



## RESEARCH BRIEF

for the Houston Independent School District

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## ***Does a Self-Affirmation Intervention Reduce Stereotype Threat in Predominantly Black and Hispanic High Schools?***

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*The risk of confirming negative stereotypes about one's social group, known as stereotype threat, depresses academic achievement among students of color and contributes to racial gaps in achievement. Some work finds that stereotype threat may be alleviated through self-affirmation exercises, translating into improved performance among students vulnerable to threat. However, this work has been conducted primarily in settings where students of color represent a relatively small segment of the student population. The current study explores whether this intervention is efficacious in schools where students of color are the majority. Through a randomized controlled trial of 886 students in three high schools (one predominantly Black, one predominantly Hispanic, and one mixed race school), we administered self-affirmation exercises over the course of an academic year. We found no evidence of a treatment effect of higher standardized test scores but some evidence that taking the intervention is associated with higher grades in the Spring semester for Black students, though not for White or Hispanic students. These results suggest that this intervention may have promise in settings with high concentrations of minority students for their grades, but likely not standardized test scores. Interestingly, the absence of an effect for Hispanic students suggests that stereotype threat may work differently for this group.*

### **BACKGROUND**

Nationally, Black and Hispanic students score as much as a standard deviation, or a grade level, behind their peers on a variety of standardized assessments. There are many factors that explain these gaps, but one of them is attributed to performance anxiety associated with minority status. Groups that are negatively typecast may experience fears and anxieties that inhibit their performance (e.g., girls not as good at math and science as boys, or Blacks and Hispanics not as smart as Whites). This is known as *stereotype threat*. As a result, researchers developed a series of written exercises that aim to relieve this anxiety by boosting students' self-confidence and sense of self-integrity.<sup>1,2</sup>

Previous research suggests that these written exercises can significantly improve the performance of minority students, but the efficacy of these exercises may depend on the school's racial composition. For example, *high threat* contexts are those where Black and Hispanic students are more likely to encounter stereotypes due to more contact with out-group members,

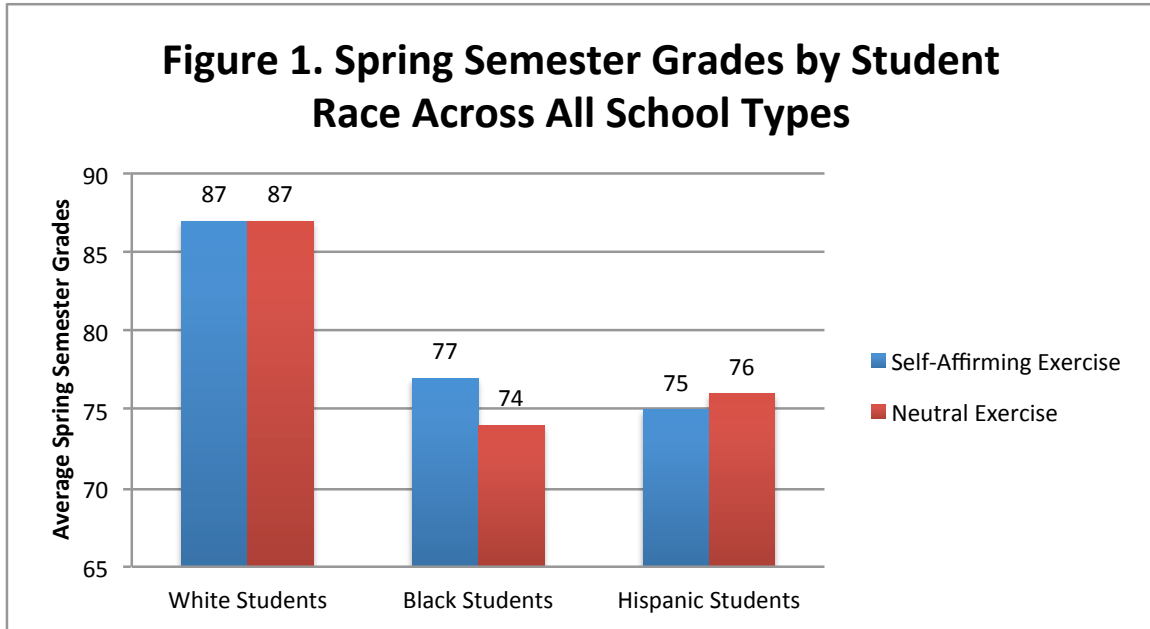
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collective threats." *Journal of personality and social psychology* 89(4):566-82.

