

How a Self-Fulfilling Stereotype Can Drag Down Performance

By Shankar Vedantam

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- 1 Here's a trick question, so think carefully before you answer: If someone mentions the word "beast" to you, which word would you match it with?
1. Afraid. 2. Words. 3. Large. 4. Animal. 5. Separate.
- 2 A beast is an animal, of course, so what's the trick? It's that getting the right answer may depend on who asks you the question.
- 3 Vocabulary questions like this have been routinely posed to thousands of Americans as part of the General Social Survey, a national survey that tracks societal trends. And for years, blacks have scored lower on the vocabulary test than whites.
- 4 Sociologist Min-Hsuing Huang recently decided to ask whether the race of the person administering the survey mattered: He found that when black people and white people answered 10 vocabulary questions posed by a white interviewer, blacks on average answered 5.49 questions correctly and whites answered 6.33 correctly—a gap typical of the ones found on many standardized tests.
- 5 Huang then examined the performance of African Americans who interacted with black interviewers: He found that black respondents then answered 6.33 questions correctly—the same as white ones. The reason African Americans scored more poorly on tests administered by white interviewers, Huang theorized, is that these situations can make the issue of race salient and subtly remind the test-takers of the societal stereotype that blacks are intellectually inferior to whites.
- 6 Huang's findings, recently published in the journal *Social Science Research*, are only the latest in a body of research that has gone largely unnoticed by policymakers, parents and managers: Dozens of field experiments have found that reminding African Americans and Latinos about their race before administering academic tests, or telling them that the tests are measures of innate intelligence, can hurt their performance compared with minorities who were not reminded about race and not told that the results reflect inherent ability.
- 7 Psychologists such as Claude Steele at Stanford University came up with the term "stereotype threat" for the phenomenon: When people are threatened by a negative stereotype they think applies to them, they can be subtly biased to live out that stereotype.
- 8 The threats do not have to take place at a conscious level: When volunteers in experimental studies that have found huge stereotype-threat differences in performance are told about the phenomenon afterward, they invariably tell researchers that the theory is interesting but does not apply to them.

- 9 Nor are the findings limited to blacks and Latinos. The same phenomenon applies to women’s performance in mathematics. Reminding women about their gender or telling them that men generally outperform women on math tests invariably depresses the women’s scores. Similarly, telling test-takers that people of Asian descent score better than other students depresses the performance of white men. The impact of stereotype threats has been demonstrated in several foreign countries, in educational settings ranging from kindergarten to college, and a variety of settings where adults work and play.
- 10 In a soon-to-be-published study, researchers Gregory M. Walton at Stanford and Steven J. Spencer at Waterloo University in Ontario explored a question with even thornier implications. What does stereotype threat tell you if you are a college admissions officer debating between a man and a woman who both have an SAT score of 1200?
- 11 SAT scores are typically seen as measures of aptitude and predictors of a student’s performance. Colleges have long known, however, that women and minorities typically underperform relative to their SAT scores.
- 12 “Let’s say on the SAT you have a score of 1200,” Spencer said. “What would that predict about your GPA at university? It would predict a 3.2 GPA. What has been observed in high-stereotype-threat environments is that that 1200 does not predict a 3.2 GPA but a 3.”
- 13 In a pure meritocracy, the college admissions officer ought to pick the man, since his score predicts he will do better in college than a woman with the same score.
- 14 But in two meta-analyses involving nearly 19,000 students, Walton and Spencer found that when schools and colleges go out of their way to ameliorate stereotype threats, the performance of women and minorities soars—it’s as if these students are athletes who have been running against a headwind. Without the headwind, Walton and Spencer found that minorities, and women in math and science, do not just do as well as whites and men with the same SAT scores—they outperform them.
- 15 “We would argue if you simply use test scores, you are building in discrimination into a system,” Spencer said. “The test scores underrepresent what minorities, and women in math and science, can do.”
- 16 What makes this thorny, of course, is that Walton and Spencer are effectively saying a score of 1200 means different things depending on the background of the student. Couldn’t that quickly descend into special pleadings and all kinds of claims about disadvantages and stereotype threats?
- 17 Walton acknowledged the challenges but said there is one implication of the research that is noncontroversial: Several simple measures appear to be highly effective at reducing stereotype threats—and everyone can agree that schools and companies should get students and workers to perform at their full potential.

- 18 Stereotype threats are diminished when race and gender are not made salient in academic or workplace settings, and when people are told that tests are not measures of inherent ability. One study tried to combat stereotype threats by asking junior high school students to regularly remind themselves in essays about a value that they hold dear, such as the importance of family—presumably bolstering their confidence in the face of stereotype threats. A core idea in many interventions is to give people a sense of belonging.
- 19 Stereotype threats seem to emerge in large part because certain settings can subtly make particular groups feel out of place: A woman in a math class, a black or Latino man confronted by a vocabulary test, a white man trying to make a basketball team. When confronted by challenges that inevitably arise in these contexts, people threatened by stereotypes get the false message that they ought to be doing something else.