

# How Does Implicit Bias Influence Behavior?

## Explanations and Impacts of Unconscious Bias

By [Kendra Cherry](#) |  Medically reviewed by [Akeem Marsh, MD](#) | Updated on September 18, 2020

### Table of Contents

- [Causes](#)
- [Implicit Attitude Test](#)
- [Discrimination](#)
- [Effects](#)
- [How to Reduce Implicit Bias](#)

An implicit bias is an unconscious association, belief, or [attitude](#) toward any social group. Due to implicit biases, people may often attribute certain qualities or characteristics to all members of a particular group, a phenomenon known as stereotyping.

It is important to remember that implicit biases operate almost entirely on an [unconscious level](#). While explicit biases and prejudices are intentional and controllable, implicit biases are less so.


A person may even express explicit disapproval of a certain attitude or belief while still harboring similar biases on a more unconscious level. Such biases do not necessarily align with our own [sense of self](#) and personal identity. In many cases, people can hold positive or negative associations with regards to their own race, gender, religion, sexuality, or another personal characteristic.

**Related:** [The Psychology Behind Peoples' Prejudices](#)

# Causes

While people might like to believe that they are not susceptible to these biases and stereotypes, the reality is that everyone engages in them whether they like it or not. This reality, however, does not mean that you are necessarily prejudiced or inclined to discriminate against other people. It simply means that your brain is working in a way that makes associations and generalizations.

In addition to the fact that we are influenced by our environment and stereotypes that already exist in the society into which we were born, it is generally impossible to separate yourself from the influence of society.



You can, however, become more aware of your unconscious thinking and the ways in which society influences you.

It is the natural tendency of the brain to sift, sort, and categorize information about the world that leads to the formation of these implicit biases. We're susceptible to bias because of these tendencies:

- **We tend to seek out patterns.** Implicit bias occurs because of the brain's natural tendency to look for patterns and associations in the world. [Social cognition](#), or our ability to store, process, and apply information about people in social situations, is dependent on this ability to form associations about the world.

- **We like to take shortcuts.** Like other [cognitive biases](#), implicit bias is a result of the brain's tendency to try to simplify the world. Because the brain is constantly inundated with more information than it could conceivably process, mental shortcuts make it faster and easier for the brain to sort through all of this data.
- **Our experience and social conditioning play a role.** Implicit biases are influenced by experiences, although these attitudes may not be the result of direct personal experience. Cultural conditioning, media portrayals, and upbringing can all contribute to the implicit associations that people form about the members of other social groups.

## Implicit Attitude Test

The term implicit bias was first coined by social psychologists Mahzarin Banaji and Tony Greenwald in 1995. In an influential paper introducing their theory of implicit social cognition, they proposed that social behavior was largely influenced by unconscious associations and judgments.

In 1998, Banaji and Greenwald published their now-famous Implicit Association Test (IAT) to support their [hypothesis](#). The test utilizes a computer program to show respondents a series of images and words to determine how long it takes someone to choose between two things.

Subjects might be shown images of faces of different racial backgrounds, for example, in conjunction with either a positive word or a negative word. Subjects would then be asked to click on a positive word when they saw an image of someone from one race and to click on a negative word when they saw someone of another race.

## Interpreting the Results

The researchers suggest that when someone clicks quickly, it means that they possess a stronger unconscious association. If a person quickly clicks on a negative word every time they see a person of a particular race, the researchers suggest that this would indicate that they hold an implicit [negative bias](#) toward individuals of that race.


In addition to a test of implicit racial attitudes, the IAT has also been utilized to measure unconscious biases related to gender, weight, sexuality, disability, and other areas. The IAT has grown in popularity and use over the last decade, yet has recently come under fire.

Among the main criticisms are findings that the test results may lack [reliability](#). Respondents may score high on racial bias on one test, and low the next time they are tested.

Also of concern is that scores on the test may not necessarily correlate with individual behavior. People may score high for a type of bias on the IAT, but those results may not accurately predict how they would relate to members of a specific social group.

