



# TEACHING TOLERANCE

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## How Stereotypes Undermine Test Scores

Subtle changes in test environments can improve standardized test scores among students of color and girls.

For more than 10 years, New York University associate professor [Joshua Aronson](#) and his colleagues have examined ways stereotypes interfere with academic performance.

Comparatively low performance among African Americans and Latino students, as well as girls and women in mathematics and science, tends to be attributed to cultural differences that supposedly undermine acquisition of skills or values necessary for academic achievement.

But, Aronson and his colleagues would encourage us to consider the psychology of stigma -- how human beings respond to negative stereotypes about their racial or gender group.

Consistently, their research indicates that being targeted by well-known stereotypes ("blacks are unintelligent," "Latinos perform poorly on tests," "girls can't do math" and so on) can be threatening to students in profound ways, a predicament they call "stereotype threat."

While offsetting stereotype threat isn't a cure-all for the achievement gap, Aronson and his colleagues have demonstrated that even subtle changes to testing situations can improve standardized test scores among students of color, girls and women.

Teaching Tolerance's Jennifer Holladay recently sat down for a virtual chat with Joshua about the implications of this research for educators, during testing season and beyond.

***Jennifer: Explain "stereotype threat" to me, in plain terms.***

***Joshua:*** Well, take the "absentminded professor" stereotype. I'm a professor, and, like most people, I'm capable of absentmindedness. In my profession though, I'm keenly aware of that stereotype, and I might worry that others -- students in particular -- might see me this way. Let's say I'm late to class, having a hard time finding my lecture notes, stumbling around, just generally flustered. The question crosses my mind: *Am I behaving like an absentminded professor? Are my students seeing me that way?* I may become even more flustered because my attention is divided by this outside concern.

When a stereotype paints a negative image, whether it's that professors are absentminded or that students of color "don't do well on tests," it can impact those targeted internally, creating a sense of risk about living up -- or down -- to the negative stereotype.

Consider a Latino student called upon in class to answer a complex question. While the student may or may not know the answer, when you add on the stereotype that "Latino intellect" is inferior, the student may perform less well than she otherwise would.

Negative stereotypes about intelligence or aptitude among people of color is particularly dangerous in our society, because the stereotypes are widely known and intelligence is so universally valued. Unfortunately, our research also has shown mere awareness of such stereotypes is enough to manifest the threat in students; one doesn't have to believe they are true.

***Jennifer: So, students of color -- and girls and women in math and sciences -- may internalize social stereotypes and that internalization may impede their performance in academic settings. This time of year, my mind is all about testing. Does stereotype threat manifest in testing?***

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**Joshua:** Stereotype threat arises in situations where a negative stereotype relates to evaluating performance. So, absolutely, standardized testing is relevant -- incredibly so after passage of the No Child Left Behind Act (NCLB).

**Jennifer:** *So how might teachers and schools offset stereotype threat and, at least in relation to it, maximize student performance on standardized tests?*

**Joshua:** How schools position tests is critically important. Ideally, they should be situated as non-evaluative tasks. This may be hard to do in the NCLB era, yet our research has shown time and time again that, if tests are not presented as a measure of students' intelligence, students of color do better. One teacher we worked with told students the test would be used to measure how well the school was doing, rather than how well students were doing. Students performed better.

If this isn't possible, schools should be clear that the tests will measure of students' current knowledge, not their overall ability or potential. Many students believe intelligence and aptitude are unchangeable -- that whatever they were born with is all they're ever going to have. And when students are aware of social stereotypes like "blacks are stupid" or "girls can't do math," it may seem pointless to try to do your best.

A key way to offset the stereotype threat is to stress consistently throughout the year the expandability of academic abilities. When teachers, parents and others let students know that their abilities can improve with hard work, the stereotype threat loses some of its potency, and, research shows, students' test scores and grades will improve.

**Jennifer:** *Is there any value in using the stereotypes as a motivational tool? Like an "us vs. them" -- "we'll prove them wrong!" -- sort of challenge?*

**Joshua:** Not in the context of difficult standardized tests. Stereotype threat can make students try harder, and, when they are charged with a task that can be easily accomplished with a boost of energy, the "us vs. them" mentality might help. In the context of standardized tests, however, what students need is a relaxed kind of concentration. Anything that heightens pressure to perform, including a "we'll show them" mentality, will be counterproductive.

**Jennifer:** *What else can teachers and schools do to offset stereotype threat during testing season?*

**Joshua:** Never, ever ask students to complete questions about their racial, ethnic or gender identities as part of a test. Our research, both in laboratory and actual school settings, show that these seemingly benign questions are enough to introduce stereotype threat and increase anxiety for test takers.

Additionally, one of the most powerful things teachers can do to offset stereotype threat and bolster performance is to prompt students to reflect on their talents, beliefs and values. These kinds of "affirmations" remind students of what's important to them and can build a line of defense against stereotype threat. One recent study actually showed affirmation procedures were directly related to a 40% drop in grade disparities between students in different racial groups.

**Jennifer:** *What should schools do throughout the year -- not just during testing season -- to create environments that guard against stereotype threat?*

**Joshua:** Emphasizing the expandability of academic abilities and engaging in affirmation exercises should be done consistently. Two other practices can really help. First, exposure to role models is important. Ideally, the role models should be older students of shared racial, ethnic or gender identities who overcame difficulties through hard work and ultimately mastered the content.

A famous female engineer isn't the ideal role model for girls in relation to math proficiency, because she can be seen as a "token" of female success in mathematics, someone who possesses an "unusual-for-girls" natural talent. When students serve as role models for each other, the malleability of academic abilities is highlighted, showing students that progress is not only possible, but also normal with persistence.

Second, if I could make just one change to instructional practices in schools, it would be broad-scale adoption of cooperative learning techniques. Stereotypes abound in competitive environments. When students work cooperatively to tackle challenging material, prejudice (and stereotype threat) are reduced and academic achievement among students from stigmatized groups can improve considerably.

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