



INTRODUCTION:

Social Role Theory: Gendered behaviors stem from culturally assigned roles (Eagly & Wood, 2012).

Feminine Norms: Prescribe that women be gentle, passive, and dependent- qualities challenged by displays of physical strength (Musolino et al., 2021; Rosdahl, 2014).

Body Ideals: Both men and women prefer low body fat over muscle mass in women and associate muscularity with masculinity (Brierley et al., 2016; McCreary et al., 2005).

Muscular Women: Judged as less feminine, less attractive, and more stereotypically masculine (Forbes et al., 2004).

Benevolent Sexism: Rewards women who conform to traditional femininity (Bareket & Fiske, 2023). Women who defy these norms, like muscular women, may be penalized (Rosdahl, 2014).

Research Gap: Although muscular women are known to elicit negative judgments in terms of social and attractiveness judgments (Forbes et al., 2004), their links to sexist attitudes remains underexplored. This study addresses that by focusing on benevolent sexism, which reinforces appearance-based norms (Sáez et al., 2025). Hostile sexism, which targets broader gender nonconformity (Bareket & Fiske, 2023), was explored as well.

OBJECTIVE:

To test whether benevolent sexism predicts how muscular vs. non-muscular women are perceived in terms of attractiveness, femininity, and masculinity.

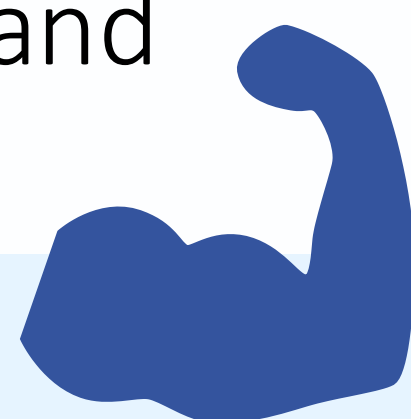
HYPOTHESES:

H1 - Main Effects: Muscular women will be rated as less attractive, less feminine, and more masculine than non-muscular women.

H2 - Moderation: These effects will be stronger among participants high (vs. low) in benevolent sexism (and hostile sexism, as exploratory hypothesis).

PROCEDURE:

Participants viewed randomized images of muscular and non-muscular women, rated each image on the seven traits, and then answered the sexism and demographic measures.



METHOD:

- Design:** Within-subjects.
- Stimuli:** 10 AI-generated images (5 pairs of muscular vs. non-muscular women).
- Sample:** $N = 112$, aged 18–66 ($M = 34.11$, $SD = 14.4$); 46 men, 59 women, 7 other.
- Measures:**
- 6-item Sex-Role Stereotype Questionnaire** (Musolino et al., 2021) - assessed feminine traits ($\alpha_{\text{muscular}} = .85$, $\alpha_{\text{non-muscular}} = .75$) and masculine traits ($\alpha_{\text{muscular}} = .84$, $\alpha_{\text{non-muscular}} = .76$) per image.
 - Single-item Attractiveness** (Musolino et al., 2021) - assessed per image (6-point Likert; $\alpha_{\text{muscular}} = .84$, $\alpha_{\text{non-muscular}} = .70$).
 - 12-item Ambivalent Sexism Inventory** (Glick & Fiske, 1996) - assessed benevolent ($\alpha = .76$) and hostile sexism ($\alpha = .80$).



RESULTS:

- Linear mixed model analysis- 'high' and 'low' sexism levels were defined as ± 1 standard deviation from the mean.
- H1- Main Effects:** Muscular (vs. non-muscular) women were rated as less attractive ($\beta = -1.45$, $p < .001$), less feminine ($\beta = -0.87$, $p < .001$), and more masculine ($\beta = 0.86$, $p < .001$).
 - H2- Benevolent Sexism $\times$ Body Type:** Participants high (vs. low) in benevolent sexism rated muscular (vs. non-muscular) women as less feminine ($\beta = -0.17$, $p = .004$).
 - Exploratory- Hostile Sexism $\times$ Body Type:** Participants high (vs. low) in hostile sexism rated muscular (vs. non-muscular) women as less attractive ($\beta = -0.22$, $p = .030$).

DISCUSSION & CONCLUSIONS:

- Benevolent sexism penalizes women who deviate from traditional feminine ideals.
- Hostile sexism reflects backlash against gender nonconformity, particularly physical strength in women.
- Across the board, muscular women were rated as more masculine, suggesting that physical strength is culturally linked to masculinity, beyond individual attitudes.

REFERENCES:

Bareket, O., & Fiske, S. T. (2023). A systematic review of the ambivalent sexism literature: Hostile sexism protects men's power; benevolent sexism guards traditional gender roles. *Psychological Bulletin*, 149(11–12), 637–698.

Brierley, M., Brooks, K. R., Mond, J., Stevenson, R. J., & Stephen, I. D. (2016). The body and the beautiful: Health, attractiveness and body composition in men's and women's bodies. *PLoS ONE*, 11(6), e0156722.

Eagly, A. H., & Wood, W. (2012). Social Role Theory. In *Handbook of Theories of Social Psychology* (9th ed., Vol. 2, pp. 458–476). SAGE Publications Ltd.

Forbes, G. B., Adams-Curtis, L. E., Holmgren, K. M., & White, K. B. (2004). Perceptions of the social and personal characteristics of hypermuscular women and of the men who love them. *The Journal of Social Psychology*, 144(5), 487–506.

Glick, P., & Fiske, S. T. (1996). The Ambivalent Sexism Inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology*, 70(3), 491–512.

McCreary, D. R., Saucier, D. M., & Courtenay, W. H. (2005). The drive for muscularity and masculinity: Testing the associations among gender-role traits, behaviors, attitudes, and conflict. *Psychology of Men & Masculinity*, 6(2), 83–94.

Musolino, E. A., O'Connor, B. P., & Cioe, J. D. (2021). Bigger isn't always better: An exploration of social perception bias against high levels of muscularity in women. *The Journal of Social Psychology*, 162(5), 523–539.

Rosdahl, J. (2014). The myth of femininity in the sport of bodysculpting. *Social Alternatives*, 33(2), 36–42.

Sáez, G., Riemer, A. R., Klein, O., & Gervais, S. J. (2025). The evaluative process model of objectification: How men's evaluations of patriarchal security and women's fit with conventional beauty and sexuality norms interact to predict perpetration of sexually objectifying behaviors. *Frontiers in Social Psychology*, 2.

