measure bias, the degree to which implicit biases are truly unconscious, and even the strength of the link between bias and behavior." (James, 2017, para. 28, 29)

In sum, our review shows that the public interest in "implicit bias" and/or "unconscious bias" peaked when mass media bolstered its legitimacy:

- (a) showing the attention to the problem at the highest level – as it was debated by the two major-party candidates for the U.S. presidency in 2016; and
- (b) informing the public about prominent corporate efforts to address the issue – the system-wide 2018 Starbucks shutdown to conduct massive anti-bias training.

As illustrated by John C. Turner, the perceived validity of information often comes down to the subjective validity of the source (Turner, 1991). The above quotations illustrate that many prominent sources presented the topic of

implicit or unconscious bias as worthy of serious consideration or as causing concerted action by government, corporate, and public-interest actors. Concern and action were connected to such respected institutions as Harvard University and associated with law enforcement, including the training of police, prosecutors, and judges. Implicit bias was widely presented as a pernicious but treatable condition. We posit that awareness of the topic was raised, creating pre-conditions to see it as identifying serious problem and to support action to address it.

The Study

Our next step was to seek to assess whether publicly available information on implicit bias is related to public attitudes on the topic. We measured these attitudes in a nationally representative, fifty-state random-digit-dialed telephone survey of 1,001 adults, conducted in English and Spanish, 60 percent via cell phones and 40 percent via landlines, September 25–30, 2018, with field work by SSRS of Glen Mills, PA., via its SSRS Omnibus survey, in which various clients insert questions on their topics of interest. Data were weighted to correct for unequal probability of selection and, via iterative proportional fitting, to Census benchmarks from the U.S. Census Bureau's March 2017 Current Population Survey ("Current Population Survey," 2023) for age, sex, region by sex, education, race, marital status, Hispanic ethnicity and Hispanic nativity, as well as July–December 2017 National Health Interview Survey ("National Health Interview Survey," 2024) data on phone-type use. Weights were trimmed not to exceed 4.0 or fall below 0.25. Weighted and unweighted sample distributions by demographic group, along with target values, are provided in Table 28.1.

Results have a margin of sampling error of plus or minus 3.7 percentage points for the full

Table 28.1 *Unweighted sample sizes and distributions of weighting variables – unweighted, weighted, and CPS or NIHS targets*

Respondents	Unweighted		Weighted	Target
	N	Percent		
Women	575	57%	49%	48%
Men	426	43	51	52
Total	1001	100%	100%	100%
Age 18–29	144	14%	20%	21%
30–49	267	27	33	33
50–64	267	27	25	25
65+	319	32	21	21
Total	996	100%	100%	100%
White people	664	68%	64%	64%
Black people	68	7	12	12
Hispanic people	145	15	16	16
Hispanic, U.S. born	71	7	7	8
Hispanic, foreign born	73	7	9	9
Others	100	10	8	8
Total	977	100%	100%	100%
No high school diploma	69	7%	11%	11%
High school graduate	216	22	28	29
Some college/tech. school	244	25	28	28
College graduate/postgraduate	465	47	32	32
Total	994	100%	100%	100%
Northeast	187	19%	18%	18%
Midwest	217	22	21	21
South	358	36	38	38
West	239	24	24	24
Total	1001	100%	100%	100%
Landline only	59	6%	5%	5%
Dual landline/cell	550	55	40	40
Cell phone only	390	39	55	55
Total	999	100%	100%	100%

sample, including adjustment for the survey's design effect due to weighting.⁴

Thirteen substantive questions were posed:

1. There's an idea that a person might be prejudiced against people in other groups, without realizing that he or she is prejudiced against them. This sometimes is called implicit bias or unconscious bias.

⁴ Tables presenting race and Hispanic ethnicity refer to answers to two questions. One asked, "Are you of Hispanic or Latino origin or descent?" Those who said yes were reported as Hispanics, regardless of their race. The next asked, "Do you consider yourself white, black or African American, Asian, Native American, Pacific Islander, mixed race or some other race?" "Others," listed in race/ethnicity tables in this report, refers to individuals who reported being anything other than White, Black, or Hispanic.

- How much, if anything, have you heard or read about this – A great deal, a lot, a moderate amount, a little, or nothing?
2. How many people do you think have unconscious biases against people in other groups – do you think all people have these unconscious biases, most have them, some, a few, or none?
 3. (IF NONE IN Q2, If they exist,) Do you think these unconscious biases influence the way people act toward people in other groups, or not?
 - 3a. (IF THEY INFLUENCE THE WAY PEOPLE ACT) Do you think unconscious biases typically have a strong influence on the way people act, or not so strong?
 4. (IF NONE IN Q2, If they exist,) Do you think that scientists can accurately measure a person's unconscious biases, or not?
 - 4a. (IF THEY CAN BE MEASURED) Do you think this can be measured extremely accurately, very accurately, somewhat accurately, or not so accurately?
 5. (IF NONE IN Q2, If they exist) Do you think people can or cannot be trained to overcome their unconscious biases?
 - 5a. (IF THEY CAN BE TRAINED) Are you extremely confident of that, very confident, moderately confident, slightly confident, or not confident at all?
 6. Some large companies, police forces, and other organizations give their staff members training about unconscious biases in order to try to change their behavior toward people in other groups. Do you think this training is or is not worthwhile?
 7. Would you support or oppose your local government spending money to give the police force training about unconscious biases in order to try to change their behavior toward people in other groups?
 8. If your local government spent money on this training, do you think the behavior of police officers would change, or not?
 - 8a. (IF BEHAVIOR WOULD CHANGE) Are you extremely confident of this, very confident, moderately confident, slightly confident, or not confident at all?
 9. About what percent of whites do you think have unconscious prejudice against blacks?
 10. About what percent of whites do you think are *consciously aware* that they have prejudice against blacks?
 11. What percent of blacks do you think have unconscious prejudice against whites?
 12. About what percent of blacks do you think are *consciously aware* that they have prejudice against whites?
 13. If you were to honestly assess yourself, would you say you have some feelings of prejudice toward [ITEM]?
 - a. Blacks
 - b. Whites

Respondents were able to volunteer that they had no opinion; percentages doing so ranged from 6 percent to less than 1 percent. The topline data report including percent responses to each question is publicly available at <https://bias-study.parc.us.com>, as are the questionnaire, dataset, modeling syntax, sample dispositions, and related materials.

