



THE SCIENCE OF EQUALITY, VOLUME 1:

**ADDRESSING IMPLICIT
BIAS, RACIAL ANXIETY, AND
STEREOTYPE THREAT IN
EDUCATION AND HEALTH CARE**

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PART IV INTERVENTIONS

The research presented on implicit bias, racial anxiety, and stereotype threat helps to explain otherwise confounding discrepancies between society's stated egalitarian ideals, racially disparate outcomes in education and health care, the experiences of bias by people of color, and interracial discomfort among people of all races and ethnicities. In addition to increasing our understanding, social psychologists have also made significant strides in identifying interventions that have been shown to reduce bias, calm racial anxieties, ameliorate the effects of threat, and transform interracial behavior.

In this section of the report, we describe concrete steps and interventions informed by research that can be implemented to move institutions and individuals toward eliminating race as an obstacle to educational success and the provision of health care. The interventions we discuss are devised to address contexts in which racial disparities are identified, but the vast majority of individuals within the institutions consciously reject negative attitudes and stereotypes. This focus does not foreclose the continued presence of explicit bias in our society or the role structural conditions play in perpetuating inequality (powell, 2012).

Indeed, implicit bias, racial anxiety, and stereotype threat are all reactions to societal and institutional conditions. Individuals hold implicit associations and attitudes and experience racial anxiety and stereotype threat because unconscious processes absorb both biased cultural messages and deeply held norms of racial fairness. Yet broad cultural messages and noxious stereotypes can be defused by contexts that reduce bias, anxiety, and stereotype threat.

Related research shows that contact between racial and ethnic groups can result in decreased prejudice, reduced racial anxiety, and positive shifts in intergroup attitudes (Pettigrew & Tropp, 2011; Page-Gould et al., 2008). Yet intergroup contact does not always lead to these salutary outcomes; the particular contexts and conditions in which the interaction occurs will influence whether the contact will fulfill its positive potential (Tropp & Page-Gould, 2014).

Thus, the good intentions of individuals are rarely sufficient by themselves to achieve desired intergroup outcomes. Institutions can change the environmental conditions in ways that dramatically reduce the effects of implicit bias and make racial anxiety and stereotype threat less likely. In turn, individuals situated in those institutions can benefit greatly from strategies that lead to reduced bias and behaviors that stem from such bias, allowing them to experience more positive cross-group interactions, the alleviation of racial anxieties, and resilience in the face of stereotype threat.

The catalysts for institutions and individuals to undertake these interventions will vary. Some will embrace the opportunity to create conditions that are consistent with racial equality ideals. Others may be concerned that litigation efforts under the Equal Protection Clause or Title VI of the Civil Rights Act or administrative investigations by invigorated Offices of Civil Rights will have greater likelihood of success in light of the robust evidence that race is the proximate cause of harmful behavior.

Our goal in this report is to describe the kinds of interventions that institutions ought to adopt and that individuals ought to engage in – whether voluntarily or subject to a consent decree or administrative order – to respond effectively to the racial dynamics that lead to the wide array of harms to stigmatized groups, as described above. We focus on research suggesting interventions to address implicit

bias, racial anxiety, stereotype threat, and the specific work that has been done on inter-group contact.

The Supreme Court Equal Protection jurisprudence

is clear that it is necessary for plaintiffs to establish that actions were taken “because of race,” not that defendants possessed racial animus. *Ricci v. DeStefano*, 129 S. Ct. 2658, 2690 (2009). The mind sciences provide powerful tools for lawyers seeking to prove that certain actions were a result of race, not incidental to it.

A. IMPLICIT BIAS INTERVENTIONS

Social science research focusing on addressing the effects of implicit bias can be divided into two broad categories: interventions seeking to “debias” (that is, to reduce implicit bias) and those directed toward mitigating the effects of bias and preventing implicit biases from affecting behavior. All agree that generic admonitions about race are unhelpful; the premise of this literature is that the vast majority of people already hope to adhere to racial equality norms.

