Policy Insights from the
Behavioral and Brain Sciences
2018, Vol. 5(1) 49–56

DOI: 10.1177/2372732217746190
journals.sagepub.com/home/bbs
SAGE

Policy Insights From Advances in Implicit Bias Research

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Abstract

Implicit bias, which refers to mental associations that can lead to unintentional discrimination, has become a focus as many organizations and institutions try to reduce disparities and increase inclusiveness. Many forms of implicit bias training are aimed at changing individuals' implicit biases. This approach treats implicit bias as a trait-like attribute of the person. Recent theoretical advances in understanding implicit bias, however, suggest that implicit bias may not be a stable attribute of individuals. Instead, implicit bias may better characterize social environments than people. Understanding implicit bias as a cultural phenomenon, rather than a fixed set of beliefs, has important policy implications. Most notably, the best approaches for reducing the harm of implicit bias should aim at changing social contexts rather than changing people's minds. Here, we highlight some considerations of this new understanding of implicit bias for policy makers aiming to reduce disparities and increase inclusion.

Keywords

implicit bias, explicit prejudice, Bias of Crowds, discrimination, interventions

Tweet

The new Bias of Crowds model suggests that to reduce implicit biases, we should change social contexts, not individual minds.

Key Points

- Implicit bias refers to mental associations based on race, gender, and other social categories that may lead to discrimination without conscious intent.
- Traditionally, implicit biases have been viewed as an individual difference, with some individuals having consistently high levels of implicit bias and others low levels.
- Implicit biases are not stable individual attitudes, but predict disparities better at an aggregate level, such as nations, states, or metropolitan areas.
- According to the Bias of Crowds model, implicit bias is best understood as a social phenomenon that passes through the minds of individuals, but exists with greater stability in the situations they inhabit.
- To the extent that implicit bias is grounded in the culture, community, and immediate social contexts people inhabit, then solutions need to focus on structuring the social context, rather than changing the beliefs or values of individuals.

Introduction

Americans cherish the idea that people who work hard can succeed. The widespread belief in meritocracy can be seen in public opinion polls, which show that large majorities of people in the United States believe that hard work and effort are more important to success and failure than outside circumstances (The Pew Charitable Trusts & Economic Mobility Project, 2011). When asked about the continued existence of racial disparities, Americans are twice as likely to assert that Black people are responsible for their own condition as they are to agree that discrimination is the main reason Black people cannot get ahead (Hanson & Zogby, 2010). And White Americans often believe that discrimination against Whites is more prevalent than discrimination against Black Americans (Norton & Sommers, 2011).

Despite these widespread beliefs in a meritocratic system, data indicate that discrimination remains common. Black individuals are more likely than White people to be pulled over by police (Antonovics & Knight, 2009; Meehan & Ponder, 2002; Smith & Petrocelli, 2001), and unarmed Black

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Americans are about 3.5 times as likely to be shot by police than unarmed Whites (Ross, 2015). Furthermore, the more Afrocentric or stereotypically Black features individuals have, the more likely they are to be convicted based on the same evidence (Blair, Judd, & Chapleau, 2012). They are also more likely to be sentenced to death for murder, but only when their victims are White and not when they are Black (Eberhardt, Davies, Purdie-vaughns, & Johnson, 2006). In field experiments, Black job applicants receive about half as many callbacks as White applicants with the same resumes (Pager, Western, & Bonokowski, 2009), and resumes with African American–sounding names receive fewer callbacks than the same resumes with names that sound White (Bertrand & Mullainathan, 2004). Hispanic and Black individuals are also less likely than White applicants to be approved for business loans, and their requests for information about mortgage loans are more likely to be ignored (Blanchard, Zhao, & Yinger, 2008; Hanson, Hawley, Martin, & Liu, 2016). One field experiment found that mortgage loan originators respond to African Americans at rates similar to Whites with a credit score that is 71 points lower (Hanson et al., 2016). Other minority groups also face discrimination. Women covering their hair with a hijab are less likely to be invited to complete an application, and they receive fewer callbacks from employers than women not wearing one (Ghumman & Ryan, 2013). The list could go on.

The prevalence of ongoing discrimination, alongside the denial of discrimination, suggests that most people's perceptions that minimize anti-Black discrimination are detached from the dynamics creating and sustaining racial and ethnic disparities. As psychology research in recent decades suggests, one reason for this divide is that much discrimination may be driven by implicit bias rather than explicit prejudice. Explicit prejudice refers to consciously intended and overtly expressed beliefs that favor some groups over others. Implicit bias, in contrast, refers to mental associations based on race, gender, and other social categories that may lead to discrimination without conscious intent. Such subtle biases may sustain disparities in ways that are largely invisible.

