

Effects of Ally Confrontation on Target Outcomes

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Objective:

Women often experience sexism in their everyday STEM environments. The negative impact could be lessened if an ally or bystander confronts the perpetrator. The purpose of this study is to observe the effects of ally confrontation on the target of the sexist action.

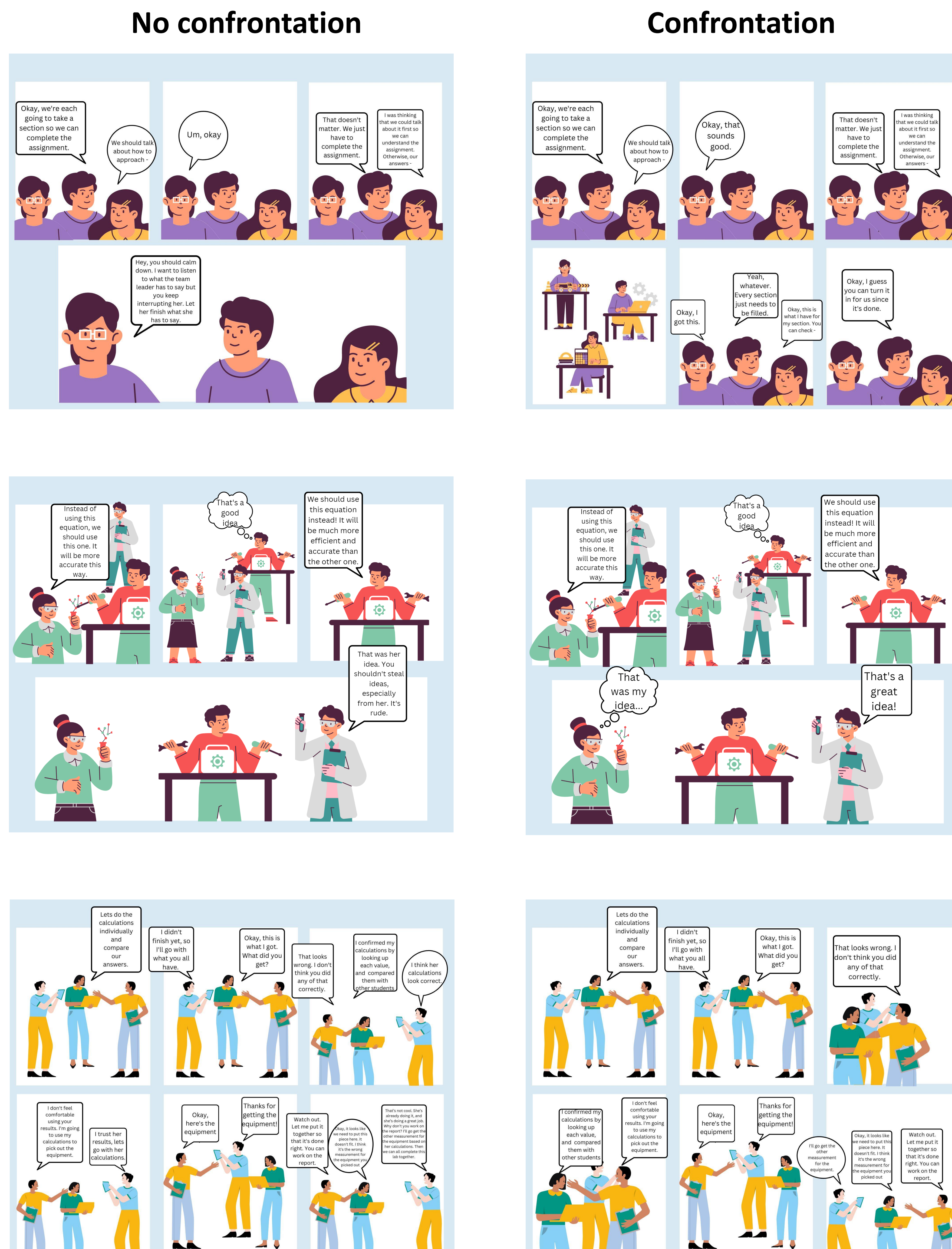
Overview & Hypotheses:

- **Study 1:** Pilot study to verify materials: Do the scenarios elicit low sense of belonging, identity safety, and self-esteem for women as expected?
 - o We will test whether one scenario is perceived as more biased and elicits lower belonging, identity safety, and self-esteem than the other scenarios
 - o We will use the scenario that elicits the lowest belonging, identity safety, and self-esteem for Study 2
- **Study 2:** Main study: Does ally confrontation mitigate the negative effects of the sexist scenario?
 - o If there is a confrontation by an ally, then women will feel validated, giving them a sense of belonging, identity safety, and buffered self-esteem. We expect a similar pattern for men, albeit smaller.

