Stereotype Threat: Performing When There's a "Threat in the Air"

Tests such as the Wechsler Adult Intelligence Scale (WAIS), SAT, and the American College Test (ACT) are standardized. That means that every individual experiences the same testing conditions, instructions, materials, and test questions. Obviously, one goal of standardization is to help ensure that such tests are as fair and unbiased as possible. However, it is impossible to standardize all conditions, including the expectations that we think other people might have about our performance in a particular situation.

As psychologist Claude Steele has discovered, if those expectations are negative, they can cause us to perform below our actual ability level. Steele coined the term stereotype threat to describe this phenomenon, which occurs when members of a particular group fear that they will be evaluated in terms of a negative stereotype about their group. As Steele (1997) explains, "It's a situational threat—a threat in the air—that, in general form, can affect the members of any group about whom a negative stereotype exists, whether it's skateboarders, older adults, white men, or gang members. Where bad stereotypes about these groups apply, members of these groups can fear being reduced to that stereotype."

To illustrate, consider the gender stereotype that females are poor at math, especially advanced mathematics. (We dispel this myth in chapter 10, on gender and sexuality.) In one study, when female students took a difficult math test that was described in advance as producing gender differences, their scores were much lower than that of male students taking the same test. But when a matched group of female students took the same test but were told that it did not produce gender differences, their scores were equal to those of the male students (Spencer & others, 1999). Simply reminding the female students of the stereotype that women are less skilled in mathematics than men was enough to lower their scores.

Now consider a study by Margaret Shih and her colleagues (1999) showing just how easily stereotype awareness can be manipulated to affect test performance. Mathematically gifted Asian-American female college students were randomly assigned to two groups. One group filled out a questionnaire asking them several questions that were likely to remind them of their Asian background and activate the cultural stereotype that Asian-Americans have superior math abilities. The other group filled out a questionnaire asking them questions that were likely to remind them of their gender identity as females and activate the gender stereotype that women are not good at math. Then each group took a challenging math test.

The results? Those students who were reminded of their racial identity as Asians scored significantly higher on the exam than the students who were reminded of their gender identity as women. A control group of students, who filled out a neutral questionnaire, had scores in the middle of the two groups.

Why would being reminded of a negative stereotype undermine your performance on a test? Fear that you might confirm the negative stereotype creates self-doubt and anxiety (Blascovich & others, 2001; Stone & others, 1999). In turn, anxiety, apprehension, and nervousness interfere with your thinking and problem-solving abilities (Osborne, 2001; Quinn & Spencer, 2001). Perhaps not surprisingly, those students who are most highly motivated to perform well are the ones most likely to be affected by stereotype threat (Wheeler & Petty, 2001).

The influence of stereotype threats is not confined to Asian-American or female students taking math tests or, for that matter, limited to tests of academic ability. Consider these additional examples:

- When told that a test was simply a laboratory task investigating problem-solving strategies and did not measure intellectual ability, black and white students scored equally well. But when a matched group of students were given the same test and told that it was a test of intellectual ability, black students did much more poorly than white students (Steele & Aronson, 1995).

- When reminded of the stereotype of the elderly being more forgetful, senior adults scored more poorly on memory tests than when they were not reminded of the stereotype. But when reminded of the positive stereotype that elderly people are wise, older individuals scored higher on the same memory tests (Levy, 1996).

- After completing questionnaires about their social and economic background, French students from a low socioeconomic background who took a test described as a measure of intellectual ability performed worse than students from a wealthy background. But when the test was presented as not reflecting intellectual ability, the students performed just as well as the students from a wealthy background (Croizet & Claire, 1998).

The key point here is that performance on tests, even tests that are carefully designed to be fair and objective, is surprisingly susceptible to social and cultural influences. How can the influence of stereotype threats be overcome? One way is for the test giver to tackle the issue head-on: Simply saying that a particular test is racially fair or gender-neutral has been shown to reduce the effects of stereotype threat (Spencer & others, 1999).