Key Findings

About half of American adults, 48 percent, reported having heard a great deal, a lot, or a moderate amount about implicit or unconscious bias – 14, 12, and 22 percent, respectively. The other half reported having heard a little (23 percent) or nothing (29 percent) about it.

Education is a key predictor: Having been exposed to a great deal or a lot of information about implicit bias ranged from 48 percent of

Americans with postgraduate educations to 33 percent of four-year college graduates and 20 percent of those with less than a four-year degree. Exposure was higher among Democrats than independents and Republicans (34 percent vs. 24 and 20 percent, respectively) and higher among liberals than conservatives (33 vs. 21 percent).

Seventy-four percent of the public said that all, or most, or some Americans have unconscious biases against people in other groups – 16, 26, and 32 percent, respectively – while the rest thought a few (18 percent) or none (7 percent) have such biases. Eighty-two percent said that, when present, unconscious biases influence the way people act, including 50 percent who said they “strongly” influence people’s actions. Seventy-one percent said people can be trained to overcome their unconscious biases, although fewer than half of them, 33 percent, were extremely or very confident of this.

There are prominent links between these measures and self-reported exposure to information. Among those who reported a great deal or a lot of exposure to information on implicit biases, 62 percent said all or most people have them, versus 33 percent among those with little or no information. Similarly, 63 percent in the high-information group said unconscious biases strongly influence behavior, versus 42 percent in the group with little or no information. Likewise, 80 percent in the high-information group said training can overcome unconscious biases, versus 67 percent in the low group for information.

There’s less confidence in another common refrain: that implicit bias can be reliably measured. Just 30 percent of Americans said that scientists can measure unconscious bias accurately, and a mere 7 percent said they can do so extremely or very accurately. Ideological and partisan gaps are notable: liberals and Democrats were most likely to say

unconscious biases can be measured accurately (45 and 36 percent, respectively), while strong conservatives and Republicans were least apt to think so (17 percent in both cases). A smaller, twelve-point gap appeared on this question between the high- and low-information groups.

Support for Training

The survey found broad support for training to help people overcome unconscious biases. Seventy-three percent described such training as “worthwhile,” as shown in Table 28.4. Seventy-five percent supported their local government spending money on such training for the police. As shown in Table 28.3, support for such programs was similar regardless of how confident people were that training would change the way the police behave, falling off only among those who thought that training they would have no effect on police behavior at all.

As shown in Table 28.4, party identification and ideology predict these attitudes. Eighty-two percent of those who described themselves as very liberal saw training programs as worthwhile, compared with 51 percent of people who described themselves as very conservative. There was a much smaller (nine-point) difference by political party, but this widened when it came to spending money to train the local police: Support reached 82 percent among Democrats versus 61 percent among Republicans. By ideology, it was 88 percent among those who described themselves as very liberal versus 52 percent among those who described themselves as very conservative, as shown in Table 28.4.

As noted in Table 28.2, there was essentially no difference between Democrats and Republicans in the general sense that people can be trained to overcome their unconscious biases, expressed by 71 and 70 percent, respectively. But there is a gap in the expectation that

Table 28.2 *Opinions on unconscious biases toward people in other groups*

Respondents	Q.2	Q.3/3a	Q.4	Q.5
	All/most people have them	They strongly influence behavior	They can be accurately measured	Training can overcome them
All	42% <i>n</i> = 420	50% <i>n</i> = 510	30% <i>n</i> = 299	71% <i>n</i> = 708
Heard/read:				
Great deal/a lot	62%	63%	38%	80%
A moderate amount	39%	55%	28%	72%
Little/nothing	33%	42%	26%	67%
Age 18–29	55%	49%	37%	79%
30–39	48%	54%	32%	72%
40–49	43%	56%	30%	76%
50–64	36%	47%	26%	69%
65+	30%	46%	21%	62%
Democrats	44%	60%	36%	71%
Independents	44%	51%	33%	74%
Republicans	35%	40%	17%	70%
Liberal	53%	59%	45%	74%
Conservative	35%	45%	21%	71%
Very liberal	59%	64%	51%	69%
Somewhat liberal	50%	55%	41%	76%
Moderate	42%	53%	27%	71%
Somewhat conservative	37%	49%	23%	75%
Very conservative	31%	38%	17%	66%
White people	41%	48%	26%	70%
Black people	47%	56%	27%	66%
Hispanic people	37%	52%	43%	78%
Others	42%	58%	35%	79%
High school or less	34%	44%	26%	69%
Some college	37%	51%	29%	71%
College graduate	54%	56%	35%	74%
Postgraduate	58%	60%	36%	77%

Note: This table shows the percentages of American adults, overall and in groups, who said they think all or most people have unconscious biases against people in other groups (Q.2, first column, 42 percent overall); who said they think such biases strongly influence the way people act toward people in other groups (Q.3/3a, second column, 50 percent overall); who said they think that scientists can accurately measure a person's unconscious biases (Q.4, third column, 30 percent overall); and who said they think people can be trained to overcome their unconscious biases (Q.5., fourth column, 71 percent overall). Those who did not hold these views are not shown in the table.

