

## What is Unconscious Bias?

### Introduction: Bias By Any Other Name

Source: [Americans for American Values](#)

In 2009, race in the United States is rife with contradictions. We have just elected our first black President who, along with his family, enjoys extraordinarily high levels of support from people of all races. Even higher percentages of Americans of all races oppose the idea of racism and aspire to egalitarian values. At the same time, with the odd resurgence of the "birther" movement, President Obama is bedeviled with questions about whether he is truly "American" at all. More generally, blacks and other people of color continue to experience obstacles in hiring, access to credit and equal treatment in the criminal justice system. For example, recent studies show that a white male with a felony conviction is more likely to be brought back for a second interview than a black male high school graduate. Despite the overwhelming evidence of such obstacles, a majority of whites remain convinced that blacks and other people of color unfairly benefit from affirmative action advantages to which they are denied.

How can we reconcile these glaring contradictions? Advances in neuroscience and other social sciences have helped us to understand that people can consciously believe in equality while simultaneously acting on subconscious prejudices they are not aware of. By looking at the complexity of how our brains work, this research has given us a way to understand better how decision making happens in our minds— and to use this understanding to disrupt the impact of hidden biases so that our consciously held values can prevail.

### Implicit Social Cognition

Also known as Hidden Bias or Unconscious Bias, Implicit Bias arose as a way to explain why discrimination persists, even though polling and other research clearly shows that people oppose it. Initially, some researchers conjectured that people sought to hide their bias from pollsters – and simply lied about their views for fear of appearing prejudiced.

However, in 1995, Doctors Anthony Greenwald and Mahzarin R. Banaji [theorized](#) that it was possible that our social behavior was not completely under our conscious control. In *Implicit Social Cognition: Attitudes, Self-Esteem and Stereotypes*, Greenwald and Banaji argued that much of our social behavior is driven by learned stereotypes that operate automatically – and therefore unconsciously — when we interact with

other people. [Three years later](#), Greenwald et al developed the Implicit Association Test (IAT), which has become the standard bearer for measuring implicit bias ([you can take the test yourself here to see how it works](#)). For a more in-depth conversation about the science behind the Implicit Association Test, please see our methodology article.

## Measuring Implicit Bias

While social scientists use a variety of measures of implicit bias, the Implicit Association Test, which uses reaction time measurement, has become one of the most popular. To understand how it works, imagine that you are asked to associate a list of positive words (pretty, sweet, calm) with a list of flower names. Next, you are asked to associate a list of negative words (ugly, scary, freaky) with a list of insect names. Most of us find this initial task easy.

But what if you reverse it? You are in front of a computer screen: the left half of the screen contains a picture of a spiny poisonous caterpillar and the word “calm;” on the right half is a picture of a tulip and the word “freaky”. When a positive word or an insect name comes up, you press the left arrow. When a negative word or a flower name comes up, you press the right arrow.

The second task turns out to be complicated — we don’t generally associate insects with positive words. This complication leads us to do worse (to react more slowly) on a test that pairs insects with “pretty,” “sweet,” and “calm” than one that pairs insects with “ugly,” “scary,” and “freaky.” By measuring reaction times in tests like these, Greenwald postulated that scientists are able to measure your association of positive words with flowers and negative words with insects. We call this positive association a preference and the negative association a bias.

Although this seems innocuous enough, it gets less so when “flowers” and “insects” are swapped for what’s called in-group (the group you belong to) and out-group (groups you aren’t a member of) perceptions. When similar tests are administered to people with regards to race (i.e. measuring Japanese Americans’ associations about Koreans) they frequently demonstrate bias. It turns out, not surprisingly, that it is generally harder for people to associate out-group images and names with positive words.

The enormous data set (7 million and growing) of [Project Implicit](#) (a joint project of Harvard University, the University of Washington, and the University of Virginia) shows that implicit bias is extremely prevalent, and maps itself onto existing social hierarchies. We are likely to show preferences toward the dominant group – whites over blacks, young over old, straight over gay, and to associate time-worn stereotypes with

groups – men with work/women with family, whites with America/Asians with foreign. The next question is whether and how these biases translate into the real world.

### **Real World Effects**

[The research shows that they do](#). Implicit bias, as measured by the IAT and other tools, has been found to predict behavior accurately outside of the computer setting — to have what’s called “predictive validity”. [In a recent meta-analysis](#) (a study that reviews other studies) Greenwald and colleagues found statistically significant links between people’s implicit bias scores and their daily behavior – and most telling, the implicit bias scores were better predictors of discriminatory behavior than explicit self-reports.

Study after study shows evidence of in-group preference or out-group bias: [doctors](#) are less likely to prescribe life-saving care to blacks, managers are less likely to call back or hire members of a different ethnic group, and [NBA referees](#) are more likely to subtly favor players with whom they share a racial identity. Recent studies also show how robust stereotypes continue to be and that stereotypes affect people’s evaluation of efficacy – even when the actual performances are identical.

### **Reconciling the Racial Contradictions**

Understanding Implicit Bias is critical to overcoming our society’s racial contradictions. It explains how people can genuinely believe in equality, while simultaneously engaging in behavior that favors dominant groups. The doctors who are giving different treatment to white and black patients with similar symptoms are not hate-filled bigots – they are likely people fully intending to do their best by all patients regardless of race. Unbeknownst to them, their implicit associations about black patients shade their evaluations of symptoms.

Social scientists are also making strides to develop mechanisms to overcome implicit bias – and to allow our consciously held values to dictate our actions. And studies show that implicit bias can be decreased at least for certain periods of time by, for example, [exposure to “positive exemplars”](#) (e.g., Martin Luther King or Tiger Woods) or persons who defy stereotypes. In addition, studies have shown that diverse social environments (at workplaces, colleges etc.) can help lower implicit bias and that seeing (for example) images of African Americans at a BBQ reduced implicit bias versus images of African Americans in a gang setting.

These advances in scientific understanding are also essential for a more accurate public discussion of discrimination. We are used to thinking of discrimination being about individual bigoted people acting

overtly to cause some harm against someone because of their race, gender or sexuality. While old-fashioned bigotry still exists, when we limit our definition of discrimination in this way, we hamper our journey as a nation towards equality. Implicit Bias, offers the idea that discrimination and bias are social, rather than individual issues, and that we can thus all participate in promoting equality. Most importantly, Implicit Bias removes a serious stigma about acknowledging racial bias by portraying it as an unconscious decision that we all engage in. Bias is not a black vs. white issue, it's a human issue.

No advance in social science is without some controversy – and a few have challenged both the idea of implicit bias and the tools to measure it. For a more in-depth discussion of the challenge, [click here](#). It is important to recognize, though, that the overwhelming evidence supports the salience of implicit bias and the utility of the IAT. And the presence of implicit bias is found by many other mechanisms, some of which you can read about in the methodology section.

In future additions to this site, we will review the extant literature on unconscious bias, with links to the original literature for those seeking more information.