This article summarizes current thought on the nature of implicit bias, how it differs from explicit prejudice, and what policy makers can do to minimize the likelihood that implicit bias turns into discriminatory treatment.

Implicit Bias

Whereas explicit prejudice is measured using self-report surveys, implicit bias is measured using cognitive tasks such as the implicit association test (IAT; Greenwald, Mcghee, & Schwartz, 1998), the affect misattribution procedure (AMP; Payne, Cheng, Govorun, & Stewart, 2005), and other sequential priming tasks (e.g., Fazio, Jackson, Dunton, & Williams, 1995; Wittenbrink, Judd, & Park, 1997). These implicit tests do not ask respondents to report their attitudes. Instead, they infer biases in respondents' cognitive and affective responses from how they perform in the task. Because responses on implicit tests are difficult to control, these tests often show implicit biases even among individuals who reject stereotypes and prejudices on explicit surveys.

The expression of explicit prejudice has been steadily declining for decades, but research suggests that implicit biases remain widespread (Nosek et al., 2007; Payne et al., 2010). Although explicit prejudice has not disappeared completely, these trends have led scholars and policy makers to focus more attention on implicit bias in recent years. Strategies such as raising awareness, education about implicit biases, and various forms of implicit bias "training" have become common in many organizations (Staats, Capatosto, Wright, & Jackson, 2016).

Although both explicit prejudice and implicit bias are risk factors for discrimination, they are likely to operate under different conditions. Explicit prejudice poses a risk of intentional discrimination through active exclusion or derogation. Implicit bias, in contrast, poses more subtle risks. It can lead to disparate treatment even by individuals who value diversity and consciously intend to be fair. Implicit bias is associated with biases of omission, such as passive neglect or inattention rather than active exclusion, the perception that members of stereotyped groups are a "poor fit" for organizational goals, and less warm and friendly nonverbal behavior (Dovidio, Kawakami, & Gaertner, 2002; Dovidio, Kawakami, Johnson, Johnson, & Howard, 1997; Uhlmann & Cohen, 2005). For instance, physicians who show high implicit biases against African Americans are slower in their dialogue with those patients compared with White patients, engage them less in patient-centered discussions, and show more verbal dominance (Cooper et al., 2012). Black patients, in turn, report poorer ratings of patient care compared with White patients. Such passive forms of discrimination are challenging to remediate because there may be no specific act or "smoking gun" to identify as the problematic behavior. Instead, many small everyday behaviors can add up to a general climate that discourages people of color, women, and other stereotyped groups from seeking care, accessing resources, or being fully included in an organization.

Implicit and explicit forms of prejudice differ in their prevalence among some groups. For example, explicit prejudice is lower among highly educated people, but implicit prejudice is generally uncorrelated with education (Nosek et al., 2007; Payne et al., 2010). Explicit prejudice is strongly associated with ideologies favoring hierarchies, including conservative political ideologies, social dominance orientation, and authoritarianism. Implicit bias, in contrast, shows only weak associations with these ideological variables (Cunningham, Nezlek, & Banaji, 2004; Nosek et al., 2007; Payne et al., 2010; Pratto & Shih, 2000). These patterns suggest that explicit prejudice may pose relatively greater risk than implicit bias among populations with low levels of

education or that favor hierarchical ideologies. Implicit bias, in contrast, may pose a relatively greater risk in populations that are highly educated or that favor egalitarian ideologies. This discussion highlights one of the ironies of implicit bias: Strategies to combat implicit bias may be needed most among populations who have the greatest motivation to be egalitarian.

Attempts to Change Implicit Bias

Traditionally, implicit biases have been viewed as an individual difference, with some individuals having consistently high levels of implicit bias and others low levels. Following this rationale, many studies have tested interventions aimed at changing individuals' levels of implicit bias. Some of these studies have been successful. Participants who take the perspective of stigmatized groups (Galinsky & Moskowitz, 2000; Todd, Bodenhausen, Richeson, & Galinsky, 2011), imagine counterstereotypical exemplars (Blair, Ma, & Lenton, 2001; Dasgupta & Greenwald, 2001; Gonzalez, Steele, & Baron, 2017), practice meditation (Lueke & Gibson, 2015; Stell & Farsides, 2016), think about characteristics that overlap between an outgroup and the ingroup (Hall, Crisp, & Suen, 2009), or view empathy-eliciting photos of outgroups (Chapman et al., 2017) tend to show reductions in implicit biases. Another study combined several of these same techniques and found a significant reduction of implicit bias 6 and 8 weeks later (Devine, Forscher, Austin, & Cox, 2012).