Table 28.3 Views of training programs for local police by levels of confidence that such training would change police behavior

Respondents	Think training would change police behavior			Expect no change
	Extremely/very confident	Moderately confident	Less confident	
All	20% (<i>n</i> = 210)	27% (<i>n</i> = 278)	13% (<i>n</i> = 123)	33% (<i>n</i> = 325)
See training programs as worthwhile	88%	87%	85%	47%
Support local spending to train police	91%	94%	89%	43%

Note: This table shows the percentage of adults who saw training to overcome unconscious bias as worthwhile, and who supported spending to train their local police, among those who were extremely/very, moderately, or less confident that such training would change police behavior, as well as among those who said such training would not change police behavior.

Table 28.4 Views on training, support for spending, and expected outcome

Respondents	See training as worthwhile	Support local spending on police training	Think police behavior would change
All	73% (<i>n</i> = 717)	75% (<i>n</i> = 730)	60% (<i>n</i> = 613)
Liberal	83%	88%	72%
Conservative	65%	62%	47%
Very liberal	82%	88%	75%
Somewhat liberal	84%	88%	71%
Moderate	80%	80%	68%
Somewhat conservative	72%	67%	52%
Very conservative	51%	52%	37%
Democrats	77%	82%	69%
Independents	76%	78%	60%
Republicans	68%	61%	51%

Note: This table shows the percentage of Americans who saw training as worthwhile, who supported local spending for police training, and who said such training would change police behavior, overall and among political and ideological groups.

training would be effective in terms of changing the behavior of local police: As shown in Table 28.4, 69 percent of Democrats said so, versus 51 percent of Republicans. The gap by ideology was wider: Seventy-five percent of very liberal people said that police behavior would change, compared with 37 percent of

very conservative people, also shown in Table 28.4.

Perceived Prevalence of Bias

Racial bias was perceived to be very prevalent. Eighty-one percent of Americans said

that more than half of Black people are prejudiced (consciously or unconsciously) against White people, and 75 percent said more than half of White people are biased against Black people. Forty-nine percent said half or more of Black people have both conscious and unconscious bias against White people, while 41 percent said the same about the level of prejudice of White people against Black people.

As shown in Table 28.5, people more exposed to information about unconscious bias

estimated higher levels of unconscious bias than conscious bias among their fellow Americans. This is the case especially for estimates of bias among White people: In the high-information group, 58.3 percent of White people were thought to have unconscious bias against Black people, versus 37.7 percent who were estimated to have conscious bias. There is a smaller but still sizable gap in perceptions of unconscious versus conscious bias among Black people against White people, 58.0 versus 45.6 percent, in the high information group.

Table 28.5 Respondents' estimates of the prevalence of unconscious and conscious bias among Whites against Blacks, and among Blacks against Whites

Respondents	The public's estimates of unconscious bias (UB) compared with estimates of conscious bias (CB)					
	UB	CB	Diff.	UB	CB	Diff.
All respondents						
Mean	46.3%	36.6%	10.3%	49.2%	43.3%	5.9%
Median	50%	30%	20%	50%	40%	10%
Heard/read about it:						
Great deal/a lot						
Mean	58.3%	37.7%	20.6%	58.0%	45.6%	12.4%
Median	60%	30%	30%	50%	50%	0%
A moderate amount						
Mean	45.9%	36.5%	9.4%	48.1%	42.3%	5.8%
Median	50%	30%	20%	50%	40%	10%
Little/nothing						
Mean	40.3%	36.2%	4.1%	45.1%	42.8%	2.3%
Median	40%	30%	10%	50%	40%	10%

Note: This table compares means and medians of the public's estimates of the proportion of White people who have unconscious bias against Black people (first column) with the public's estimates of the proportion of White people who have conscious bias against Black people (second column), showing the difference between the two (third column); and comparing the public's estimates of the proportion of Black people who have unconscious bias against White people (fourth column) with the public's estimates of the proportion of Black people who have conscious bias against White people (fifth column), showing the difference between the two (sixth column). These are shown, in rows, among all adults, among those who said they had heard or read a great deal or good amount about unconscious bias, among those who had heard or read a moderate amount about it, and among those who had heard or read a little or nothing about it.

These gaps almost disappear among people with little or no self-reported exposure to information on implicit bias. Individuals in this low-information group estimated that 40.3 percent of White people have unconscious bias and 36.2 percent have conscious bias against Black people, and that 45.1 percent of Black people have unconscious bias and 42.8 percent have conscious bias against White people.

Standard deviations are high, ranging from 27–32. Using medians, perceptions of unconscious bias remain more substantial than conscious bias, and information remains relevant in terms of perceived bias among White people, but not in terms of Black people.

The data show a strong relationship between perceiving unconscious and conscious bias. Those who estimated higher levels of unconscious bias among White people also saw higher levels of conscious bias among White people; the same is true for perceived bias among Black people. Further, people who saw higher levels of unconscious or conscious bias in one group also saw it in the other group. For instance, among those in the top tercile for seeing unconscious bias among White people against Black people, 80 percent also saw unconscious bias among Black people against White people, 75 percent saw conscious bias among Black people against White people and 67 percent saw conscious bias among White people against Black people, as shown in Table 28.6.

