Stereotype Threat

Stereotype Threat

refers to the concern with being viewed through the lens of a stereotype.[1]

Stereotype threat is caused by cues in the situation that remind people of negative stereotypes.[13,18]

Anxiety over confirming these stereotypes can **impair** an individual's ability to perform up to their full potential.[2]

Research has shown that stereotype threat negatively impacts: women's math performance[3] (compared to men's), White men's math performance[4] (compared to Asian men), men's social sensitivity[5] and spatial abilities[6] (compared to women's), White athletic performance[7] (compared to Black), and Black students' verbal problem-solving abilities[1] (compared to White students').

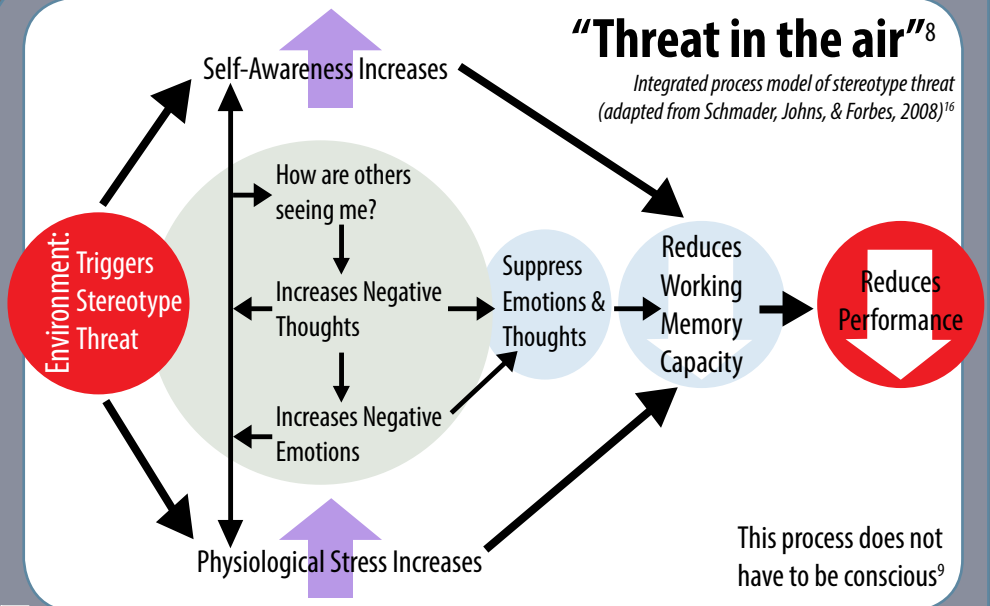
Stereotype threat may be a significant factor in undermining women's success and persistence in engineering.[13] This has important implications for STEM fields. A simple reminder of one's race or gender is enough to elicit stereotype threat.[18]

STEM fields should consider ways to create identity safe environments to help people overcome stereotype threat.

By actively **raising awareness** about stereotype threat, providing **role models**, and **encouraging self-affirmation** exercises, individuals' performances are more likely to match their potential.

"Threat in the air"[8]

Integrated process model of stereotype threat (adapted from Schmader, Johns, & Forbes, 2008)[16]



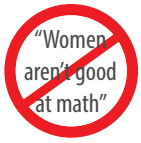
This process does not have to be conscious[9]

Environment Triggers

Don't...

... define people by their gender,

... or their group,



... or stereotype on performance expectations

Impact on STEM

Reduced:

Performance[18]

of women & minority students on the SAT, by 50 points[18]

Job Engagement & Organizational Commitment

in academia[11] & in the engineering industry[12]

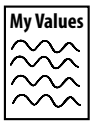
Coping Strategies & Alleviating the Threat

Role Models

Show that others have struggled and succeeded [9,17,20]

Self-Affirmation

Write about your core values[21]



Reframing the Situation

Create identity safe contexts e.g. gender-fair tests[3]

Learning about Stereotype Threat

Performance improves when stereotype threat is explained before a test[14,15,19]

Attribute the anxiety to the stereotype, not the self [14]

More information and resources at: www.wwest.ca

Westcoast Women in Engineering, Science and Technology

NSERC CRSNG

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Recommended Readings

1. http://www.reducingstereotypethreat.org/
2. Dr. Toni Schmader's website: http://schmader.psych.ubc.ca/research.html

About WWEST 2015-2020

Westcoast Women in Engineering, Science and Technology (WWEST) is the operating name for the 2015-2020 NSERC Chair for Women in Science and Technology (CWSE), BC and Yukon Region. Our mission is to promote science and to engage students, industry, and the community to increase the awareness and participation of women and other under-represented groups in science, technology, engineering, and mathematics (STEM). WWEST works locally and, in conjunction with the other CWSE Chairs, nationally on policy, research, advocacy, facilitation, and pilot programs that support women in science and engineering.

About the 2015-2020 WWEST Chairholder

Dr. Lesley Shannon P.Eng is an Associate Professor and Chair for the Computer Engineering Option in the School of Engineering Science at Simon Fraser University. Dr. Shannon studies computer systems design. She works in a rapidly growing field that combines custom computing hardware and software to design and implement application-specific computer systems for applications in a wide range of areas including robotics, machine learning, aerospace and biomedical systems, multimedia applications, and cloud computing. She teaches both undergraduate and graduate students in the area of Computer Engineering; she received the 2014 APEGBC Teaching Award of Excellence in recognition of her classroom and out-of-class mentoring activities and her contributions in leading a redesign of the School's undergraduate curriculum at SFU. Dr. Shannon has long been an advocate of increasing the diversity of students and workers in science- and engineering-related fields and was instrumental in developing programs to support a successful transition from high school into university.

More information and resources at: www.wwest.ca

WWEST 2010-2015