However, despite these promising examples, more comprehensive research casts doubt on how broadly such interventions may work. A recent meta-analysis of 494 studies found that the average effect of interventions on implicit bias was small (though significantly different from zero; Forscher et al., 2017). Moreover, the analysis found no effect of the same interventions on behavioral outcomes, raising doubts about how well interventions generalize beyond implicit tests to discriminatory outcomes. Another large-scale study tested eight interventions that previous research suggested were likely to be effective at reducing implicit biases (Lai et al., 2016). Each intervention was effective at reducing implicit bias on an immediate test, but none were effective after a delay (from several hours to several days).

The meta-analysis of Forscher et al. (2017) and the large-scale experiment by Lai et al. (2016) have frequently been interpreted as evidence that implicit biases are resistant to change because they reflect deeply ingrained personal attitudes. That is, after an intervention shifts implicit biases, respondents' scores appear to inevitably return to their original attitude.

Yet, other well-established research findings are difficult to reconcile with this rigid view of implicit bias as reflecting stable attitudes. First, the temporal stability of implicit tests is low (e.g., Cooley & Payne, 2017; Cunningham, Preacher, & Banaji, 2001; Devine et al., 2012; for a review, see Gawronski, Morrison, Phills, & Galdi, 2017). That is, a person may score high on an implicit bias measure today and receive a low score the next week. Individual scores on an implicit test explain less than 20% of the variation in scores on the same test performed a few weeks later (Gawronski et al., 2017). The low stability does not appear to reflect only measurement error, because even tests with high internal consistency at a single time point show low stability, and correcting for unreliability does not improve temporal stability much (Cunningham et al., 2001; Gawronski et al., 2017). Second, individual differences in implicit bias are only weakly correlated with individual differences in discriminatory behavior. Meta-analyses suggest that the shared variability between measures of implicit bias and discriminatory behavior is less than 10% (Cameron, Brown-Iannuzzi, & Payne, 2012; Greenwald, Poehlman, Uhlmann, & Banaji, 2009; Oswald, Mitchell, Blanton, Jaccard, & Tetlock, 2013). If implicit biases were rigid attitudes, then we would expect them to be stable over time and to predict individual differences in behavior robustly. These findings challenge that expectation.

However, implicit biases do strongly predict discriminatory outcomes and are highly stable—when viewed from a different perspective. Implicit bias is strongly associated with disparate outcomes when examined at aggregate levels such as nations, states, or metropolitan areas. For example, countries with stronger average associations between males and science have greater gender achievement gaps in science and math scores (Nosek et al., 2009). Metropolitan regions in the United States with higher levels of implicit race bias have greater racial disparities in shootings of citizens by police (Hehman, Flake, & Calanchini, 2017). U.S. states with higher proportions of Black residents in the population have higher average levels of implicit ingroup preferences (Rae, Newheiser, & Olson, 2015). Moreover, the frequency of Internet searches for racial slurs is strongly associated with implicit ingroup preferences (Rae et al., 2015). One study found that death rates for Black residents were higher in U.S. counties in which Black residents had greater implicit biases against Whites (Leitner, Hehman, Ayduk, & Mendoza-Denton, 2016). Another found that counties with higher levels of implicit racial bias also had greater Black–White gaps in infant health outcomes (Orchard & Price, 2017).

The associations reported in these studies are generally large, and much larger than the associations reported in meta-analyses of individual differences. These substantial associations suggest that implicit bias may reveal more about social environments than about individuals within them.

Given this evidence, new scholarship suggests a dramatically different alternative to the idea that implicit biases represent stable attitudes. According to a recently developed theoretical model of implicit bias called the Bias of Crowds, implicit biases can characterize situations (e.g., geographical

regions, institutions, situations, and organizations), not just people (Payne, Vuletich, & Lundberg, 2017).

The Bias of Crowds

The Bias of Crowds model assumes that implicit attitudes reflect the accessibility of mental content (for a review, see Gawronski & Payne, 2010). Accessibility refers to the readiness with which information can be retrieved and used in cognitive processing (Fazio & Williams, 1986; Higgins, 1996; Srull & Wyer, 1979). Thus, implicit bias reflects the accessibility of concepts linked to a social category. For example, reading the words *Mohammed, mosque*, and *Islamic* may make some concepts more accessible than others to complete the word fragment ter_____. If the word "terrorism" or "terrorist" came easily to mind, it does not necessarily reflect a person's beliefs or values as much as the shared cultural knowledge reflected in common stereotypes.