Cluster analysis (two-step clustering) was conducted to group people based on their estimates of how many Black people and White people have conscious and unconscious bias against each other. All variables in this analysis are scales with multimodal distributions, peaking at round numbers; we recoded them to create uniform distributions. For consistency, we used the same scale for every

variable, which provided comparable size of groups within each variable. These groups are: 0, 1–10 percent, 11–30 percent, 31–50 percent, and more than 50 percent.

The variables are:

- The estimated percentage of White people who have unconscious bias against Black people;
- The estimated percentage of White people who are aware of being prejudiced against Black people;
- The estimated percentage of Black people who have unconscious bias against White people; and
- The estimated percentage of Black people who are aware of being prejudiced against White people.

The analysis returned two clusters of practically equal size, shown in Table 28.7, demonstrating a strong relationship between seeing bias as widespread and seeing it as prevalent.

As shown in Table 28.8, White people were divided evenly between the higher and lower perceived bias groups, while Black people and Hispanic people perceived higher levels of bias. The higher perceived bias group also contained more Democrats and liberals. Exposure to information did not predict these opinions strongly.

Self-Reported Prejudice

One precept of attempts to measure implicit bias is the claim that people will not report their biases explicitly. But as shown in Table 28.9, 25 percent of Americans in this study said they have some feelings of prejudice toward White people, and 18 percent reported some prejudice toward Black people.

There is substantial overlap between these groups – 15 percent reported some prejudice

Table 28.6 *The public's estimates of the prevalence of bias by terciles*

	UB among White people			CB among White people			UB among Black people			CB among Black people		
	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
Estimated percent of White people												
... with UB	15%	42%	81%	41%	46%	65%	31%	51%	68%	45%	49%	67%
... with CB	24%	43%	67%	12%	31%	63%	25%	44%	47%	26%	38%	53%
Estimated percent of Black people												
... with UB	39%	47%	80%	50%	50%	60%	19%	49%	84%	45%	54%	68%
... with CB	50%	56%	75%	45%	43%	66%	41%	52%	68%	15%	43%	79%

Note: This table shows, in rows, the public's estimates of the percentage of White people who have unconscious bias toward Black people, the percentage of White people who have conscious bias toward Black people, the percentage of Black people who have unconscious bias toward White people, and the percentage of Black people who have conscious bias toward White people. These are shown among those in the first, second, and third terciles in their estimates of the prevalence of unconscious bias among White people against Black people (first three columns); among those in the first, second, and third terciles in their estimates of the prevalence of conscious bias among White people against Black people (second three columns); among those in the first, second, and third terciles in their estimates of the prevalence of unconscious bias among Black people against White people (third three columns); and those in the first, second, and third terciles in their estimates of the prevalence of conscious bias among Black people against White people (last three columns).

Table 28.7 Cluster analysis – perceived bias

Cluster 1 = See racial bias as widespread, n = 466			
	Median	Mean	St. Dev.
Perceived prevalence of:			
Conscious bias against Black people	60%	64.0%	23.3
Unconscious bias against Black people	50	50.7	23.4
Conscious bias against White people	67	66.3	21.7
Unconscious bias against White people	50	58.6	22.6
Cluster 2 = See racial bias as not widespread, n = 406			
	Median	Mean	St. Dev.
Perceived prevalence of:			
Conscious bias against Black people	25%	26.8%	21.4
Unconscious bias against Black people	20	21.3	18.7
Conscious bias against White people	30	30.4	21.6
Unconscious bias against White people	25	27.0	22.0

Note: The table shows the perceived prevalence of conscious and unconscious bias among White and Black people toward each other, among people in two clusters: those who saw racial bias as widespread and those who saw the racial bias as not widespread. It shows that people who saw racial bias as widespread (Cluster 1) gave high estimates of conscious bias prevalence among White people and Black people alike, and also gave high estimates of unconscious bias prevalence among White people and Black people alike. Estimates of both types of bias prevalence were lower among people who saw racial bias as not widespread (Cluster 2).

toward Black people and White people alike. An additional 10 percent reported prejudice toward White people only, and 4 percent reported prejudice toward Black people only. A total of 29 percent reported some prejudice toward either or both groups.⁵

Self-reports of explicit bias were highest among individuals who were more attuned to implicit bias. Those who said all or most people have unconscious biases were far more apt than others to report prejudices of their own. Self-reporting prejudice was also more prevalent among people with higher levels of information about implicit bias compared with those in the low-information group. It was higher as well among liberals and Democrats, particularly in comparison with very conservative people and Republicans,

and among those with more education, as shown in Table 28.9.

Regression Modeling and Cluster Analysis

Ordinary least squares regressions were estimated predicting views on how many people

⁵ This is roughly in line with previous surveys. In polls by ABC News and media partners in 1999, 2008, and 2009, 30 to 34 percent of Americans said they had “at least some racist feelings” (1999) or “at least some feelings of racial prejudice” (2008 and 2009), including 30 to 34 percent of Whites and 34 to 40 percent of Blacks. This was sharply lower in another ABC News poll, conducted shortly before Barack Obama’s election as president in 2008. ABC also found reported prejudice toward Muslims (26 and 27 percent in two surveys), Arabs (25 percent), Hispanics (10 percent), and Jews (6 percent).