- <sup>2</sup> Cohen, Geoffrey L., Julio Garcia, Nancy Apfel, and Allison Master. 2006. "Reducing the racial achievement gap: A social-psychological intervention." *science* 313(5791):1307-10.

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<sup>1</sup> Cohen, Geoffrey L., and Julio Garcia. 2005. "I am us': Negative stereotypes as



which is more likely when Black or Hispanic students comprise a small share of the school's racial composition. This leads to stereotype threat emerging as minority students become more aware of their "minority" status and are thus burdened with representing their group. The intervention is more likely to improve minority students' performance in this context than in a school where Black or Hispanic students comprise a large share of the school's racial composition. Because the efficacy of these exercises may depend on school racial composition, it is important to analyze how HISD schools, which are largely composed of mostly minority students, fair with these exercises. In an effort to close the racial test score gaps in HISD, the self-affirming written exercises were obtained from Dr. Geoffrey Cohen at Stanford and tested in three HISD high schools of varying racial compositions (one predominantly Black, one predominantly Hispanic, and one mixed with approximately a third Black, a third Hispanic, and a third White students).

In 2012-2013, a series of four self-affirming written exercises were administered to a randomly selected group of ninth graders during their English classes at the three high schools. The remaining ninth graders received neutral written exercises at the same time. A total of 886 ninth graders completed the written exercises. As recommended by the developer, the exercises were administered prior to test-taking, which included the STAAR assessment in Algebra I and Reading I. In order to avoid disrupting class activities, the English teachers integrated these written exercises into their classroom curriculum.

## RESEARCH QUESTIONS

1. Did students receiving the self-affirming exercise perform better than students receiving the neutral exercise?
2. Were the exercises more effective for racial minorities?
3. Were the exercises less effective in predominantly minority schools?

## KEY FINDINGS

- *Overall.* Students who received the self-affirming exercises performed about the same on STAAR Reading I and Algebra I assessments as students who received the neutral exercises.
- *All Three Schools.* Black students who received the self-affirming exercises did statistically better in their English Spring Semester grades than Black students who received the neutral exercises (see Figure 1). No such difference was identified among White or Hispanic students or for students' STAAR test scores.

- *School-Specific Results.* Among students in the predominantly Black school, those who received self-affirming exercises earned a Spring semester grade in English of 72, while their peers who received the neutral exercise achieved a 69, although not statistically significant. No such gain among those who received the self-affirming exercises was identified in the predominantly Hispanic school or the mixed school.
- *In Sum.* Racial and school-based differences persist, independent of the written exercises. Notably, the differences between schools are wider than those between race/ethnic groups.

## CONCLUSION

There is little evidence that the self-affirmation exercises enhanced the academic performance of minority students in our study population, when assessed in terms of standardized tests in Reading and Algebra as well as English Spring semester grades. A noteworthy exception is that Black students who received the self-affirmation exercises did better in their English Spring semester grades than those who received the neutral exercises. This suggests that interventions designed to reduce stereotype threat may be most effective for improving the grades of Black students and students in predominantly Black schools. More research is needed to identify interventions that are effective for Hispanic students' grades and for Black and Hispanic students' test scores.

This is an abbreviated version of a much longer research study written for peer review. For additional information on the findings presented here, or to obtain the full peer-review version of this research brief, contact the Houston Education Research Consortium at 713-348-2802 or email [herc@rice.edu](mailto:herc@rice.edu).