1. “Debiasing” or Reducing Implicit Bias

“Debiasing” research is more nascent than the diagnostic research; researchers have devised some promising strategies (Dasgupta & Asgari, 2004; Dasgupta & Rivera, 2006; Devine et al., 2012), but are cautious (Joy-Gaba & Nosek, 2010). In one study, researchers found that

exposure to counter-stereotypic examples of people can diminish implicit stereotypes of women and negative implicit attitudes toward gays (Dasgupta & Asgari, 2004; Dasgupta & Rivera, 2006). In a related study, inducing empathy toward an Asian American movie character (the daughter in *The Joy Luck Club*) resulted in decreased implicit bias toward Asian Americans (Shih et al., 2013).

Devine et al. (2012) have found success in reducing implicit bias by combining multiple interventions to “break the prejudice habit.” The strategies (which thoughtfully utilize findings from other research) included those detailed below.

Stereotype Replacement

This strategy involves replacing stereotypical responses with nonstereotypical responses. Using this strategy involves recognizing that a response is based on stereotypes, labeling the response as stereotypical, and reflecting on why the biased response occurred. Next, one considers how the biased response could be avoided in the future and replaces it with an unbiased response (Monteith, 1993).

Counter-Stereotypic Imaging

This strategy involves imagining in detail counter-stereotypic others (Blair et al., 2001). These can be abstract (e.g., smart black people), famous (e.g., Barack Obama), or non-famous (e.g., a personal friend). The strategy makes positive exemplars salient and accessible when challenging a stereotype's validity.

Individuation

This strategy relies on preventing stereotypic inferences by obtaining specific information about group members (Brewer, 1988; Fiske & Neuberg, 1990). Using this strategy helps people evaluate members of the target group based on personal, rather than group-based, attributes.

Perspective Taking

This strategy involves assuming a first-person perspective of a member of a stereotyped group. Perspective taking increases psychological closeness to the stigmatized group, which ameliorates automatic group-based evaluations (Galinsky & Moskowitz, 2000).

Increasing Opportunities for Contact

This strategy involves seeking opportunities to encounter and engage in positive interactions with out-group members. Increased contact can ameliorate implicit bias through a wide variety of mechanisms, including altering the cognitive representations of the group and directly improving evaluations of the group (Pettigrew, 1998; Pettigrew & Tropp, 2006; Devine et al., 2012).

Devine and colleagues (2012) found that after four weeks of engaging in the interventions described above, intervention group participants had lower IAT scores than control group participants ($B = -.19$, $t(88) = -2.82$, $p = .006$, $R^2 = .081$). And these effects held when participants retook the IAT another four weeks later ($B = .091$, $t(88) = .82$, $p = .42$, $R^2 = .008$), leading researchers to conclude that the reduction in implicit race bias persisted throughout the eight-week interval.

These data “provide the first evidence that a controlled, randomized intervention can produce enduring reductions in implicit bias” (Devine et al., 2012). While earlier studies have found implicit bias to be less malleable (Joy-Gaba & Nosek, 2010), Devine et al. have replicated their study and are poised to publish a second article describing their findings in 2015.

While these results provide reason to be optimistic, it is important to recognize that it is impossible at this point to control for the continued prevalence of negative,

racialized imagery in the media (Dixon, 2008, 2009). Accordingly, most researchers agree that it is critical to focus on the behavioral manifestations of implicit bias as well.

2. Preventing “Biased” Decision-making

Most of the interventions devised to address implicitly biased behavior have been directed primarily toward the effects of implicit bias on decision-making. Notably, Jerry Kang led a group of social scientists, law professors, and a federal judge to identify an array of actions that have been found to decrease the likelihood that implicit bias will affect decision-making (Kang et al., 2012).