Table 28.8 *Cluster analysis – groups*

Respondents	See bias as . . .	
	Widespread (Cluster 1)	Not wide- spread (Cluster 2)
White people	49%	51%
Black people	68%	32%
Hispanic people	66%	34%
Others	44%	56%
Democrats	60%	40%
Independents	54%	48%
Republicans	40%	60%
Liberal	64%	36%
Conservative	46%	54%
Very liberal	65%	35%
Somewhat liberal	64%	36%
Moderate	51%	49%
Somewhat conservative	47%	53%
Very conservative	43%	57%
Heard/read:		
Great deal/a lot	59%	41%
A moderate amount	55%	45%
Little/nothing	50%	50%

Note: This table shows the sizes of groups in Cluster 1 (those who saw bias as widespread) and Cluster 2 (those who saw bias as not widespread).

have unconscious biases (all, most, some, a few, or none; Model 1) and whether these biases influence behavior (Model 2), can be measured reliably (Model 3), and can be influenced by training (Model 4). Seeing unconscious bias as more prevalent than conscious bias among White people and seeing unconscious bias as more prevalent than conscious bias among Black people also were used as dependent variables (Models 5 and 6, respectively). Independent variables were age, race/

ethnicity, education, political partisanship, political ideology, and exposure to information on unconscious bias.

Only one variable, information on unconscious bias, was a significant predictor in all six models and was the strongest predictor in all but one (Model 4, in which information was the second strongest predictor, after age). Other significant predictors were age, education, and ideology in Models 1 and 5, age, education, and party in Model 2, sex and ideology in Model 3, age and education in Model 4, and race and ideology in Model 6.

We repeated these models using reported feelings of prejudice as another independent variable. It was the strongest predictor in Model 1, and information was the next-strongest predictor in that model. Information was the strongest predictor in all other models except Model 4, in which it was second strongest.

Additional cluster analysis (again using two-step clustering) identified four groups based on responses to views about unconscious bias, as shown in Table 28.10:

- Concerned Americans (28 percent of the population) have the most information exposure and believe unconscious bias is widespread and influences behavior, is treatable, and is reliably measurable.
- Accepting adults (30 percent of the population) have the second-highest information exposure, see unconscious biases as moderately common, do not think it's measurable, but believe it influences behavior and is treatable.
- Fatalists (17 percent overall) have moderate information exposure, believe unconscious biases influence behavior, but don't think it's treatable.
- Skeptics on the issue (15 percent of the population) have low information exposure,

Table 28.9 *Feelings of prejudice toward White people and toward Black people*

Respondents	Percent of adults who reported prejudice toward . . .			Reported no prejudice
	White people	Black people	Either or both	
All	25% (n = 255)	18% (n = 207)	29% (n = 308)	71% (n = 668)
Heard/read:				
Great deal/a lot	37%	25%	41%	39%
A moderate amount	27%	19%	32%	68%
Little/nothing	18%	15%	22%	78%
Think all/most people have unconscious biases				
Some	38%	32%	45%	55%
Few/none	19%	10%	22%	78%
Democrats	11%	7%	13%	87%
Independents	32%	20%	35%	65%
Republicans	25%	17%	29%	71%
Liberal	18%	18%	22%	78%
Conservative	33%	22%	36%	64%
Very liberal	20%	16%	25%	75%
Somewhat liberal	41%	27%	44%	56%
Moderate	28%	19%	31%	79%
Somewhat conservative	24%	20%	29%	71%
Very conservative	24%	18%	27%	73%
White people	15%	13%	20%	80%
Black people	24%	21%	29%	71%
Hispanic people	35%	21%	38%	62%
Others	20%	9%	22%	78%
High school or less	25%	17%	25%	75%
Some college	21%	13%	25%	75%
College graduate	24%	16%	26%	74%
Postgraduate	29%	26%	35%	65%
	33%	28%	39%	61%

Note: This table shows the percentage of Americans who reported some feelings of prejudice toward White people (first column); the percentage of Americans who reported some feelings of prejudice toward Black people (second column); the combined percentage of Americans who reported some feelings of prejudice towards White people, Black people, or both (third column), and the percentage of Americans who said they have no feelings of prejudice toward either group (fourth column). These results are given, in rows, among all adults and among selected information, attitudinal, and demographic groups.

think relatively few people have unconscious biases and doubt that they influence behavior, but think impacts can be addressed through training.

Four variables were used in this analysis:

- “Exposed” – a dichotomous variable identifying people who reported having heard a

Table 28.10 Cluster analysis – opinion profile

Respondents	Concerned	Accepting	Fatalists	Skeptics
All	28% (<i>n</i> = 280)	30% (<i>n</i> = 299)	17% (<i>n</i> = 172)	15% (<i>n</i> = 150)
More information	63%	50%	43%	33%
Less information	37%	50%	57%	67%
Total	100%	100%	100%	100%
All/most have UBs	100%	0%	47%	16%
Moderate amount	0%	65%	35%	24%
Few/none have UBs	0%	35%	18%	62%
Total	100%	100%	100%	100%
Think it influences behavior	100%	100%	100%	0%
Don't think it influences behavior	0%	0%	0%	100%
Total	100%	100%	100%	100%
Think it's measurable	47%	36%	17%	17%
Don't think it's measurable	53%	67%	83%	83%
Total	100%	100%	100%	100%
Think it's treatable	100%	100%	0%	57%
Don't think it's treatable	0%	0%	100%	43%
Total	100%	100%	100%	100%

Note: This table shows the distribution of information and selected opinions among the four clusters. It shows, for example, that among people in the Concerned cluster (first column), 63 percent reported having more information (at least a moderate amount) about unconscious bias while 37 percent reported having less information; 100 percent said all or most people have unconscious biases; 100 percent said unconscious biases impact behavior; 47 percent were confident that scientists can measure unconscious biases accurately, while 53 percent didn't think so; and 100 percent believed that people can be trained to overcome their unconscious biases.

great deal, a lot, or a moderate amount about unconscious bias. Others were coded as not exposed.⁶

- “Prevalence” – a variable dividing respondents into three groups based on their perception of how widely unconscious bias is spread, i.e., whether all or most people have it, some people have it, or a few or none have it. (“No opinion” responses and refusals were coded with “few” or “none.”)
- “Influence” – a dichotomous variable dividing respondents into two groups: those who believed that unconscious bias influences people's behavior, and those who

didn't think so. (“No opinion” responses and refusals were coded as missing values.)