## Link With Discrimination

It is important to understand that implicit bias is not the same thing as racism, although the two concepts are related. Overt racism involves conscious prejudice against members of a particular racial group and can be influenced by both explicit and implicit biases.



Other forms of discrimination that can be influenced by unconscious biases include [ageism](#), sexism, homophobia, and ableism.

One of the benefits of being aware of the potential impact of implicit social biases is that you can take a more active role in overcoming social stereotypes, discrimination, and prejudice.

## Effects

Implicit biases can influence how you behave toward the members of social groups. Researchers have found that such bias can have effects in a number of settings, including in school, work, and legal proceedings.

### School

Implicit bias can lead to a phenomenon known as *stereotype threat* in which people internalize negative stereotypes about themselves based upon group associations. Research has shown, for example, that young girls often internalize implicit attitudes related to gender and math performance.

By the age of 9, girls have been shown to exhibit the unconscious beliefs that females have a preference for language over math. The stronger these implicit beliefs are, the less likely girls and women are to pursue math performance in school. Such unconscious beliefs are also believed to play a role in inhibiting women from pursuing careers in science, technology, engineering, and mathematics (STEM) fields.

Studies have also demonstrated that implicit attitudes can also influence how teachers respond to student behavior, suggesting that implicit bias can have a powerful impact on educational access and academic achievement.

One study, for example, found that Black children—and Black boys in particular—were more likely to be expelled from school for behavioral issues. When teachers were told to watch for challenging behaviors, they were more likely to focus on Black children than on White children

## In the Workplace

While the Implicit Attitude Test itself may have pitfalls, these problems do not negate the existence of implicit bias. Or the existence and effects of bias, prejudice, and discrimination in the real world. Such prejudices can have very real and potentially devastating consequences.

One study, for example, found that when Black and White job seekers sent out similar resumes to employers, Black applicants were half as likely to be called in for interviews as White job seekers with equal qualifications. Such discrimination is likely the result of both explicit and implicit biases toward racial groups.

Even when employers strive to eliminate potential bias in hiring, subtle implicit biases may still have an impact on how people are selected for jobs or promoted to advanced positions. Avoiding such biases entirely can be difficult, but being aware of their existence and striving to minimize them can help.

## Healthcare Settings

Certainly, age, race, or health condition should not play a role in how patients get treated, however, implicit bias can influence quality healthcare and have long-term impacts including suboptimal care, adverse outcomes, and even death.

For example, one study published in the *American Journal of Public Health* found that physicians with high scores in implicit bias tended to dominate conversations with Black patients and, as a result, the Black patients had less confidence and trust in the provider and rated the quality of their care lower.

Researchers continue to investigate implicit bias in relation to other ethnic groups as well as specific health conditions, including type 2 diabetes, obesity, mental health, and substance use disorders.

## Legal Settings

Implicit biases can also have troubling implications in legal proceedings, influencing everything from initial police contact all the way through sentencing. Research has found that there is an overwhelming racial disparity in how Black defendants are treated in criminal sentencing.

Not only are Black defendants less likely to be offered plea bargains than White defendants charged with similar crimes, but they are also more likely to receive longer and harsher sentences than White defendants.

## How to Reduce Implicit Bias

Implicit biases impact behavior, but there are things that you can do to reduce your own bias:

- **Focus on seeing people as individuals.** Rather than focusing on stereotypes to define people, spend time considering them on a more personal, individual level.
- **Work on consciously changing your stereotypes.** If you do recognize that your response to a person might be rooted in biases or stereotypes, make an effort to consciously adjust your response.
- **Take time to pause and reflect.** In order to reduce reflexive reactions, take time to reflect on potential biases and replace them with positive examples of the stereotyped group.
- **Adjust your perspective.** Try seeing things from another person's point of view. How would you respond if you were in the same position? What factors might contribute to how a person acts in a particular setting or situation?
- **Increase your exposure.** Spend more time with people of different racial backgrounds. Learn about their culture by attending community events or exhibits.
- **Practice mindfulness.** Try meditation, yoga, or focused breathing to increase mindfulness and become more aware of your thoughts and actions.