Study 1 Methods:

- Study 1 is a pilot study to see if there are differences in situations (and identify which scenario produces the largest effect) on the target in terms of perceived bias, belonging, identity safety, and self-esteem.
- **Participants:** 82 women and men STEM professionals recruited from the Prolific online participant pool.
- **Procedures:** Participants will complete the study online where they will read each scenario and rate their sense of belonging and identity safety after each scenario.
- **Independent Variables** Scenario: Stolen idea, Interruption, Taking over
- **Measures:** Participants will respond to all items on a 7-pt Likert scale (1=strongly disagree, 7=strongly agree)
 - o Perceived bias (5 items): "To what extent do you think Brad's behavior was discriminatory"
 - o Belonging (adapted from Good et al, 2012): 10 items (e.g., "This experience would make me feel valued")
 - o Gender-based identity safety (adapted from Cundiff et al., 2018): 6 items (e.g., "If I was a science major at this university, I would feel like I would have to continually 'prove' myself because of my gender") (reverse-scored).
 - o Self-esteem (adapted from Rosenberg, 1965): 10 items (e.g., "The way my lab mates behaved made me feel like I am able to do things as well as most other people")

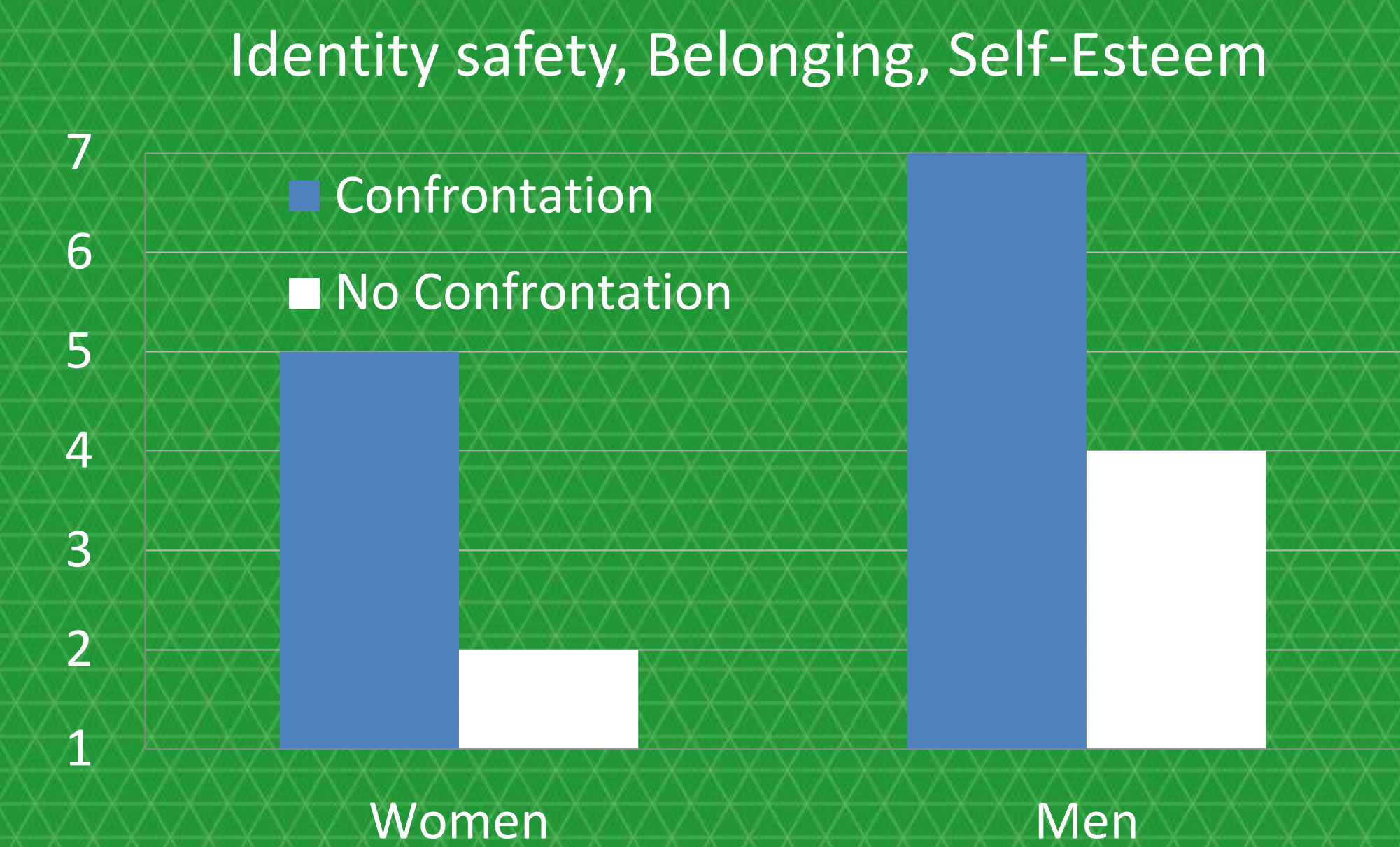
Study Materials:



Study 2 Methods:

- **Participants:** 245 women and men STEM professionals recruited from the Prolific online participant pool
- **Procedure:** Participants will complete the study online. Participants will be randomly assigned to read one of two scenarios; the scenario will have a bystander that either confronts or does not confront the biased behavior. After reading the scenario, participants will complete the dependent measures: sense of belonging, identity safety, and self-esteem
- **Independent Variables:**
 - o Ally confrontation (yes, no)
 - o Participant gender (women, men)
- **Measures:** Belonging, Identity safety, Self-esteem (same as Study 1)

Expected Results for Study 2:



Implications:

Gender bias in male-dominated fields (STEM) can cause lower sense of belonging, identity safety, and self-esteem for women. One way to mitigate the negative effects of bias is for allies (members of non-targeted groups) to confront the bias. If results show that ally confrontation can effectively mitigate negative effects of bias, this can be an effective target for future interventions and training.