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## HOW TO MAKE STEM SAFE FOR WOMEN -- A RESEARCH-BASED GUIDE

My lived experience and interactions with women suffering harassment in male-dominated institutions have made me acutely aware of the tremendous damage done to women's scholarly work and their health – with the loss of a safe workplace and the palpable fear: a fear of speaking out, a fear of reprisals. As Dresden et al. (2018, p. 2) note, “In these male-dominated environments, women may be viewed as a gender threat, or a threat to masculinity, by their male counterparts, resulting in increased hostility toward them and the creation of a negative work environment. These women are especially at risk when they occupy positions of leadership (Bartol 1999; Eagly and Karau 2002).”

Below I share research guidance on making STEM settings safe for women. You may want to also read my previous research-based guide, “How to harass women in STEM”, written in a style to provoke discussion.

**Inaction is costly.**  
**Reduced productivity.**  
**Increased turnover.**  
**Hurtful to women and men.**

“Given that job satisfaction is associated with significant financial consequences for organizations (e.g., decreased productivity and increased job turnover; Sims, Drasgow, & Fitzgerald, 2005), it is in their best interest to aggressively work to eliminate gender-based mistreatment in order to improve the workplace climate for all employees, regardless of gender. (...) In the present study, both men and women were negatively impacted by hostility directed toward women, even without personal experiences of mistreatment.” (Settles et al., 2012, p.189)

## **Awareness not enough.**

Acknowledge bias.

Work with resisting males.

Translate awareness into action.

“In many ways, evidence of bias is only as impactful as the responses it engenders.”  
“men have traditionally benefited from the existing gender status hierarchy and may thus be more threatened by experimental evidence exposing these gender-based inequities.”

“Thus, practitioners may choose to spend less time working to boost awareness/recognitions of bias, focusing instead on methods to translate awareness into action.”  
“work with individuals who do not readily acknowledge the evidence of sexism.”  
(Moss-Racusin et al. 2015, pp. 206-207)

## **Develop mentoring programs.**

Reduce isolation.

Create community.

Mentors need skills.

“A lack of access to and support from mentors is a barrier to the career success of women.<sup>16, 17</sup> (...) To be most effective, mentors must understand, acknowledge, and be sensitive to the complex challenges faced by women and URM students, including experiences of isolation, discrimination, and stereotyping.” (Carr et al., 2018, p. 3)

## **Seek cultural change.**

The social context is the problem.

Cultural transformation needed.

Provide information.

Minimize reactance.

Enhance empathy.

Encourage self-efficacy.

“Cultural transformation is needed to address the barriers to career advancement for women.” (Carr et al., 2018, p. 1) “Without such a transformation, no substantive change can be achieved.” (Carr et al., 2018, p. 6)

“Another implication of this perspective is that it moves away from viewing harassers as having something uniquely wrong with them to viewing them as having something wrong with their social context. It locates the primary cause of SBH in gender hierarchy and the incentives it provides individuals to define social status based on sex.” (Berdahl, 2017, p. 653)

“(…) Zawadzki, Shields, Danube, and Swim, (2014) argued that four elements are important to consider when designing interventions to reduce sexism: providing information, minimizing reactance, enhancing empathy, and encouraging self-efficacy.” (McClelland & Holland, 2015, p. 221)

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