The accessibility of concepts linked to social categories can vary both chronically (as an aspect of the person) and situationally (as an aspect of the context). However, the research described above provides little evidence that implicit bias is driven by chronically accessible associations. If it were, then it would be a stable individual difference. Instead, most of the variability in implicit biases appears to be based in contexts or situations. Social environments with high degrees of disparities and inequalities are likely to continually cue culturally shared stereotypes, thus repeatedly activating the same stereotypical associations for whomever happens to inhabit those environments.

In light of the evidence reviewed above, we believe implicit bias is best understood as a social phenomenon that passes through the minds of individuals, but exists with greater stability in the situations they inhabit. By switching the emphasis from a person-based analysis to a situation-based view, we arrive at a reinterpretation of the evidence. This new interpretation suggests that measures of implicit bias are better measures of situations or social environments than of persons.

Consider how a crowd of sports fans behaves when "the wave" erupts in one section of the stadium. Once the wave has begun in one section, we can predict with great accuracy whether, and when, a set of fans will stand up. But if we tried to predict wave behavior by measuring individual differences in people's tendency to stand or sit, we would be much less successful in our prediction. It would be better to measure whether a wave was happening in that stadium at the time. Social phenomena, like the wave, fads, panics, or rumors, are best understood as passing through people. If implicit bias is such a social phenomenon, then the level of implicit bias in a given context is more meaningful than an individual's level of bias.

Viewed through this lens, the low temporal stability of implicit bias is unsurprising, because implicit bias fluctuates as people move from one context to another. The small individual difference correlations are expected, because implicit bias is less a feature of individuals than of shared contexts. Finally, the robust associations between implicit bias and disparities at the level of counties, states, and countries are expected. These aggregate units of analysis capture shared contexts, the level at which implicit bias is proposed to operate. From the Bias of Crowds perspective, the fact that interventions only shift people's implicit biases temporarily does not mean that individuals revert to their own stable level of bias. Instead, it may reflect that the sample mean reverts back to the average level of bias cued by inequalities in the social environment. Implicit bias can therefore be seen as the cognitive manifestation of structural racism (or sexism, or other inequalities in the culture).

Implicit bias is thus a marker of the level of overall bias in the social environment. It is also, however, a cause. In highly biased environments, any given person is likely to have stereotype-consistent thoughts cued at any given moment. If stereotype-consistent thoughts are accessible as a person makes a decision, that decision is likely to be biased (Bodenhausen, 1988; Srull & Wyer, 1979).

Understanding implicit bias as a cultural phenomenon, rather than a fixed set of beliefs, has important policy implications. Next, we highlight some of the considerations of this new understanding of implicit bias for policy makers aiming to reduce disparities and increase inclusion across a range of communities and organizational contexts.

Policy Insights

Systemic social biases have doubly destructive effects. Most obviously, they harm the individuals discriminated against. But more than that, they reinforce inequalities in the social context, which has the effect of making stereotype-consistent concepts more accessible for people within the organization on a daily basis. Thus, implicit biases in the minds of people and discriminatory treatment in institutions and organizations can reinforce each other, creating a vicious cycle.

Implicit bias training has become a widespread tactic to fight discrimination. The goal of such training is often to change people's implicit attitudes. From the Bias of Crowds perspective, interventions that attempt to change implicit attitudes are likely to have limited success because most of the force of implicit bias comes from situations and environments rather than individual attitudes. Individuals functioning within biased situations will tend to return to the average level of bias in the situation. To the extent that implicit bias is grounded in the culture, community, and immediate social contexts people inhabit, then solutions need to focus on structuring the social context, rather than changing the beliefs or values of individuals. Below, we describe some examples of this approach.

Blind Review

One way to break the cycle between implicit bias and inequality is to implement blind hiring practices that mask revealing information about the race of job applicants. It is also helpful to create accountability for hiring decisions. When managers have to explain in detail to a supervisor why they evaluated candidates as they did, they tend not to show a pro-White bias (Ford, Gambino, Lee, Mayo, & Ferguson, 2004). However, those who do not have to explain their evaluations in detail rationalize their decisions by devaluing African American applicants (Ford et al., 2004).

