

Resource Guide

Understanding Stereotype Threat

The concept of stereotype threat emerged from social psychological research conducted in the 1990s by Claude Steele, Joshua Aronson, and others. As Steele and Aronson explain: “the existence of a negative stereotype about a group to which one belongs . . . means that in situations where the stereotype is applicable, one is at risk of confirming it as a self-characterization, both to one’s self and to others who know the stereotype” (1995). As the research makes clear, stereotype threat “can be disruptive enough . . . to impair intellectual performance” (Steele & Aronson, 1995).

The effects of stereotype in the classroom are striking. David Sparks explains, “some students have a fear of confirming a stereotype for a group to which they belong (e.g., race or gender), which has the potential to negatively impact their performance” (2016). For example, when female students are given a math exam and told that the exam is diagnostic of their own intellectual abilities, negative stereotypes of women as less capable mathematicians can actually negatively impact their performance on the exam. Below are some key findings about stereotype threat summarized from the literature.

- **Members of any identity group may be affected by stereotype threat.** Although most notably studied in female students and students of color in STEM (science, technology, engineering, and mathematics) fields, research shows that stereotype threat can be “triggered” or “cued” in any identity group about which a particular performance may be associated with negative stereotypes within that identity group, particularly in specific contexts and measured against specific comparison groups. For example, studies have shown that White students who are told that Asian students tend to perform better on given math tasks (thereby activating the stereotype that White students are weaker in math than Asian students) underperform on those tasks.
- **Students experiencing stereotype threat do not have to believe in the negative stereotype for the threat to affect their performance.** It is enough to simply be aware of the negative stereotype. (Indeed, studies have shown that students do not even need to be *conscious* of the stereotype during the performance.)
- **Stereotype threat is understood to be a primary cause of achievement gaps for students of color and female students in STEM fields.** Numerous studies have demonstrated the applicability of stereotype threat in education, particularly in situations where students in a negatively-stereotyped group are under-represented minorities within the performance context.

- **The harder a student under stereotype threat works at the affected performance, the greater the potential effect of stereotype threat in impairing that performance.** As Steele (2010) explains, the greater the effort being expended, the more likely it is that stereotype threat will negatively impact performance. This fact seems connected to another observation made during stereotype threat research: the more students care about the performance, the greater the likelihood stereotype threat will be a factor in the performance.
- **Stereotype threat appears to impair cognitive performance in several ways:** by decreasing a student's working memory, by changing which parts of a student's brain are being tapped during a given performance, and by increasing what psychologists refer to as overall "cognitive load" (Steele, 2010).
- **Within a classroom, stereotype threat can be activated by contextual "cues" – and the more cues there are, the greater a student's sense of identity threat based on negative stereotypes.** Some are cues instructors have control over, while others aren't. Some examples of contextual factors that indicate to a student that s/he is marginal or "other" in some way, include: number of students in a classroom in the same identity group; identity groups of instructors, course materials, and other visible markers of "authority"; either explicit or implicit bias toward the student's identity group (which may manifest itself in micro-aggressions, over-praise, lowered expectations, and other ways), particularly on the part of the instructor. Other classroom variables that may activate stereotype threat include working in small groups, discussing sensitive topics in class, and performing tasks that are explicitly associated with particular identity groups.
- **Instructors also may experience stereotype threat.** If instructors perceive that their mastery of teaching, the content of their courses, or other aspects of their teaching have the potential to confirm negative stereotypes about their identity group (e.g., gender or age), they too can be affected.

Resources

Sparks, D. (2016). Reducing Stereotype Threat in the Science and Mathematics Classroom: An Overview of Research, Best Practices, and Intervention Strategies. Currents in Teaching and Learning. Vol. 7, no. 2. Pp. 4-17.

Steele, C. M. (2010). Whistling Vivaldi: How Stereotypes Affect Us and What We Can Do. New York: Norton. LINK: <http://books.wwnorton.com/books/Whistling-Vivaldi/>.

Steele, C.M. and Aronson, J. (1995). Stereotype Threat and the Intellectual Test Performance of African Americans. Journal of Personality and Social Psychology. Vol. 69, no. 5. Pp. 797-811. <https://doi.org/10.1037/0022-3514.69.5.797>

For more information or to discuss how you might incorporate these ideas into your courses, contact the Reinert Center at cttl@slu.edu.