Doubt Objectivity

As noted above, the greater the extent to which one presumes the capacity to be objective, the greater the risk that the person will inadvertently allow bias to influence decision-making. There is some evidence to suggest that teaching people about non-conscious thought processes will lead them to be more skeptical of their own objectivity and, as a result, be better able to guard against biased evaluations (Pronin, 2007).

Increase Motivation to Be Fair

Guarding against biased evaluations is obviously more likely to occur if a person has the motivation to be fair. Research has demonstrated that people with motivation to be egalitarian were able to prevent their implicit anti-gay attitudes from affecting their

Implicitly biased behavior is best detected by using data to determine whether patterns of behavior are leading to racially disparate outcomes.

behavior (Dasgupta & Asgari, 2004). Consistent with this model, the National Center for State Courts has organized a project to teach judges and court staff about implicit bias (National Center for State Courts, 2012). The results from a three-state project suggest that those judges who were taught the neuroscience of bias were successfully convinced that implicit bias can impact behavior, and those who responded to follow-up surveys indicated that they were making efforts in their own

courtrooms to reduce the effects of bias (Kang et al., 2012). Although the number of respondents was small and self-reports are not always accurate, this work provides some evidence to suggest that education about implicit bias can increase motivations to be fair and to engage in behavioral change.

Improve Conditions of Decision-making

Implicit biases are a function of automaticity (Kahneman, 2011). “Thinking slow” by engaging in mindful, deliberate processing prevents our implicit schema from kicking in and determining our behaviors. Ideally, decisions are made in a context in which one is accountable for the outcome, rather than in the throes of any emotion (either positive or negative) that may exacerbate bias.

Count

Implicitly biased behavior is best detected by using data to determine whether patterns of behavior are leading to racially disparate outcomes. Perhaps not surprisingly in light of the assumptions many make about the decrease in discrimination in our society, research has shown that people are more likely to detect discrimination when it is presented in the aggregate rather than on a case-by-case basis (Crosby et al., 1986). Once one is aware that decisions or behavior are having disparate outcomes, it is then possible to consider whether and how the outcomes are linked to bias.

These interventions have enormous potential to address the cognitive dimensions of implicit bias. However, those who adhere to egalitarian norms are likely to be deeply concerned and upset when they learn that they have not successfully shed the effect of noxious stereotypes. This reaction can be helpful if it creates incentives to adopt the interventions described above to ensure that behavior is not dictated by implicit biases.

However, there is also the possibility that the interventions focused on raising awareness of the risk of implicit bias may induce some people to focus more on whether they appear biased rather than on actually altering their behavior. Social psychologists differentiate between “external motivation to control prejudice” (EMS) and “internal motivation to control prejudice” (IMS) and have designed measures to assess people’s variability on these dimensions (Plant & Devine, 2003). Indeed, those who show an external motivation to control prejudice (for example, those who agree with statements such as “I attempt to appear non-prejudiced toward black people in order to avoid disapproval from others”) often report high levels of racial bias in private (Plant & Devine, 1998); by contrast, those who are high on internal motivation to control prejudice (agreeing with statements such as “I attempt to act in a non-prejudiced way toward black people because it is personally important to me”) are less likely to differ in their private and public reports of bias.

We do not take these findings to mean that teaching about implicit bias should be avoided. Rather, we believe attempts to teach people about implicit bias should be

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accompanied by a discussion of the many factors that contribute to its development and the strategies people can employ to reduce its influence. Most important, people should be taught the interventions that can ameliorate both the threat and the behavioral effects of implicit bias. Moreover, to keep this information from inducing racial anxiety and stereotype threat, implicit bias training should be supplemented

with thoughtful interventions such as those described below, within an integrated framework developed by the institutions in which they are used.

B. REDUCING RACIAL ANXIETY

The mechanisms for reducing racial anxiety are related to – but are not identical to – the reduction of implicit bias, and a combination of intervention strategies is vastly more likely to be successful than either approach in isolation.

