

## Stereotype Threat

refers to the concern with being viewed through the lens of a stereotype.<sup>1</sup>

Stereotyped threat is caused by cues in the situation that remind people of negative stereotypes.<sup>13,18</sup>

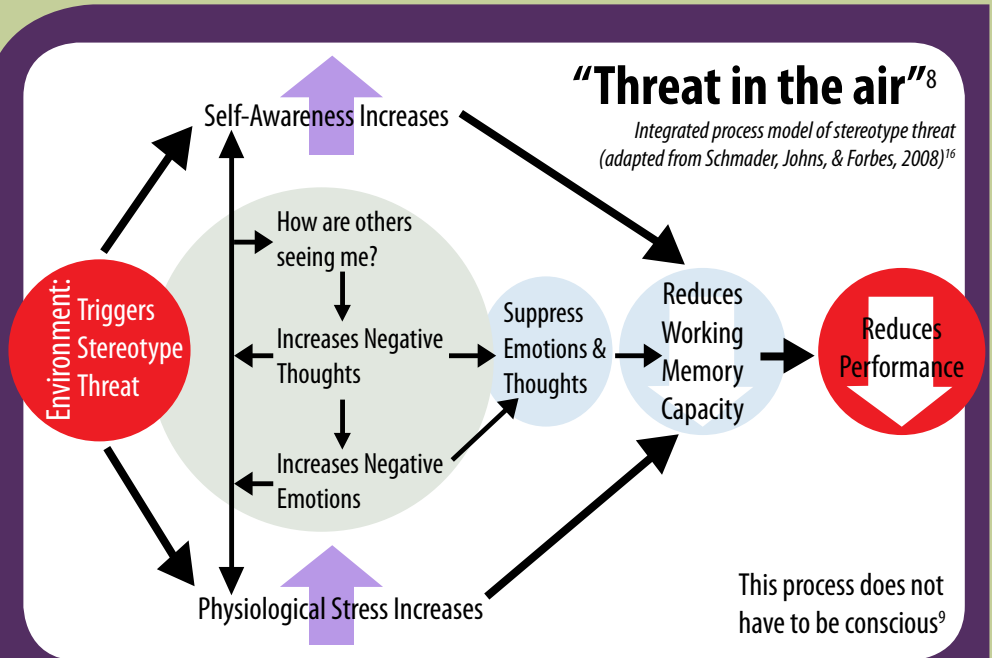
Anxiety over confirming these stereotypes can **impair** an individual's ability to perform up to their full potential.<sup>2</sup>

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

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

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.



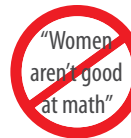
## Environment Triggers

Don't...

... define people by their gender,



... or their group,



... or stereotype on performance expectations

## Impact on STEM

Reduced:

Performance<sup>18</sup>

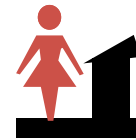
of women & minority students on the SAT, by 50 points<sup>18</sup>



Job Engagement & Organizational Commitment

in academia<sup>11</sup> & in the engineering industry<sup>12</sup>

## Coping Strategies & Alleviating the Threat

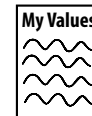


Role Models

Show that others have struggled and succeeded<sup>9,17,20</sup>

Self-Affirmation

Write about your core values<sup>21</sup>



Reframing the Situation

Create identity safe contexts e.g. gender-fair tests<sup>3</sup>

Learning about Stereotype Threat

Performance improves when stereotype threat is explained before a test<sup>14,15,19</sup>

Attribute the anxiety to the stereotype, not the self<sup>14</sup>





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Westcoast Women in Engineering,  
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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

Westcoast Women in Engineering, Science & Technology (WWEST) is the operating name for the NSERC Chair for Women in Science and Engineering (CWSE), BC and Yukon Region. Our mission is to advance engineering and science as welcoming careers that serve our world through holistic understanding and creative, appropriate and sustainable solutions. 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 Chairholder

The Chair is held by Dr. Elizabeth Croft, P.Eng., FEC, FASME. Dr. Croft is the Associate Dean, Education and Professional Development in the Faculty of Applied Science, and a Professor of Mechanical Engineering at the University of British Columbia. She is also the Director of the Collaborative Advanced Robotics and Intelligent Systems (CARIS) Laboratory. Her research investigates how robotic systems can behave, and be perceived to behave, in a safe, predictable, and helpful manner. She is the lead investigator of "Engendering Engineering Success," a 3-year interdisciplinary research project that aims to take an evidence-based approach to increasing the retention of women in engineering by understanding and changing aspects of workplace culture that place women at a disadvantage.

## Thank you to our sponsors

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