- “Measurability” – a dichotomous variable dividing respondents into two groups: those who said unconscious bias can be measured accurately, and those who didn't think so. (“No opinion” responses and refusals were coded as missing values.)
- “Susceptibility to treatment” – a dichotomous variable dividing respondents into two

⁶ “No opinion” responses and refusals were coded as “not exposed.”

groups: those who said that unconscious bias is susceptible to treatment, and those who didn't think so. ("No opinion" responses and refusals were coded as missing values.)

People who thought that unconscious biases are susceptible to treatment composed two-thirds of the public. They were united by the views that unconscious biases influence behavior and by relatively higher levels of exposure to information, while differing on measurability.

As shown in Table 28.11, the concerned group (highly informed and supportive of

action) included disproportionate numbers of younger and more educated adults, liberals, and Democrats. Republicans, moderates, and conservatives clustered in the accepting group. Older adults were more apt than others to be fatalists and skeptics, and skepticism peaked among the least-educated.

Discussion

Prejudice is a pernicious element of any society. Actions by individuals and groups based on bias against other groups violate a

Table 28.11 Cluster analysis – demographic profile and political preference profile

Respondents	Clusters				Total
	Concerned	Accepting	Fatalists	Skeptics	
All	28% (<i>n</i> = 280)	30% (<i>n</i> = 299)	17% (<i>n</i> = 172)	15% (<i>n</i> = 150)	100%
Age 18–29	43%	27%	16%	14%	100%
30–39	37%	32%	17%	14%	100%
40–49	37%	34%	16%	12%	100%
50–64	25%	37%	22%	17%	100%
65+	17%	35%	27%	22%	100%
High school or less	24%	34%	19%	22%	100%
Some college	28%	35%	20%	17%	100%
College graduate	39%	31%	19%	11%	100%
Postgraduate	44%	30%	18%	8%	100%
Democrats	36%	31%	21%	12%	100%
Independents	34%	31%	18%	17%	100%
Republicans	19%	43%	18%	19%	100%
Liberal	44%	25%	19%	12%	100%
Conservative	23%	38%	19%	20%	100%
Very liberal	50%	20%	21%	9%	100%
Somewhat liberal	40%	29%	18%	14%	100%
Moderate	29%	36%	21%	13%	100%
Somewhat conservative	25%	40%	19%	16%	100%
Very conservative	20%	36%	17%	27%	100%

Note: This table shows the distribution of demographic groups in the four clusters. It shows, for example, that among 18- to 29-year-olds, 43 percent are in the Concerned cluster (first column), 27 percent are in the Accepting cluster (second column), 16 percent are in the Fatalists cluster (third column), and 14 percent are in the Skeptics cluster (fourth column).

nation's foundational principle of equal treatment. Social scientists should devote their best efforts and practices to understanding the causes and effects of bias; to developing empirically validated methods of addressing bias; and to communicating their findings accurately to policymakers and the public.

This study found significant disconnects between the state of the science, public pronouncements, and the public's understanding of implicit bias. We found many assertions in the public sphere that implicit bias exists, is widespread, can be reliably measured, influences behavior, and can be mitigated through training. Apart from confidence in its measurement, these same understandings were expressed in public attitudes, with the attendant view that training programs for police, prosecutors, and business employees are worthwhile, and support for training the local police. Implicit bias is perceived as more widely distributed than conscious bias, particularly among White people. And there are strong associations between these views and exposure to information on the topic, as well as to ideology, political partisanship, education, and age.

Assertions about implicit bias clearly have fallen on fertile soil. Americans perceive bias overall to be widespread; in terms of racial prejudice alone, three-quarters saw at least half of White people as consciously and/or unconsciously biased against Black people, and at least half of Black people as biased against White people. Three in ten reported their own racial prejudice.

It's no wonder that claimed solutions have drawn a broad audience. In tandem with public views, many government and corporate institutions have subscribed to claims about implicit bias and taken steps to address it. Social justice groups see recognition of implicit bias, and training to mitigate it, as key in seeking to diminish prejudice. An

industry has arisen, in some cases academically linked, to provide consulting and training services.

Many research claims about implicit bias are undergoing fresh scrutiny. As reported by expert presenters at the National Science Foundation Conference on Implicit Bias, the science on implicit bias is unsettled in many respects, including its definition, its distinction from conscious bias, its measurability, its impacts on behavior, and its susceptibility to training. While questions on these matters have begun to enter public discourse, blanket assertions reflecting a more settled science remain common. A question for future study is whether acceptance of research claims about implicit bias and support for training reflect particular endorsement of this approach, or – given public concern about bias – a broader desire to do *something* about it.

This survey is limited in scope. Its chief message, in many respects, is to underscore the need for scientists to probe more deeply into key questions about bias in society and to communicate their findings effectively and accurately to the public. These include the definition, existence, and reliable measurement of implicit bias; its relationship with conscious bias; and its demonstrable impacts and treatability. Answers may lead to a more nuanced view of implicit bias in the public discourse, well as a stronger footing from which to address the corrosive problem of bias in society.

Acknowledgments

The authors of this chapter have no commercial interest in the measurement or attempted mitigation of unconscious bias.