In this section, we will focus on two approaches to reducing racial anxiety. The first is “intergroup contact,” which refers to direct interaction between members of different racial groups; the second, “indirect contact,” describes ways in which people are exposed to positive interactions between members of their group and another group, without necessarily having direct interaction with the other group themselves. Both approaches have been shown to be effective in enhancing positive intergroup attitudes, in part through reducing intergroup anxiety (Wright et al., 1997; Pettigrew & Tropp, 2008; Turner et al., 2008).

1. Intergroup Contact

The role of intergroup contact in reducing anxiety and bias underscores the role of emotion in racial interactions. It is not enough for people to be taught that negative stereotypes are false or to believe in the morality of non-prejudice. People need to feel a connection to others outside of their group; once people feel connected, their racial anxiety decreases and so does their bias (Pettigrew & Tropp, 2008; Voci & Hewstone, 2003).

Intergroup friendships are considered most effective in promoting positive intergroup attitudes (Binder et al., 2009; Brown & Hewstone, 2005; Davies et al., 2011). Having intergroup friendships or robust intergroup contact is valuable not only in creating more positive attitudes, but also in creating greater resilience for future cross-group interactions which have the potential to be stressful (Page-Gould et al.,

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2010). Prior positive contact can also enhance the likelihood that future cross-group interactions will be positive. Page-Gould et al. (2010) have found that priming people to think about prior positive cross-group contact before a new cross-group interaction can help to facilitate a positive intergroup experience in that new interaction. Similarly, Mallett et al. (2008) have observed positive shifts in expectations for cross-group interactions, by having subjects observe a positive cross-group interaction and

write about their own similar experience. In other words, instead of anticipating the worst, we can establish more positive expectations for interactions that often flow into more positive intergroup experiences (Mallett et al., 2008). This in a sense reverses the effect of pluralistic ignorance (Shelton & Richeson, 2005) and can ideally alter that dynamic.

A great deal of social science focuses on how intergroup contact can lead to a range of positive outcomes among both whites and people of color (Tropp & Page

Gould, 2014), though conditions of the contact situation can undermine or facilitate such positive effects. It has long been recognized that certain factors are of particular importance, including the establishment of equal status between groups, cooperation, common goals, and institutional support for the contact (Allport, 1954; Pettigrew & Tropp, 2006). Cooperative learning strategies and integrated sports teams exemplify these ideal conditions (Slavin, 1979; Brown et al., 2003). Still, such optimal conditions cannot always be guaranteed, and as such, researchers have sought to identify means through which cooperative interdependence between groups might be achieved.

In particular, researchers have noted that it is important to create a shared sense of identity, while also acknowledging group differences. Tension can ensue if group difference is emphasized before a certain degree of trust and rapport has developed (Brewer & Miller, 1984; Miller, 2002), but ignoring group difference tends to

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undermine the potential for broader positive impacts resulting from intergroup contact (Hewstone & Brown 1986; Brown & Hewstone, 2005). When people of different races and ethnicities interact with one another, those interactions will yield more general changes in intergroup attitudes only if they are recognizing group membership (Brown et al., 2007; Brown et al., 1999; Van Oudenhoven et al., 1996; Voci & Hewstone, 2003). Researchers have also found that emphasizing group differences once relationships have been developed can help to build cross-group intimacy and understanding (Nagda, 2006; Tropp, 2008), and to ensure that

meaningful differences in perspective and experience are not disregarded or overlooked (Egins et al., 2002; Tropp & Bianchi, 2007).

2. Indirect or “Extended” Contact

In light of current patterns of racial segregation in so many life domains, sustained interracial interaction may not always be easy to achieve (powell, 2012). Racial anxiety is often a byproduct of living in a racially homogenous environment, which renders future intergroup interaction less likely and increases the chances that it will be less positive if it does occur (Plant & Devine, 2003). As a result, researchers have sought to develop strategies that can facilitate positive intergroup dynamics even among racially homogenous groups, both to enhance attitudes toward other racial and ethnic groups and to diminish anxiety about potential interactions with members of those groups (Christ et al., 2010; Page-Gould et al., 2010; Page-Gould et al., 2008).

