

impact of affirmative action on women, none have focused on women at the highest rungs on the career ladder. Thus, we still do not know whether being the beneficiary of affirmative action early in their careers ultimately helps women to attain top leadership positions; though as noted, it does appear to have helped open doors to positions along the way. Affirmative action and antidiscrimination policy, in general, may also have broader social benefits, beyond the gains to the specific individuals hired, for instance by creating mentors and expanding networking opportunities for women and minorities.

The benefits of affirmative action in employment, then, are moderately positive for women and minorities alike. Some individuals, however, perceive its costs to be large, which is what makes the policy so controversial and also may threaten its effectiveness. One concern that has been raised is that it creates defacto quotas. But work by Jonathan Leonard shows that federal contractors tend to fall short of their employment goals for women and minorities, suggesting that they are indeed goals and not quotas. The more frequently raised concern, however, is that affirmative action encourages reverse discrimination—deliberately excluding white men to provide more opportunities for women and minorities. Such concerns may particularly arise when the economy is in a downturn and jobs are scarce. However, Holzer and Neumark's evidence suggests that the likelihood of more productive men or whites being passed over in favor of less productive women or minorities is probably low. And the fact that women and minorities still earn less than men and whites, all else equal, also indicates that reverse discrimination is not the norm.

Concerns about affirmative action not only make the program politically sensitive but could actually cause problems for those who are supposed to benefit from it. They may be viewed as "affirmative action hires" rather than as equally qualified, equally productive employees. This, in turn, could sap their confidence, creating a self-fulfilling prophecy. On the other hand, without affirmative action, women and minorities are likely to have fewer opportunities available to them or may invest less in education and training because they think that it will not pay off down the line. Looking to the future, the challenge is to continue to find ways to equitably level the "playing field" so that everyone has an equal opportunity to succeed. *

Francine D. Blau is the Frances Perkins Professor of Industrial and Labor Relations and Labor Economics and Director of the Institute for Labor Market Policies at Cornell University. Anne E. Winkler is Professor of Economics and Public Policy Administration at the University of Missouri-St. Louis.

psychological effect of stereotypes

by CARRIE CONAWAY



E DON'T NORMALLY THINK OF highly successful people as likely to suffer due to psychological pressure or stereotyping. But according to social psychologists, it is those most invested in their achievement who are most likely to fall prey to a kind of unconscious behavior known as stereo-

type threat. This threat is pernicious because it is not due to active discrimination by employers, teachers, or other external evaluators; rather, it comes from within. It emerges in situations where people worry that their poor performance on some measure might be attributed not to their individual ability, but to a negative stereotype about a group they belong to—women, African-Americans, athletes, liberals, any group at all. Members of these stereotyped groups worry that their individual results will serve as a referendum on the abilities of everyone in their group, and the stress and self-doubt this brings on demonstrably reduces their performance—creating the very outcome they were striving to avoid. For example, knowing that women are perceived as indecisive, a successful woman leader may still act indecisively, not because she actually is incapable of making a decision, but because the fear that others will perceive her that way slows down her decision-making process.

Stereotype threat is a complex psychological phenomenon that occurs only when several related factors coincide. Research evidence shows that for people to be affected by it, they must be high performers—people who care about doing well, rather than people who have dissociated themselves from striving for high achievement. They also must be put into a situation where their skills or abilities might be in question. This does not literally need to be an examination; a job assignment could serve the same purpose. But the task does need to be challenging, even frustrating, since these high achievers will not doubt their ability to perform well on an easy test. Studies also indicate that people will be more susceptible when they are invested in their image as a member of the stereotyped group. People whose group identity isn't important to them won't be worried about whether their poor performance reflects badly on their group. In addition, individuals are especially vulnerable if they believe that human intelligence is determined at birth (rather than being determined by situational



or learning experiences) and if they anticipate that they will experience discrimination in the test situation (rather than expecting to be treated fairly).

When these factors come together—as they often do on standardized tests and job evaluations—the effect on performance can be surprisingly large. The earliest research on this phenomenon, conducted a decade ago by Claude Steele and Joshua Aronson, focused on African-Americans' performance on verbal material. They found that, after adjusting for initial differences in SAT scores, black students at Stanford University who took a challenging verbal test answered approximately 10 percent fewer questions correctly than whites did—but only if they believed that the test was a measure of their ability. If they were told that the test measured "psychological factors involved in solving verbal problems," the black-white test score difference was eliminated.

Later studies have replicated Steele and Aronson's results, often even without adjusting for initial differences in education or ability. And the effect is not unique to blacks. Studies show that women do worse on challenging tests of mathematical and scientific material, both when they are primed to think that the test demonstrates gender differences in math ability and when they are not primed about the test's content (and thus are reacting purely on their knowledge that society expects women to be bad at math). The male-female gap is eliminated only when women are led to believe that the test is gender-neutral. Even high-ability white men are susceptible. White men with near-perfect scores on the mathematics section of the SAT—that is to say, white men who were highly invested in their math performance—performed worse on a mathematics test when they were told the test was designed to understand why Asians are better at math. And the results also extend outside academic ability. White athletes did worse than black athletes in a golf exercise when they thought their scores demonstrated "natural athletic ability" (a stereotypically black trait), whereas blacks did worse than whites when they thought it tested "sports strategic intelligence" (a stereotypically white trait).

Unfortunately, we do not know much about stereotype threat outside laboratory settings—for example, in actual work environments. And we know even less about how it might affect women on the way up the corporate ladder. But one set of studies, by Laura Kray and colleagues, does demonstrate that stereotype threat could affect women's outcomes in one key skill needed by successful executives—negotiation. Women and men business students in a negotiations class were paired (in either mixed- or same-sex pairs) and asked to negotiate over a price or over salary and benefits. Similar to the results of previous stereotype threat research, when women believed that the task demonstrated their negotiating ability—something they cared deeply about because of their identity as business students—their performance suffered. But if they were explicitly told that the test was a learning tool and did not measure ability, they did just as well as men. Likewise, if women were told that successful negotiators were rational, assertive, and self-interested—implicitly linking stereotypically male traits to success—they performed worse than men. But interestingly, and in contrast to some other studies, women actually outperformed men if they were explicitly told that the researchers expected to see gender differences because men were more likely to possess the traits associated with success. In this case, the explicit reference to gender differences led the women to compensate—indeed, overcompensate—for the negative effect of stereotype threat.

The bad news is, stereotype threat is pervasive, and it can have a significant impact on performance. The good news is, understanding the circumstances that trigger it can help to identify ways to avoid its effects. The more people believe that they are being evaluated on a gender- and race-neutral standard and that their evaluators are confident in their abilities, the less impact stereotype threat will have. *

"Thin Ice: Stereotype Threat and Black College Students," by Claude Steele, Atlantic Monthly, 1999.

"Contending with Group Image: The Psychology of Stereotype and Social Identity Threat," by Claude M. Steele, Steven J. Spencer, and Joshua Aronson, Advances in Experimental Social Psychology, 2002.

"Battle of the Sexes: Stereotype Confirmation and Reactance in Negotiations," by Laura J. Kray, Leigh Thompson, and Adam Galinsky, Journal of Personality and Social Psychology, 2001.