Set Decision Criteria Up Front

Implicit bias leads people to make biased decisions and then confuse their reasons for their rationalizations (Norton, Vandello, & Darley, 2004). One way to prevent unintended bias is to have decision-making rubrics that specify decision criteria in advance (Uhlmann & Cohen, 2005). These solutions are relatively easy to implement and can be scaled up across large organizations. Recent technological advances have led to software solutions to help automatically blind the review of resumes or evaluations, and to aid in creating and applying rubrics to decision making.

Visibility

Reducing environmental inequalities that activate stereotypical associations is important, but so is increasing the activation of positive associations. Increasing the positive visibility of marginalized groups requires active seeking, recruiting, and retaining of talented individuals from those groups to positions of power and social influence. These individuals provide counterstereotypical examples, which have been shown to reduce implicit biases (Blair, 2002; Dasgupta & Greenwald, 2001). Although the bias-reducing effects are likely temporary, having a diverse and inclusive organizational makeup on a daily basis provides a daily set of counterpressures to the constant stereotype-confirming cues in many social environments. Policies that reward positive portrayals of marginalized groups in the media may also be effective in combating the accessibility of negative stereotypes.

Slow Down and Concentrate

Implicit biases reflect the concepts that come most easily to mind in the moment. Because of this, implicit biases are most likely to affect judgments and decisions when the opportunity for more thoughtful processing is limited (Payne, 2005, 2006; Sherman et al., 2008). People are more likely to use such accessible information when they are tired, rushing, or distracted. This set of factors is surprising if we think about explicit prejudice rather than implicit bias. Someone who is intentionally hostile to minority groups would be more likely to discriminate when they devote their full attention to a decision, not when they are distracted. Implicit bias, in contrast, drives responses most strongly when decision makers are paying the least attention. Structuring decision settings in a way that minimizes fatigue, hurry, and distraction can reduce bias. For example, allocating ample time to review large sets of resumes can prevent rushed responding. Making important decisions during a time of day when decision makers are most alert can minimize fatigue. Minimizing workplace distractions such as multitasking and noisy environments can help decision makers devote their attention to more intentionally controlled decision processes.

Bias Is the Baseline

The prevalence of implicit bias means that decision makers should recognize that the potential for biased decisions is the normal default condition in most situations. Recognizing that bias is the baseline means that colorblind strategies focused just on avoiding discrimination are unlikely to be effective at reducing disparities. Implicit bias differs from explicit prejudice in that intentions to be fair are not enough. From the Bias of Crowds perspective, the reason that implicit bias is widespread in general is that the environment has a relatively constant level of systemic inequalities that repeatedly raise the accessibility of stereotypic concepts. Thus, most environments are not neutral; they exert a constant level of pressure in the direction of stereotype-consistent bias. In contexts where the average level of bias is substantial, reducing disparities requires going beyond passive colorblind (or gender-blind) policies. Affirmative strategies for increasing inclusivity, diversity, and the visible presence of women and minority group members in positions of authority may be necessary to offset the constant background pressure of systemic inequalities that give rise to widely accessible bias.

Conclusion

We have focused on solutions that structure the social context in which people make decisions, rather than changing the beliefs or values of individuals. To combat implicit biases, the systemic inequalities that cue negative associations must be addressed. To give one final example, disparities in school resources and teacher training lead to predictable achievement gaps, reinforcing notions that minority groups are less competent and qualified. Schools in high-poverty areas are less likely to have experienced or certified teachers and guidance counselors, advanced instruction, early intervention programs, extracurricular activities, and safe, well equipped facilities (NAACP Legal Defense and Educational Fund, 2005). In California schools in which more than half of the teachers lacked full credentials, 98% of the students were non-Whites (cited in Blasi, 2002). Because children

living in segregated and disadvantaged neighborhoods are less likely to receive the support they need to succeed in school and graduate, automatic associations between race or poverty and personal traits like "persistence" inevitably follow. Consequently, the implicit biases against these groups are resistant to change.

Implicit bias is both a symptom of and a contributor to systemic inequalities. Although interventions and training aimed at raising awareness of implicit bias and its consequences can be valuable, the research reviewed here suggests they are unlikely to have long-lasting effects on individuals' biases. Attempts to reduce the harmful impact of implicit bias should focus on the immediate cues of stereotypes and biases, and that often means changing the immediate social environment.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received the following financial support for the research, authorship, and/or publication of this article: The work for this article was funded in part by the Russell Sage Foundation (93-16-08) awarded to the first author, and the National Science Foundation Graduate Fellowship and the Paul and Daisy Soros Fellowships for New Americans awarded to the second author.

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