One important approach is known as the “extended contact” effect, which refers to the idea that knowing that members of your group have friends in the other group can positively shift your attitudes toward and expectations for contact with members of those other groups (Wright et al., 1997; Turner et al., 2008; Gómez et al., 2011).

Extended contact research shows that even if a person does not have opportunities to interact directly with members of other groups, knowing that others in their own group have positive relations can help to shift their own attitudes more positively toward members of other groups. Indeed, a number of studies indicate that while direct contact tends to be more effective in improving intergroup attitudes when there are ample contact opportunities, indirect strategies such as “extended contact” tend to be more effective when opportunities for direct contact are limited (Eller et al., 2012; Christ et al., 2010). For example, in a study focusing on whites’ attitudes toward Mexican Americans in California, Eller and colleagues (2012) found that extended contact (knowing whites with Mexican American friends) reduced prejudice when direct contact was minimal but did not influence prejudice levels when direct contact was high.

Like direct contact, these approaches have been shown to be effective in enhancing positive intergroup attitudes, in large part through reducing intergroup anxiety (Wright et al., 1997; Mazziotta et al., 2011; Turner et al., 2008). In addition, this work highlights the roles that norms play in shaping attitudes toward other groups and expectations for cross-group interaction – including both in-group norms demonstrating how members of our group should relate to others and out-group norms indicating how we can expect to be received by members of other groups (Gómez et al., 2011; Turner et al., 2008). This body of work is important because it provides options for addressing prejudice and racial anxiety in racially homogenous environments – which, in light of the continued prevalence of segregation in K-12 education, is critical (UCLA Civil Rights Project, 2014).

C. STEREOTYPE THREAT INTERVENTIONS

Social scientists have developed an array of interventions that have been found to either prevent stereotype threat from being triggered or to significantly lessen its effects (Erman & Walton, in press). These interventions, which have been constructed primarily to address the effect of stereotype threat on student’s performance, include the interventions described below.

Social Belonging Intervention

When people worry that they don’t belong or aren’t valued because of their race, they are likely to interpret experiences in a new environment as evidence that their race is an impediment to their belonging and success. The “social belonging” intervention in the context of education is based on survey results showing that upper-year students of all races felt out of place when they began, but that the feeling abated over time. In a study of this intervention, both black and white students were given this information, along with a series of reflection exercises. The intervention resulted in improvement in black students’ grades, at the same time as it had no effect on the grades of white students (Walton & Cohen, 2007). As such, the intervention protected students of color “from inferring that they did not belong in general on campus when they

encountered social adversity” (Erman & Walton, in press) and helped them develop resilience in the face of adversity.

Wise Criticism

A significant challenge for people of color in school or work settings is determining whether negative feedback is a result of bias or, just as detrimental, whether positive feedback is a form of racial condescension. This uncertainty – coined *attributional ambiguity* by Crocker and Major (Crocker et al., 1991) – hinders improvement by putting people of color in a quandary in terms of deciding how to respond to feedback. Cohen et al. (1999) developed an intervention used with college students that addresses this quandary by having teachers and supervisors communicate both high expectations and a confidence that the individual is capable of meeting those expectations.

The wise criticism (or high standards) intervention has been tested in other contexts, including criticism of middle school essays (Yeager et al., 2013). In this experiment, when students received a note on a paper which read, “I’m giving you these comments so you have feedback on your essay,” 17% of black students chose to revise and resubmit their essay a week later. When the note read, “I’m giving you these comments because I have high standards and I know that you can meet them” – thereby disambiguating the reason for the critical feedback – 71% of black students revised and resubmitted their essay (Yeager et al., 2013).

