

Your gender may affect how you perceive a woman's anxiety in STEM

March 16 2018

Undergraduate students' reactions to reading about a woman's anxiety in a science, technology, engineering and mathematics (STEM) class vary by gender according to a Dartmouth-led study published in the *Psychology of Women Quarterly*.

Men are more likely than [women](#) to attribute a female [student](#)'s anxiety or self-doubt in a STEM class to internal factors such as not being prepared while women are more likely than men to attribute such emotions to external factors, including bias, [negative stereotypes](#) and unconscious bias by a professor.

For the study, undergraduate men and women were asked to read narratives about a female student facing emotional struggles in a physics class or an environmental science class, and to complete a survey evaluating why the student may have been encountering such difficulties and attribute the potential causes. The research team conducted a set of three studies and an internal meta-analysis to evaluate how the students perceived the narrative.

Women indicated that the female character's emotional responses to STEM resembled real-life situations, whereas, men responded otherwise, perceiving the narratives as less likely to reflect real-life. Men doubted that an instructor may have been affected by bias.

"As we look at the underrepresentation of women in STEM and the challenges that female [undergraduate students](#) face, it's not simply

enough to share experiences of bias and stereotypes, as each person interprets the world differently and may not necessarily perceive bias," explains lead author [Gili Freedman](#), a post-doctoral researcher at Dartmouth's [Tiltfactor](#) lab, which designs games for social change.

"The way students perceive each other affects classroom dynamics and may reinforce feelings of anxiety and bias. For example, if a male student perceives a [female student](#) as struggling in a STEM class due to factors such as a lack of preparation, he may be less inclined to want to work with her in a group project than if he thinks that she is struggling due to instructor [bias](#)," Freedman added.

More information: Gili Freedman et al. The Effect of Gender on Attributions for Women's Anxiety and Doubt in a Science Narrative, *Psychology of Women Quarterly* (2018). [DOI: 10.1177/0361684318754528](#)

Provided by Dartmouth College

Citation: Your gender may affect how you perceive a woman's anxiety in STEM (2018, March 16) retrieved 26 April 2024 from <https://phys.org/news/2018-03-gender-affect-woman-anxiety-stem.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.