www.frontiersofknowledgeawards-fbbva.es

Acceptance speech

19 June 2025

Anthony G. Greenwald, awardee in the Social Sciences category (17th edition)

Implicit social cognition is a subfield of social psychology that I and Mahzarin Banaji introduced in a 1995 article in *Psychological Review*. We ended that article by stating our expectation that research on implicit social cognition would develop rapidly when a method for measuring individual differences in implicit biases became available.

A few years earlier Mahzarin and I had applied jointly for National Science Foundation support for research on implicit attitudes and stereotypes. At the University of Washington, I was testing four procedures that I thought could possibly succeed. One of those proved successful – that procedure is now known as the Implicit Association Test (or IAT). I described the work that led to that first IAT in a 2022 autobiographical chapter.

While developing the first IATs and before the IAT's first journal publication in 1998, I created group-administrable versions of its procedure that proved very useful at professional meetings. When it was clear that these group demonstrations were effective, Mahzarin also started using them in her presentations. And, importantly, Mahzarin also very soon started using the IAT method at Yale, where her lab group included Brian Nosek. Brian Nosek proved to be a gem, conducting much research on the IAT collaboratively with both of us. Before proceeding to a professorship at the University of Virginia and setting up his own active lab there, Brian did the groundwork of starting the educational website named Project Implicit, which became a 501(c)(3) non-profit in 2005. For the last 20 years, Project Implicit has been the IAT's educational arm, providing a wide variety of free self-administered IAT measures in numerous languages.

Since the IAT's creation, research conducted with it and related methods brought the understanding of implicit bias to wide attention, and to use in fields well beyond psychology, including business, law, criminal justice, medicine, education, and political science. Although this growing body of research has produced useful societal applications, a still-unsolved challenge is to develop methods that can effectively reduce widespread discriminatory impact of implicit biases. Addressing this challenge is now a high priority.

Four established findings are shaping my and others' ongoing efforts toward that goal. These findings have been reviewed in recent publications in 2020 and 2022.

Finding 1: Most implicit biases, including those involving race, age, and gender, are pervasive. For example, IAT measures revealing automatic preference for young people relative to elderly people are found in about 80% of research participants, including many people who are themselves elderly. I possess that implicit bias, along with a variety of others, including the widely studied automatic preference for racial White relative to racial Black, which is found in about 60% of most large samples.

Finding 2: IAT implicit bias measures reliably correlate with discriminatory attitudes and behavior. Although these correlations are not large in magnitude, the discriminatory attitudes and behavior they predict are societally significant because of the large number of people who possess them and in whom they operate without awareness.

Finding 3: Despite much investment in "implicit bias training" by businesses, hospitals, big city police departments, and by many other employers, there has never been reproducible evidence that these training efforts reduce implicit biases of persons to whom they are provided.

Finding 4, which may be both the most interesting and challenging: About 10 years ago, artificial intelligence researchers began to discover that their efforts to use AI to automate hiring or promotion decisions are very often flawed. In trying to select the most worthy applicants to hire, generative AI programs often produce selections that discriminate on the basis of gender, race, or age.

When I first learned that Al advocates were finding discriminatory biases in their uses of generative Al for personnel selection, I was hopeful that the Al scholars would quickly find ways to repair their models' biases, and that their fixes could be adapted to help implicit bias-possessing human decision makers. Because, alas, this hasn't yet happened, I am now working on other possibilities for reducing implicitly biased decision making.

This text version of my speech includes a <u>supplement</u> that describes my indebtedness to a few dozen teachers, colleagues, and students who helped substantially in my career development and in my research recognized by this year's Frontiers of Knowledge Award.

I am thankful and grateful to the BBVA Foundation, to their selection committee, and to their nominators for including my work among the revolutionary developments recognized with this year's Social Sciences award.