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Appendix A

We employed OLS regression to explore the relationships among opinions and demographic variables, with the following as dependent variables:

- The estimated prevalence of unconscious biases
- The estimated influence of unconscious bias on people's behavior
- The estimated susceptibility of unconscious bias to accurate scientific measurement
- The estimated effectiveness of training people to overcome their unconscious biases
- The perceived prevalence among White people of unconscious bias versus conscious bias against Black people (i.e., thinking more White people have unconscious bias than conscious bias).
- The perceived prevalence among Black people of unconscious bias versus conscious bias against White people (i.e., thinking more Black people have unconscious bias than conscious bias).

Where possible, questions were coded as continuous variables (e.g., 1 = heard nothing about unconscious bias, 2 = heard a little,

3 = heard a moderate amount, 4 = heard a lot, and 5 = heard a great deal.)

When the dependent variable was measured by two questions (e.g., "If they exist, do you think these unconscious biases influence the way people act toward people in other groups, or not?" and, if they do influence, "Do you think unconscious biases typically have a strong influence on the way people act, or not so strong?"), they were combined into a single continuously increasing variable (e.g., 1 = doesn't influence behavior, 2 = influences behavior but not strongly or don't know if strongly,⁷ and 3 = strongly influences behavior).⁸

Categorical or dichotomous variables, including many demographic measures, were coded as binary variables (e.g., 0 = female, 1 = male). Independent variables included the following demographics: age, sex, and education. Ideology and political party identification also served as controls.

Additional predictors included reported exposure to information and reported personal prejudice, coded as: 1 = not prejudiced, 2 = prejudiced either against Black people or White people, and 3 = prejudiced against both Black people and White people).

⁷ Where possible, we tried to keep "no opinion" responses in the analysis to maximize the number of cases.

⁸ The estimated susceptibility of unconscious bias to accurate scientific measurement was coded in the same way (1 = cannot be measured, 2 = can be measured, but accuracy is low or unknown, 3 = can be accurately measured). The estimated effectiveness of training was coded as: 1 = people cannot be trained to overcome unconscious bias, 2 = people can be trained, but confidence is low or unknown, 3 = people can be trained, confidence moderate, and 4 = people can be trained, highly confident.

Table 28.A.1: Model 1 *Predicting the estimated prevalence of unconscious biases*

	Standardized coefficient (β)	Significance test (t)
Exposure to information about unconscious bias increasing from 1 to 5	.250	7.769***
Age	-.161	-5.042***
Race: White	.048	1.484
Sex: Male	.040	1.295
Education	.112	3.406***
Democrat	.005	.163
Ideology (liberal, moderate, conservative)	-.085	-2.572**

Note: Adjusted $R^2 = .133$ *** $p < .001$, ** $p < .01$, * $p < .05$

Table 28.A.2: Model 2 *Predicting the estimated influence of unconscious biases on people's behavior*

	Standardized coefficient (β)	Significance test (t)
Exposure to information about unconscious bias, increasing from 1 to 5	.171	5.109***
Age	-.072	-2.162*
Race: White	-.061	-1.898
Sex: Male	-.022	-.666
Education	.098	2.854*
Democrat	.076	2.197*
Ideology (liberal, moderate, conservative)	-.041	-1.186

Note: Adjusted $R^2 = .068$. *** $p < .001$, ** $p < .01$, * $p < .05$

Table 28.A.3: Model 3 *Predicting the estimated susceptibility of unconscious bias to accurate scientific measurement*

	Standardized coefficient (β)	Significance test (t)
Exposure to information about unconscious bias, increasing from 1 to 5	.097	2.845**
Age	-.059	-1.749
Race: White	-.030	-.913
Sex: Male	-.080	-2.342*
Education	.057	1.635
Democrat	.026	.739
Ideology (liberal, moderate, conservative)	-.168	-4.803***

Note: Adjusted $R^2 = .064$. *** $p < .001$, ** $p < .01$, * $p < .05$

Table 28.A.4: Model 4 *Predicting the estimated effectiveness of training people to overcome their unconscious biases*

	Standardized coefficient (β)	Significance test (t)
Exposure to information about unconscious bias, increasing from 1 to 5	.128	3.790***
Age	-.148	-4.393***
Race: White	-.043	-1.328
Sex: Male	-.031	-.919
Education	.070	2.010*
Democrat	-.060	-1.719
Ideology (liberal, moderate, conservative)	.016	.445

Note: Adjusted $R^2 = .046$. *** $p < .001$, ** $p < .01$, * $p < .05$

Table 28.A.5: Model 5 *Predicting the perceived prevalence among White people of unconscious bias versus conscious bias against Black people*

	Standardized coefficient (β)	Significance test (t)
Exposure to information about unconscious bias, increasing from 1 to 5	-.178	-5.314***
Age	.088	2.639**
Race: White	-.015	-.479
Sex: Male	-.008	-.250
Education	-.131	-3.811***
Democrat	-.036	-1.038
Ideology (liberal, moderate, conservative)	.210	6.068***

Note: Adjusted $R^2 = .134$. *** $p < .001$, ** $p < .01$, * $p < .05$

Table 28.A.6: Model 6 *Predicting the perceived prevalence among Black people of unconscious bias versus conscious bias against White people*

	Standardized coefficient (β)	Significance test (t)
Exposure to information about unconscious bias, increasing from 1 to 5	-.128	-3.680***
Age	.047	1.355
Race: White	-.102	-3.059**
Sex: Male	-.025	-.711
Education	-.048	-1.337
Democrat	-.055	-1.509
Ideology (liberal, moderate, conservative)	.100	2.793**

Note: Adjusted $R^2 = .056$. *** $p < .001$, ** $p < .01$, * $p < .05$

Appendix B

This poll was conducted by cellular and landline telephone September 25-September 30, 2018, among a random national sample of 1,001 adults. Results have a 3.7-point error margin, including design effects. Sampling and data collection by SSRS of Glen Mills, PA.

