



## Students Need to Know Your Only Bias is for Them to Succeed

RESEARCH SUMMARY | JUNE 2015

Everyone remembers the feeling — sitting at your desk as your teacher hands back an essay completely covered with red ink. But a body of mindset research shows there's a lot at play in how a student interprets this feedback, especially when it comes to trusting that a teacher isn't basing this critical feedback on their race or ethnicity.

TRUSTING AN EVALUATOR LETS PEOPLE interpret criticism as helpful information, while mistrust can lead people to view critical feedback as a sign of apathy, antipathy, or evidence of bias.<sup>1</sup>

For African-American students, a rise in mistrust during adolescence can stem from two factors<sup>2</sup>: the recognition that they could be seen through the lens of a negative stereotype about their group's intelligence<sup>3</sup>, and the very real possibility that others could discriminate against them.<sup>4</sup> A large body of

research attests to subtle and not-so-subtle cues to minority students that they are seen as lacking or not belonging in school<sup>5</sup>, including harsher discipline, colder social treatment, and patronizing praise.<sup>6</sup>

But could there be a way to foster trust among minority students, and convince them that critical feedback is coming from teachers' high expectations and their belief that the student could meet them? And if a sturdier foundation of trust is in place, how does it impact students' academic performance?

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**Featured Article:** Yeager, D. S., Purdie-Vaughns, V., Garcia, J., Apfel, N., Brzustoski, P., Master, A., Hessert, W. T., Williams, M. E., & Cohen, G. L. (2014). Breaking the cycle of mistrust: Wise interventions to provide critical feedback across the racial divide. *Journal of Experimental Psychology: General*, 143, 804-824.

**MINDSET**  
SCHOLARS  
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Hosted at the Center for Advanced Study in the Behavioral Sciences at Stanford University, the Mindset Scholars Network is a group of leading social scientists dedicated to improving student outcomes and expanding educational opportunity by advancing our scientific understanding of students' mindsets about learning and school.

David Yeager and seven other colleagues posed these questions in their 2014 study published in the *Journal of Experimental Psychology*.<sup>7</sup> The researchers conducted three field experiments to test how fostering trust among minority middle and high school students in situations where they received critical feedback would affect perceptions of trust and academic performance.

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### STUDY DESIGNS AND RESULTS

In the first study, 44 seventh-grade students in three social studies classrooms were asked to write a five-paragraph essay about a personal hero. All the students received critical feedback on their essay from their teacher, but only half the students received an attached note that stated: “I’m giving you these comments because I have very high expectations and I know that you can reach them.” Meanwhile, the students in the control group received a placebo note that said, “I’m giving you these comments so that you’ll have feedback on your paper.” Students who received the first note were more likely to revise their essay and return it to their teacher. The effect was only significant for African-American students—71 percent who received the “high expectations” note revised their essay, compared with 17 percent who got the placebo note.

Students who were given the “high expectations” note were more likely to go back and revise, but did the actual quality of the student’s work improve? A second experiment asked teachers to grade another group of 44 seventh-graders’ revised essays on a rubric, without knowing which note the student received from the researchers. The “high expectations” message led students to earn higher scores on their revised essays. Again, the effect was only significant

for African-American students. Overall though, both African-American and white students in the condition group made twice as many corrections as students in the control condition.

The participants of the third study were 76 students at a medium-sized urban public high school. One group of students read testimonials that encouraged them to attribute criticism to teachers’ high standards and their belief that students could meet them. For example, one testimonial from an upperclassman stated: “I’ve come

to learn that criticism doesn’t mean my teacher sees me as dumb. It means they think their students can reach that high standard.” (Two other control groups received a placebo, neutral testimonial, or played puzzles and received no testimonial.) African-American students who listened to the testimonials improved their performance in core subjects—resulting in roughly a third of a grade point on the GPA scale. The intervention did not affect white students’ grades, however. By the end of the semester, the intervention had closed the racial achievement gap by about 39 percent.

### ASSUAGING MISTRUST IN ADOLESCENTS

The authors of the studies conclude that helping students perceive critical feedback as a reflection of a teacher’s high standards, and not of bias, halted the effect of mistrust.

Interestingly, the authors hypothesize that white students may be less visibly stigmatized, which lets them take teachers’ comments at face value. Meanwhile, African-American students’ group membership may cause them to question a teacher’s intentions, leaving more room for mistrust.

The interventions created a sort of “bubble” in which students’ perceptions and expectations of unfair criticism based on race no longer applied to the feedback at hand. In the case of the third study, this powerful impact continued through the year, compounding on itself to change students’ perceptions of critical feedback overall.

Recent results based on a series of follow-ups with these same students showed that the intervention

had an enduring effect on students’ lives. African-American students who had received the “high expectations” note were protected from the typical drops in distrust observed in seventh grade. These students received 50 percent fewer disciplinary referrals and were more likely to enroll in a four-year college immediately after high school graduation—nearly six years after receiving the intervention.<sup>8</sup>

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<sup>1</sup> Bryk, A., & Schneider, B. (2002). Trust in schools: A core resource for improvement. Russell Sage Foundation.

<sup>2</sup> Cohen, G. L., & Steele, C. M. (2002). A barrier of mistrust: How negative stereotypes affect cross-race mentoring. *Improving academic achievement: Impact of psychological factors on education*, 303-327; Crocker, J., & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. *Psychological Review*, 96(4), 608; Steele, C. M., Spencer, S. J., & Aronson, J. (2002). Contending with group image: The psychology of

stereotype and social identity threat. *Advances in Experimental Social Psychology*, 34, 379-440.

<sup>3</sup> G. L. Cohen & C. M. Steele, 2002; J. Crocker, & B. Major, 1989; C. M. Steele, S.J. Spencer, & J. Aronson, 2002.

<sup>4</sup> Brown, C. S., & Bigler, R. S. (2005). Children's perceptions of discrimination: A developmental model. *Child Development*, 76, 533-553; Hughes, J. M., Bigler, R. S., & Levy, S. R. (2007). Consequences of learning about historical racism among European American and African American children. *Child Development*, 78, 1689-1705.

<sup>5</sup> C. S. Brown & R. S. Bigler, 2005; J. M. Hughes, R. S. Bigler, & S. R. Levy, 2007.

<sup>6</sup> Harber, K. D., Gorman, J. L., Gengaro, F. P., Butisingh, S., Tsang, W., & Ouellette, R. (2012). Students' race and teachers' social support affect the positive feedback bias in public schools. *Journal of Educational Psychology*, 104, 1149; Wallace Jr, J. M., Goodkind, S., Wallace, C. M., & Bachman, J. G. (2008). Racial, ethnic, and gender differences in school discipline among US high school students: 1991-2005. *The Negro Educational Review*, 59, 47.

<sup>7</sup> Yeager, D. S., Purdie-Vaughns, V., Garcia, J., Apfel, N., Brzustoski, P., Master, A., Hessert, W. T., Williams, M. E., & Cohen, G. L. (2014). Breaking the cycle of mistrust: Wise interventions to provide critical feedback across the racial divide. *Journal of Experimental Psychology: General*, 143, 804

<sup>8</sup> Yeager, et al., in preparation.