

IMPLICIT BIAS:

DO HIDDEN ATTITUDES
PREDICT OUR BEHAVIOR?*

BY CARMEL S. SAAD
ASSISTANT PROFESSOR OF PSYCHOLOGY, WESTMONT

**Tilt page forward to read: Do Hidden Attitudes Predict Our Behavior?)*

Racial prejudice continues to be a hotly debated topic in the United States. **In response to recent events throughout the country, both scholars and the popular press have discussed implicit bias a great deal.**

Let's start with attitudes. Attitudes differ from beliefs, which are things you hold to be true about the world. Attitudes add an emotional, or evaluative, component to beliefs, which might have been useful evolutionarily. Having a quick, emotional reaction to something helps in deciding whether to approach or avoid it. Let's say I see a spider. It's not enough to think, "Spiders are hairy, have eight legs and could kill me." I also need to activate an emotional reaction like, "I need to get out of here." Attitudes speed up our behavior in useful ways that help us survive. Thus our brains are ready to sort things (and people) into categories to avoid or approach.

Researchers have identified two different types of attitudes. Explicit attitudes are more conscious; we form them deliberately and are aware of them. If I ask, "Do you prefer Pepsi or Coke?" you know your preference. We also have attitudes toward social groups. How do you feel about black people? We may find this a bit harder to report, although we often assume people at least know their attitudes toward ethnic groups even if they're unwilling to divulge them.

Implicit attitudes, on the other hand, are more hidden. Some people refer to them as unconscious attitudes. Involuntarily formed, these attitudes require little effort to activate. Traditionally, researchers have argued that we may not be as aware of these attitudes as we are of our explicit attitudes. However, some newer research suggests that our implicit attitudes may not be as unconscious as once thought. For example, Adam Hahn, a researcher from the University of Cologne, and his colleagues have found that when directly asked to predict their implicit attitudes while viewing pictures of minority group members, people can be more accurate than anticipated. Their predictions can reflect their scores on implicit attitude tests. People may be able to tap into their implicit attitudes at a more visceral level when they reflect on their reactions to pictures of certain groups of people. Formed involuntarily, implicit attitudes may clash with what we consciously endorse and reflect something misaligned with our more conscious ideals and standards.

From a young age, we're exposed to messages in our culture from family, friends and the media that associate certain groups with certain traits. We may not realize we're absorbing these messages. Let's take the homeless as an example. A lot of people see the homeless as lazy. "If only they worked harder, they wouldn't be homeless. It must be their fault." But what if these individuals encountered a patch of bad luck and ended up on the street through no fault of their own? Unfortunately, we don't always think of these situational circumstances at first. Instead, we may automatically jump to the explanation of laziness, a trait associated with the homeless in American society.

Similarly, we're exposed to a lot of messages about different groups of people in the United States. We hear stereotypes such as: African-Americans are lazy, African-Americans are aggressive, Latinos are unintelligent, Latinos are warm and friendly, Asians are bad drivers, Asians are smart at math, Arabs are terrorists.

Such associations get paired over and over again in our minds through messages from our friends, family and society until they affect our implicit attitudes about many groups of people. We may not realize we carry these cultural associations around in our minds or that society has been giving us these attitudes since early in our lives.

For this reason, certain implicit attitudes prevail. According to Brian Nosek of the Center for Open Science and his colleagues who run the Project Implicit website at implicit.harvard.edu, about 70 percent of white Americans have an implicit preference for white Americans over black Americans. You may be surprised to learn that 50 percent of black Americans also implicitly prefer whites over blacks. Researchers offer one possible explanation of this preference: black Americans received the same messages about black inferiority growing up in American society as everyone else did, making it possible for them to internalize some of these predilections for white Americans.

Scientists have proposed several tests to measure implicit attitudes. The Implicit Association Test, or IAT for short, has garnered the most attention among scholars and in the popular press. Developed by Anthony Greenwald of the University of Washington, Mahzarin Banaji of Harvard University, and Brian Nosek of the Center for Open Science, this reaction-time test asks participants to pair as quickly as possible positive words with white faces and negative words with black faces. Then the task is reversed. In the next portion, participants are asked to pair as quickly as possible positive words with black faces and negative words with white faces. The idea is that the speed with which we can pair certain racial faces with good words indicates how strongly we associate that race with good qualities. Specifically, the test is designed to reveal how much easier, and thus more quickly, we can associate white faces with "good" compared to black faces with "good." The IAT analyzes how long it takes someone to complete the first "white-good" portion and compares that to the time taken to complete the "black-good" portion. If someone pairs white faces with good words more quickly than black faces with good words, the association of white with "good" is stronger in that person's head than black with "good." One possible conclusion is that such a person has an implicit preference for white Americans over black Americans.

More than 17 million people have now completed the IAT. The tests found at implicit.harvard.edu measure preference for whites over blacks, the young over the elderly, thin over fat people, and other preferences. Consistently, a majority of test-takers show implicit preferences for groups favored by society.