1. There’s an idea that a person might be prejudiced against people in other groups, without realizing that he or she is prejudiced against them. This sometimes is called implicit bias or unconscious bias. How much, if anything, have you heard or read about this - A great deal, a lot, a moderate amount, a little, or nothing?

	More			Moderate	Less			No
	NET	Great deal	A lot	amount	NET	A little	Nothing	opinion
9/30/18	26	14	12	22	51	23	29	*

*= less than 0.5 percent

2. How many people do you think have unconscious biases against people in other groups - do you think all people have these unconscious biases, most have them, some, a few, or none?

	More				Less			
	NET	All	Most	Some	NET	A few	None	No opinion
9/30/18	42	16	26	32	25	18	7	1

3. (IF NONE IN Q2, If they exist,) Do you think these unconscious biases influence the way people act toward people in other groups, or not?

	Yes, influence	No, do not influence	No opinion
9/30/18	82	16	2

3a. (IF THEY INFLUENCE THE WAY PEOPLE ACT) Do you think unconscious biases typically have a strong influence on the way people act, or not so strong?

	Strong	Not so strong	No opinion
9/30/18	62	34	4

3/3a.

	Yes, influence				No, do not	
	NET	Strong	Not so strong	No opinion	influence	No opinion
9/30/18	82	50	28	4	16	2

4. (IF NONE IN Q2, If they exist,) Do you think that scientists can accurately measure a person’s unconscious biases, or not?

	Yes, can measure	No, cannot measure	No opinion
9/30/18	30	64	6

4a. (IF CAN BE MEASURED) Do you think this can be measured extremely accurately, very accurately, somewhat accurately or not so accurately?

	- More accurately -			- Less accurately -			
	NET	Extremely	Very	NET	Somewhat	Not so	No opinion
9/30/18	23	5	18	76	67	9	1

4/4a:

	Yes, can measure									
	- More accurately -			- Less accurately -			No	No, cannot	No	
	NET	NET	Extremely	Very	NET	Smwht	Not so	op.	measure	op.
9/30/18	30	7	1	5	22	20	3	*	64	6

5. (IF NONE IN Q2, If they exist) Do you think people can or cannot be trained to overcome their unconscious biases?

	Yes, can be trained		No, cannot be trained		No opinion	
9/30/18		71		25		3

5a. (IF CAN BE TRAINED) Are you extremely confident of that, very confident, moderately confident, slightly confident or not confident at all?

	- More confident -				- Less confident -			No
	NET	Extremely	Very	Moderately	NET	Slightly	Not at all	opinion
9/30/18	47	13	34	38	14	11	3	1

5/5a.

	Yes, can be trained									
	- More confident -			- Less confident -			No	can't be	No	
	NET	NET	Extremely	Very	Mod.	NET	Slightly	Not op.	trained	op.
9/30/18	71	33	9	24	27	10	8	2	1	25

6. Some large companies, police forces, and other organizations give their staff members training about unconscious biases in order to try to change their behavior toward people in other groups. Do you think this training is or is not worthwhile?

	Worthwhile		Not worthwhile		No opinion	
9/30/18		73		25		1

7. Would you support or oppose your local government spending money to give the police force training about unconscious biases in order to try to change their behavior toward people in other groups?

	Support		Oppose		No opinion	
9/30/18		75		24		2

8. If your local government spent money on this training, do you think the behavior of police officers would change, or not?

	Yes, would change		No, would not change		No opinion	
9/30/18		60		33		6

8a. (IF BEHAVIOR WOULD CHANGE) Are you, extremely confident of this, very confident, moderately confident, slightly confident, or not confident at all?

	- More confident -				— Less confident —			No
	NET	Extremely	Very	Moderately	NET	Slightly	Not at all	opinion
9/30/18	33	10	24	45	22	19	2	*

8/8a:

	Yes, can be trained					No,					
	- More confident -			- Less confident -		No	can't be	No			
	NET	NET	Extremely	Very	Mod.	NET	Slightly	Not	op.	trained	op.
9/30/18	60	20	6	14	27	13	12	1	*	33	6

9. About what percent of whites do you think have unconscious prejudice against blacks?

	None	1-25%	26-50%	51-75%	76-99%	100%	No opinion
9/30/18	4	26	34	14	12	7	2

Mean: 46

Median: 50

10. About what percent of whites do you think are consciously aware that they have prejudice against blacks?

	None	1-25%	26-50%	51-75%	76-99%	100%	No opinion
9/30/18	3	39	38	9	4	4	2

Mean: 37

Median: 30

11. What percent of blacks do you think have unconscious prejudice against whites?

	None	1-25%	26-50%	51-75%	76-99%	100%	No opinion
9/30/18	3	22	37	17	12	7	2

Mean: 49

Median: 50

12. About what percent of blacks do you think are consciously aware that they have prejudice against whites?

	None	1-25%	26-50%	51-75%	76-99%	100%	No opinion
9/30/18	3	30	38	13	8	5	3

Mean: 43

Median: 40

13. If you were to honestly assess yourself, would you say you have some feelings of prejudice toward [ITEM]?

	Yes, have	No, do not have	No opinion
a. Blacks	18	80	1
b. Whites	25	74	1