



# How Sexist Attitudes Relate to Academic Self-Efficacy and Engagement Across Gender and Field

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## INTRODUCTION

Despite comparable academic presence (England, 2020) and credentials (Tartari & Salter, 2015), women remain less actively engaged in academia than men—for example, they ask fewer questions in class (Carter et al., 2018) and participate less in industry collaborations (Tartari & Salter, 2015). These disparities reflect not only structural barriers but also internalized constraints such as fear of judgment, fear or failure, and low confidence (Carter et al., 2018).

Academic self-efficacy—belief in one's ability to succeed—is central to motivation and engagement (Kuchynka et al., 2018; Wood & Bandura, 1989), yet it may be undermined by *benevolent sexism*—attitudes that idealize women as needing protection and guidance (Glick & Fiske, 2001). Though seemingly positive, such views can foster dependence and limit autonomy, especially in male-dominated fields (e.g., King et al., 2012; Shnabel et al., 2016).

Although benevolent sexism has been linked to women's lower self-efficacy and psychological distress in general contexts (e.g., Szymanski et al., 2009), its role in women's academic involvement remains unclear. It may serve as a barrier—or, in some settings, offer social validation or sense of belonging.

## RESEARCH QUESTION

Does benevolent sexism predict academic self-efficacy and engagement—and do these associations differ by gender and field of study?

## RESULTS

Two regression models tested effects of benevolent sexism, gender, and academic field on (1) academic self-efficacy and (2) academic engagement, including interaction terms.

Psychometrics and GPA were held as control variables in both models.

**Academic Self-Efficacy** - In the regression model for self-efficacy, a significant main effect was found for benevolent sexism ( $\beta = .24, p = .0193$ ) and for GPA ( $\beta = .03, p = .021$ ). No other main effects were significant ( $ps > .162$ ).

A significant two-way interaction was found between benevolent sexism and faculty ( $\beta = .23, p = .024$ ), while the two-way interactions between benevolent sexism and gender, and between gender and faculty, were not significant ( $ps > .583$ ).

The three-way interaction between benevolent sexism, faculty, and gender approached significance ( $\beta = -.17, p = .094$ ).

Among women in male-dominated faculties, benevolent sexism strongly predicted higher self-efficacy ( $\beta = .69, p < .000$ ), but not among women in female-dominated faculties ( $\beta = -.10, p = .320$ ). No significant associations were found among men ( $ps > .140$ ).

**Proactive Engagement** - In the regression model for engagement, benevolent sexism also had a significant main effect ( $\beta = .22, p = .045$ ). No other main effects were significant ( $ps > .066$ ).

No significant two-way interactions were observed ( $ps > .275$ ). The three-way interaction between benevolent sexism, faculty, and gender was marginal ( $\beta = -.21, p = .059$ ).

## HYPOTHESES

Although the study was exploratory in nature and considered associations across genders and fields, we formulated the following theory-informed hypotheses:

1. Gender Moderation (Across Fields): Among women (vs. men), benevolent sexism will negatively predict academic self-efficacy.
2. Field Moderation (Women): This negative association will be strongest among women in male-dominated faculties (e.g., engineering, physics) vs. female-dominated faculties (e.g., education, health).
3. Field Moderation (Men): Among men, benevolent sexism will negatively predict self-efficacy in female-dominated faculties, but not in male-dominated faculties.

## METHODOLOGY

**Participants:** 140 undergraduate students (49 men:  $M_{age} = 27.7, SD_{age} = 7.64$ ; 91 women,  $M_{age} = 25.7, SD_{age} = 1.58$ ) from diverse faculties participated voluntarily and anonymously.

**Procedure:** Participants completed the following measures sequentially: the Learning Self-Efficacy Questionnaire (12 items,  $\alpha = 0.81$ ; Zimmerman & Bandura, 1992); the Academic Engagement Scale (5 items,  $\alpha = 0.86$ ; Reeve, 2013); and the Ambivalent Sexism Scale (12 items; Glick & Fiske, 2001) for benevolent sexism ( $\alpha = 0.77$ ) and hostile sexism ( $\alpha = 0.87$ ). Finally, demographic data included age, gender, faculty, psychometric score, and current GPA.

## DISCUSSION & CONCLUSIONS

Contrary to hypotheses, benevolent sexism was positively associated with women's academic self-efficacy and engagement, particularly in male-dominated faculties. This suggests it may serve a compensatory function, offering a sense of validation or belonging in demanding or male-dominated contexts.

However, these findings warrant caution. The associations observed do not imply causality: women with higher self-efficacy may also interpret benevolent attitudes more positively. Also, the lack of associations among men may reflect different mechanisms, or limited statistical power due to smaller sample size. The complex interaction models may have exceeded the sample's capacity to detect effects reliably. Some null or marginal results may therefore reflect power limitations rather than true absence of relationships. Overall, these preliminary findings offer early insight into the role of gendered attitudes in academic motivation. Further research with larger, more diverse samples is needed to replicate these patterns and clarify underlying mechanisms such as perceived support, identity, and belonging.

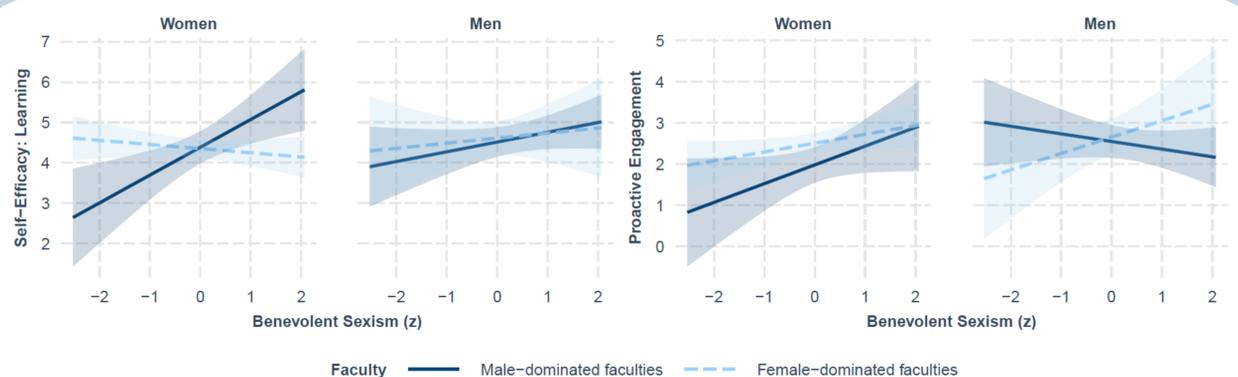


FIG. 1: Predicted Self-Efficacy for Learning by Benevolent Sexism, Participant Gender, and Faculty.

FIG. 2: Predicted Proactive Academic Engagement by Benevolent Sexism, Participant Gender, and Faculty.

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