Growth Mindset

This concept is based on work by Carol Dweck (Dweck, 2006) showing that abilities can be conceptualized as either an entity (“you have it or you don’t”) or an increment (“you can learn it”). If one holds the former concept, then poor performance confirms inadequacy; however, if one holds the latter view, then poor performance simply means one has more work to do. Having the “growth mindset” has been useful in the context of stereotype threat because it can prevent any one particular performance from serving as “stereotype confirming evidence” (Steele, 2010).

Value-Affirmation

This intervention, like the social belonging intervention, helps students maintain or increase their resilience. Students experiencing stereotype threat often lose track of “their broader identities and values – those qualities that can make them feel positively about themselves and which can increase their resilience and help them cope with adversity” (Erman & Walton, in press).

Remove Triggers of Stereotype Threat on Standardized Tests

Because standardized tests are typically understood as intended to evaluate students’ intellectual ability, they are likely to trigger stereotype threat as a default (Walton & Spencer, 2009). Small cues can exacerbate the threat; for example, in a foundational laboratory experiment, researchers found that asking black students to indicate their race before a test triggered stereotype threat that undermined their scores (Steele & Aronson, 1995). In a field experiment of the Advanced Placement (AP) Calculus test, researchers found that moving demographic queries from immediately before the test

to after the test raised girls' scores; in fact, they estimated that, if implemented nationwide, this change would cause 4,700 additional girls each year to receive AP Calculus credit (Danaher & Crandall, 2008).

Many of these interventions can be translated from domains of ability to the context of character-based stereotype threat. The interventions are largely premised on the idea that, so long as a person is not worrying that he or she will be judged or presumed to confirm a stereotype about her or his group, the threat will not be triggered and the behavioral effects of the threat will not occur. The mechanisms to address ability threat and character threat are quite similar – and sometimes overlap. In other words, an intervention to prevent students of color from the performance-decreasing effects of stereotype threat may also prevent the white professor from the performance-decreasing effects of stereotype threat. The “wise criticism” and “growth mindset” interventions can be translated to the character threat context, and a third intervention, behavioral scripts, was developed by Goff and colleagues specifically to address character-based threat.

Wise Criticism for Benefit Teachers/Supervisors

Although further research is necessary, these findings allow us to posit that instructing whites in how to use the “high standards” model can prevent white stereotype threat from being triggered. White stereotype threat manifests because of the concern that a person who engages in certain behavior will be perceived as prejudiced; as described above, providing critical feedback (for example, on an essay or a set of unhealthy behaviors) is one example of a situation where this may occur. If people are taught that they will be perceived as less biased if they provide critical feedback than if they provide empty praise, as long as the critical feedback is coupled with affirmation that they have high expectations of the person who is receiving the criticism and have confidence that the person can meet those expectations, they will be less likely to experience stereotype threat.

It is, of course, possible that an individual who receives criticism under this model may still experience critical feedback as uncomfortable; life-long experiences of discrimination will not completely dissipate or seem no longer relevant after a single experience with wise feedback. Nonetheless, the intervention can help prevent the adverse effects that whites' stereotype threat may have on subordinates or students of color, by addressing nonverbal as well as verbal cues. For instance, if a white person in a position of authority knows that she is doing right by her students, patients, or employees, she is likely to feel more confident and less anxious in the interaction and may therefore be less likely to engage in distancing or avoidant behavior and better able to have perspective on the situation rather than feel threatened by it.

Behavioral Scripts

A more general variant of the “high standards” instruction is the use of “behavioral scripts” for whites to use in interracial interactions. The studies described below have

investigated the utility of behavioral scripts in preventing behavior associated with threat or anxiety.

In their distancing study, Goff et al. (2008) found that when white participants were given a “position” to present during interracial interaction in which racial profiling was the subject, white participants no longer moved further away from their black conversation partners than from their white conversation partners. Researchers concluded that when directed to share an already constructed position, the white person’s “self” was no longer at issue in the discussion because the person had been given a position to take and was not at risk of being judged as prejudiced based upon a comment or opinion he or she held.