How do scores on the IAT relate to discriminatory behavior? This is one of the most hotly debated topics surrounding implicit attitudes today. Many researchers, among them Allen McConnell of Miami University, John Dovidio of Yale University, Russell Fazio of the Ohio State University, and Michael Olson of the University of Tennessee, posit that implicit attitudes do predict more spontaneous behavior, such as eye contact, how close we

sit to someone, how much we talk to that person, how much we smile at that person, spontaneous social remarks, speech errors, blinking, and other subtle behaviors. John Jost of New York University reviewed 10 studies from the past few decades showing that implicit attitudes predicted police decisions related to shootings, hiring preferences, medical decisions, voting decisions, and physical harm. Moreover, Anthony Greenwald and his colleagues reviewed 122 research reports and showed that among 14,900 individuals, IAT scores significantly predicted behavioral, judgment, and physiological outcomes. These researchers also argued that the IAT is better than explicit measurements of bias in predicting behavior, especially behavior involving black-white interactions.

Other researchers have argued that implicit biases do not predict behavior as well as once thought. Frederick Oswald of Rice University and his colleagues reviewed 46 studies and concluded that implicit bias scores measured by the IAT only weakly predict discriminatory behavior. They argue that implicit attitudes provide no more insight into discriminatory behavior than do explicit measures of prejudice. Thus, they have argued that scientists should be careful before claiming that scores on

From a young age, we're exposed to messages in our culture that associate certain groups with certain traits.

the IAT strongly predict discriminatory behavior. Moreover, Patrick Forscher of the University of Wisconsin at Madison and his colleagues reviewed 426 studies involving 72,063 participants and found that implicit biases can be changed. However, they discovered that these changes do not correlate strongly to changes in behavior. That is, they argue that even if we could change implicit bias, it won't reduce discriminatory behavior.

The debate about how much implicit bias scores correlate with actual discriminatory behavior is a long-standing and important one. It's healthy for the scientific community to critically examine the utility of the IAT and other measures of implicit bias. Clearly, racial and ethnic disparities in behavior don't always arise from implicit bias; sometimes they result from explicit bias or other factors. Indeed, it's clear that we should not ignore explicit attitudes nor take them to be truer than explicit attitudes. They are different things.

Although the debate continues, some researchers, such as Katherine Spencer of UC Berkeley, argue that even if correlations between implicit attitudes and discriminatory behavior are weaker than once thought, we should still pay attention to implicit bias. Even small effects can have large consequences when we examine them in the aggregate and over longer periods of time. Jost's research reviews many studies showing that implicit attitudes reliably, even if moderately, predict who gets called back for an interview, who gets hired, which organizations get funded, who gets more efficient medical treatments, who is more stressed versus satisfied with their jobs, who garners more votes, who is associated with criminal activity, and who is more likely to be shot at during a police simulation.

A lively scientific debate on the utility of measuring implicit

attitudes also encourages scientists to dig deeper to more fully understand the specific circumstances under which explicit and implicit attitudes exert the greatest influence on behavior. For example, implicit attitudes may predict spontaneous or subtle behaviors better than explicit attitudes, which predict overt behaviors better. Jack Glaser of UC Berkeley and his colleagues argue that implicit attitudes are most likely to affect judgments and behavior when the situation is ambiguous or when we don't have much time or mental energy. When we're distracted, stressed, or rushed, our implicit attitudes can most affect our decisions.

Roy Baumeister of Florida State University and Kathleen Vohs of the University of Minnesota argue that humans have a limited amount of cognitive resources just like we have a limited amount of physical resources. If we exert ourselves physically, we won't have energy left to go to the gym because we've depleted our physical resources. We can deplete mental energy as well. If we work hard mentally—such as concentrating for long periods of time or making tough decisions—we may not have a lot of self-control left to pursue our goals, such as making even more difficult decisions, studying, or even controlling our diet. These goal-directed behaviors require self-regulation, which we can deplete cognitively. Vohs and her colleagues have shown that students who are stressed out eat more fatty foods and generally have less control over their behavior.

Likewise, mental depletion can lead our implicit biases to exert a stronger influence on decisions. Researchers Olesya Govorun, who now does market research with Pfizer, and Keith Payne of the University of North Carolina at Chapel Hill found that individuals were quicker to associate black faces with weapons after first completing a mentally fatiguing task. Being mentally tired affected their ability to control their implicit attitudes and led to bias in their decisions and behavior. This effect was especially prevalent for those who more strongly associated black Americans with weapons. The finding that mental fatigue can enhance the effects of implicit bias has important implications given the rigorous demands of juggling multiple responsibilities, as many of us do on a daily basis.

