

Overview

Competitions are increasingly prevalent in the global labor market (Lavy, 2004; Lemieux, MacLeod, & Parent, 2009) and the winners of competitions are disproportionately rewarded (Frank & Cook, 2010). Understanding individual differences in response to competitive situations may help address economic disparities across groups, like persistent gender differences in labor market outcomes (Altonji & Blank, 1999; Blau & Kahn, 2017). Our proposed work will examine how much effort women choose to expend before entering a competition. Study 1 will examine how tournament and piece-rate payment schemes for performance on a multiplication task affect how much time men and women spend practicing multiplication. We hypothesize that women will spend more time, on average, preparing relative to men, especially under a tournament payment scheme. In Study 2, we will explore the boundary conditions of the findings from Study 1 by manipulating beliefs about gender differences in performance on a gender-neutral matching task. We expect women will spend significantly more time preparing for the matching task when participants believe, based on how previous research is described, men will outperform women, but the gender difference in preparation will be reduced when participants believe women will outperform men.

Intellectual merit

The proposed work will advance knowledge by providing the foundation for a fruitful line of work focused on gender differences in the choice to prepare before a competition and its possible economic ramifications for women. Additionally, many standard economic models do not account for gender differences in behavioral traits as explanations for gender differences in economic outcomes (Niederle, 2017). The current proposal will demonstrate the need to include gender-based behavior in future economic models (e.g., Akerlof & Kranton, 2000), and provide data to lay the foundation for building these models. Also, gender differences in willingness to prepare before competition may serve as a possible explanation for robust gender differences in the choice to compete, which has not yet been fully explained in previous research (Niederle & Vesterlund, 2011). Specifically, gender differences in the choice to compete may result from women's desire to spend more time preparing before willingly entering a competition. Thus, the proposed research will identify a robust phenomenon that previous researchers have not yet considered in explaining gender differences in the choice to compete.

Broader impacts

Much of the research on gender differences in competitiveness is focused on designing interventions to increase women's competitiveness, with less attention paid to potential downstream consequences of these interventions. Yet, understanding how women and men respond to competitions may also be crucial for addressing gender disparities in labor market outcomes. If competitions exacerbate gender differences in the amount of effort exerted (e.g., preparing or studying) before performance, this may affect women's labor output, career advancement, the ability to achieve a satisfying work-life balance, and even the decision to enter or stay in competitive environments. Additionally, there are opportunity costs for expending more effort than necessary on only one task or skill, especially when an individual's overall performance is evaluated based on their success across many domains. These effects are especially relevant to professional development in STEM fields, where gender disparities are arguably driven by gender differences in confidence (Cheryan, Ziegler, Montoya, & Jiang, 2017), increasing the likelihood women will overprepare before competition. Finally, the current grant would support the research efforts and training of a graduate student from an underrepresented group. Specifically, this grant would help Ms. Richards, a woman of color, successfully complete her dissertation. Ms. Richards's success and advancement in the academy would serve as a model for other underrepresented groups.