Avery et al. (2009) tested the utility of providing “defined social scripts (i.e., norms dictating expected interpersonal behavior)” to white participants prior to black–white interracial interactions. Their goal was to reduce behavior that would stem from anxiety felt by white participants – including the anxiety triggered by white stereotype threat. Their research built upon earlier researching findings that whites reported feeling more comfortable in scripted interactions with blacks (for example, serving a black customer in a restaurant) than in unscripted interactions (sitting in a crowded table in a library where a black person is already sitting). Researchers were interested in white participants’ behavior rather than self-reports, and in behaviors detectable to black people and which trigger avoidance on both sides of the racial dyad. Using video telephone conversations as a vehicle, researchers in this study found that scripted encounters were effective in reducing white anxiety as measured by third-party observers and suggested that providing scripting is particularly important for initial interactions. Extrapolating the results, Avery et al. suggest that institutions should provide structured interactions for first encounters – such as asking people to “tell each other three interesting things about yourself” or to “describe your role in the organization.”

Incremental Orientation

Having the “growth mindset” has been useful in the stereotype threat context because it can prevent any particular performance for serving as “stereotype confirming evidence” (Goff et al., 2008). Goff and colleagues hypothesized that introducing the learning or growth mindset in the white stereotype threat domain would serve the same function. Some recent work offers preliminary support for this notion (Migacheva & Tropp, 2013; Migacheva et al., 2011; Murphy et al., 2011). For example, studies with African American and white middle school students, and white high school students in a community service-learning program, suggest that a lower focus on self-concerns and a greater orientation toward learning about other groups predicted greater comfort and interest in future cross-group interactions (Migacheva & Tropp, 2013).

D. INTERVENTIONS IN CONTEXT

The fundamental premise of this report is that institutions seeking to alter racially disparate outcomes must be aware of the array of psychological phenomena that may be contributing to those outcomes. The potential harm of implicit biases has been recognized, and many institutions are beginning to engage in efforts to prevent implicit biases from undermining fair and equitable decision-making. For example, recent research suggests potential interventions for hospitals and doctors to reduce the effects of implicit bias (Chapman et al, 2013). This report contributes to that work by summarizing important research into debiasing and preventing bias from affecting behavior; we also seek to encourage institutions to look beyond implicit bias and to recognize that racial anxiety and stereotype threat may also be obstacles to racially equal outcomes.

We recommend that institutions work with social scientists to evaluate and determine where in the institution's operations race may be coming into play. A model for this kind of collaboration is the Center for Policing Equity, under whose auspices researchers and police departments have sought to implement the following four specific research interventions:

- ◆ Tools to identify officers likely to engage in biased policing
- ◆ Trainings that are effective in reducing biased policing
- ◆ Results-oriented practices with regard to departmental policies (staffing levels, discipline, etc.) that ensure equitable policing
- ◆ Systematic ways of gauging community perceptions of racial bias. (See cpe.psych.ucla.edu/images/uploads/cple_contract_for_policing_justice.pdf)

Schools and hospitals are likely to have similar concerns. For example, education research suggests that the primary areas of concern linked to race are: disproportionate discipline, disparate assessments of merit, insufficient constructive feedback, academic underperformance, and disengagement. Accordingly, schools need to identify:

- ◆ Teachers who are likely to be affected by bias in making disciplinary decisions
- ◆ Teachers who are likely to be affected by bias in assessing academic capacity
- ◆ Teachers who are likely to give differential feedback to students based upon race
- ◆ Teachers whose interactions with students trigger stereotype threat leading to underperformance or disengagement

As the policing context suggests, the goal of identifying the psychological phenomena that lead to particular outcomes – as derived from implicit bias, racial anxiety, and stereotype threat – should be followed by the development of tailored strategies to change the behavior. This focused, diagnostic approach to addressing racial anxieties and disparities is likely to yield more beneficial and far-reaching outcomes than attempts to blame or shame individuals within an institutional setting.