Finally, some researchers argue that implicit attitudes can lead to self-fulfilling prophecies. Because of our implicit attitudes about certain groups of people, we may unknowingly send subtle cues to minority groups that they are unwelcome, unqualified or un-American. How much eye contact do we make? What is our non-verbal behavior? Are we turning toward minority people or turning away from them? We emit these cues unconsciously—and minority individuals can pick up on them unconsciously. Subtle signals can affect their behavior so they underperform in important settings such as job interviews. Research shows that their behavior aligns with the negative expectations of the person sending the subtle cues. This self-fulfilling prophecy can lead minority group members to rise to the negative expectation and perform more poorly, ironically confirming stereotypes about their group.

For example, one classic study by Carl Word and his colleagues at Princeton University showed that white interviewers seemed more distant with black Americans, ended the interview sooner, and stuttered more than with white Americans. Subsequently, when a different group of white interviewees received the same treatment as black interviewees, they were judged as less qualified

and more nervous than when treated in the typical, warmer way reserved for whites. The researchers concluded that individuals' behavior aligns with what others expect of them. If we treat interviewees in a socially distant way, they may not appear as qualified—not because they are less qualified but merely because they are responding to subtle cues of not feeling included or welcome.

Can we unlearn implicit biases? Patricia Devine and Patrick Forscher of the University of Wisconsin at Madison posit that we can. Their study revealed some evidence that certain strategies have the potential to reduce bias, at least in the short term. They showed a reduction in implicit racial bias during an eight-week program when participants received feedback about their bias, were educated about prejudice, and received training in how to reduce bias.

Some potentially effective strategies included:

- Stereotype replacement, or pegging a response as stereotypic and replacing it with one that is not;
- Counter-stereotype imaging, or generating and imagining in detail counter-stereotypic exemplars like Martin Luther King Jr.
- Individuation, or gaining and using specific information about targets to reduce reliance on stereotypes;
- Taking the first-person perspective of a minority group member;
- Increasing opportunities for intergroup contact.

Some researchers, including Calvin Lai of Harvard University, have shown that some of these interventions work in the short-term, but the changes don't last long. While implicit biases may be malleable, the fact that we've been absorbing them from an early age means it may be hard to unlearn them. Forscher and his colleagues argue that one of the most pressing research questions today is whether longer-term interventions in a more natural setting, not just short-term interventions in a controlled lab, can change implicit bias to an extent that it reduces discriminatory behavior. The paucity of research makes it hard to determine whether we can, indeed, reduce implicit bias in the long term.

The most effective way of reducing implicit bias would be eliminating messages and associations linking minority groups with certain traits. However, not many psychological researchers focus on this approach; most work aims for more immediate strategies to reduce the impact of an individual's implicit bias. If implicit bias is resistant to change, some researchers state that we should shift the focus to mitigating the effect of implicit bias on behavior. First, just knowing our implicit biases can help. If we seek to treat all others equally, learning our biases may help us pause, re-assess and align our behaviors with our more egalitarian intentions when interacting with the targets of our implicit biases. Even if we don't eliminate implicit biases themselves, we may still be able to stop them from leaking out into our behavior toward others. Indeed, Devine and Forscher argue that becoming aware of how implicit bias may affect our behavior is the first step in aligning our actions with our more noble intentions of equality.

Another strategy proposed by some researchers to mitigate the impact of implicit bias on behavior involves reducing discretion in decision-making. Science shows that implicit attitudes are more likely to affect behavior when the situation is ambiguous or when individuals have a lot of discretion in

Identifying and Finding Controversial Attitudes

P W F L D S C A R Y
 J H R S M A R T E P
 A X I T U L A Z Y W
 R V E N B P S N T H
 A Y N C Z K D V M I
 B I D F T A N J E T
 L A L Y B A P V A E
 A E Y L I Y J M N P
 C X E S F X G O O D
 K L A T I N O P D T

ARAB	FRIENDLY	MEAN
ASIAN	GOOD	SCARY
BAD	LATINO	SMART
BLACK	LAZY	WHITE

their decisions. Therefore, removing some forms of discretion in decision-making in organizations may help to reduce ethnic and racial disparities in outcomes that may be influenced by implicit bias. Of course, it's not always possible to reduce discretion. Sometimes our work requires our best judgment. However, implementing more structure and reducing discretion may help limit opportunities for implicit bias to affect behavior.

In summary, messages in society and from family and friends may have shaped our implicit attitudes. We are less aware of these attitudes than we are of our explicit attitudes. Many researchers argue that the IAT predicts behavior in important ways, particularly more subtle behavior between white and black Americans. Others argue that the IAT doesn't predict behavior as strongly as once thought. This debate on the relationship between implicit bias and behavior is important and necessary for the field. It forces us to look for the particular situations in which implicit bias may most affect behavior, such as when we are stressed, distracted or tired. Although future research will elucidate the consequences of implicit bias, at least for now we know that even modest links between bias and behavior can be important, especially in critical decisions when even small influences on behavior can have large consequences. Finally, some promising research indicates that we can implement strategies to reduce bias or can at least prevent it from affecting our behavior, although more research is needed to reveal more clearly how long such strategies last.