## A Word From Verywell

Implicit biases can be troubling, but they are also a pervasive part of life. Perhaps more troubling, your unconscious attitudes may not necessarily align with your declared beliefs. While

people are more likely to hold implicit biases that favor their own in-group, it is not uncommon for people to hold biases against their own social group as well.

The good news is that these implicit biases are not set in stone. Even if you do hold unconscious biases against other groups of people, it is possible to adopt new attitudes, even on the unconscious level. This process is not necessarily quick or easy, but being aware of the existence of these biases is a good place to start making a change.

## **Related: [10 Cognitive Biases That Distort Your Thinking](#)**

### Article Sources

Verywell Mind uses only high-quality sources, including peer-reviewed studies, to support the facts within our articles. Read our [editorial process](#) to learn more about how we fact-check and keep our content accurate, reliable, and trustworthy.

1. Jost JT. [The existence of implicit bias is beyond reasonable doubt: A refutation of ideological and methodological objections and executive summary of ten studies that no manager should ignore.](#) *Research in Organizational Behavior*. 2009;29:39-69. doi:10.1016/j.riob.2009.10.001
2. Greenwald AG, Mcghee DE, Schwartz JL. [Measuring individual differences in implicit cognition: The implicit association test.](#) *J Pers Soc Psychol*. 1998;74(6):1464-1480. doi:10.1037/0022-3514.74.6.1464
3. Sabin J, Nosek BA, Greenwald A, Rivara FP. [Physicians' implicit and explicit attitudes about race by MD race, ethnicity, and gender.](#) *J Health Care Poor Underserved*. 2009;20(3):896-913. doi:10.1353/hpu.0.0185
4. Capers Q, Clinchot D, McDougale L, Greenwald AG. [Implicit racial bias in medical school admissions.](#) *Acad Med*. 2017;92(3):365-369. doi:10.1097/ACM.0000000000001388
5. Kiefer AK, Sekaquaptewa D. [Implicit stereotypes and women's math performance: How implicit gender-math stereotypes influence women's susceptibility to stereotype threat.](#) *Journal of Experimental Social Psychology*. 2007;43(5):825-832. doi:10.1016/j.jesp.2006.08.004
6. Steffens MC, Jelenec P, Noack P. [On the leaky math pipeline: Comparing implicit math-gender stereotypes and math withdrawal in female and male children and adolescents.](#) *Journal of Educational Psychology*. 2010;102(4):947-963. doi:10.1037/a0019920
7. Edward Zigler Center in Child Development & Social Policy, Yale School of Medicine. [Implicit Bias in Preschool: A Research Study Brief.](#) Updated September 24, 2019.
8. Pager D, Western B, Bonikowski B. [Discrimination in a low-wage labor market: A field experiment.](#) *Am Sociol Rev*. 2009;74(5):777-799. doi:10.1177/000312240907400505



9. Malinen S, Johnston L. Workplace ageism: Discovering hidden bias. *Exp Aging Res*. 2013;39(4):445-465. doi:10.1080/0361073X.2013.808111
10. Cooper LA, Roter DL, Carson KA, et al. The associations of clinicians' implicit attitudes about race with medical visit communication and patient ratings of interpersonal care. *Am J Public Health*. 2012;102(5):979-87. doi:10.2105/AJPH.2011.300558
11. Leiber MJ, Fox KC. Race and the impact of detention on juvenile justice decision making. *Crime & Delinquency*. 2005;51(4):470-497. doi:10.1177/0011128705275976
12. Van Ryn M, Hardeman R, Phelan SM, et al. Medical school experiences associated with change in implicit racial bias among 3547 students: A medical student CHANGES study report. *J Gen Intern Med*. 2015;30(12):1748-1756. doi:10.1007/s11606-015-3447-7