

Facial masculinity is a cue to women's dominance¹

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Introduction: Many previous studies suggest that masculine characteristics in men are positively correlated with indices of their dominance²⁻³. By contrast, very few studies have tested for links between masculine physical characteristics and dominance in women. Thus, we investigated the relationship between women's facial masculinity and their scores on the dominance subscale of the International Personality Items Pool⁴ (IPIP).

Methods

Full-face photographs of 93 women (mean age = 19.82 years, $SD = 2.17$ years) were taken under standardized photographic conditions. Images were masked so that hairstyle and clothing were not visible (see examples below).



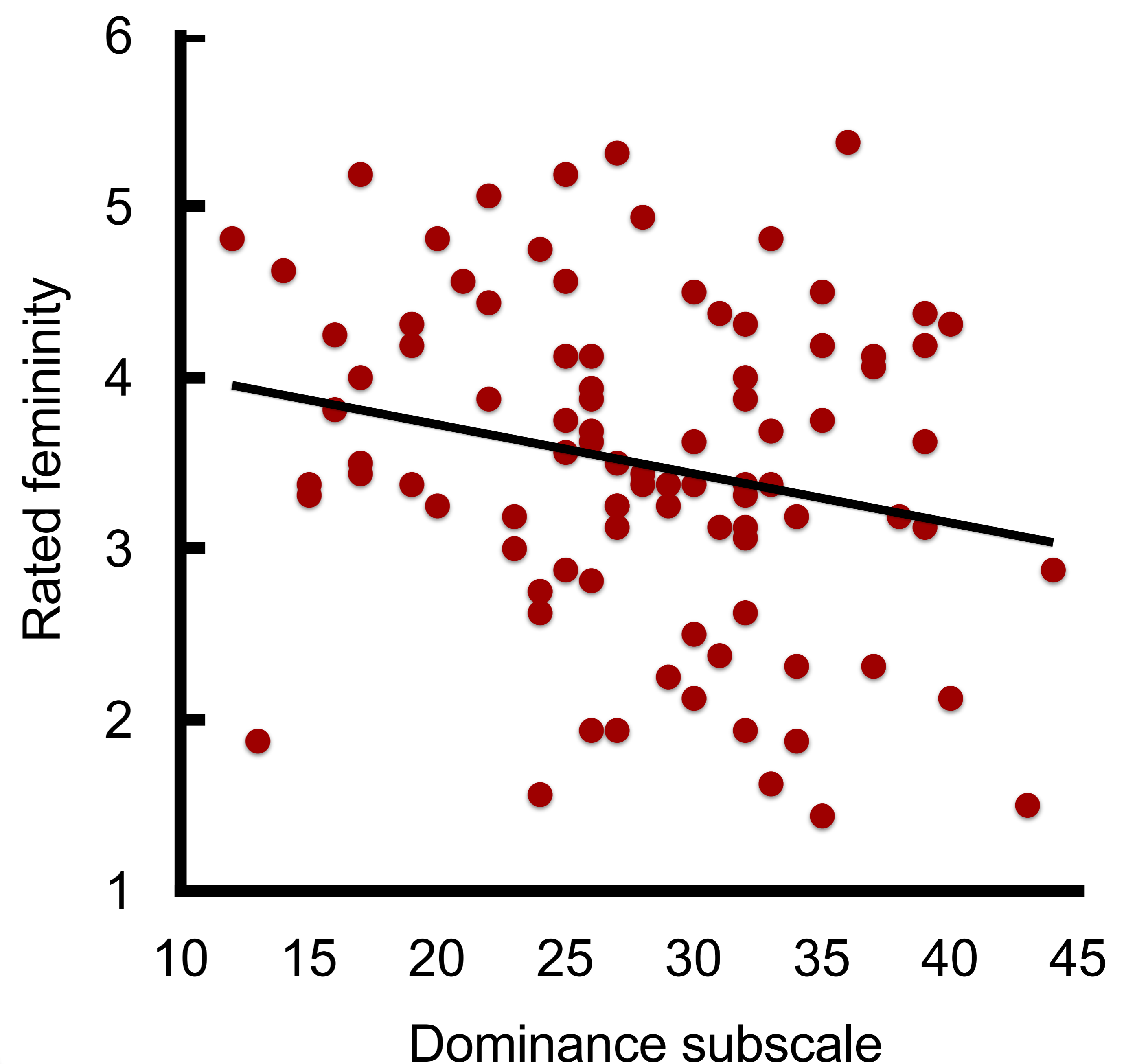
Each participant also completed the dominance subscale of the IPIP, which assesses the extent to which respondents dominate their peers during social interactions⁴ and has been used in previous studies⁵⁻⁶. The dominance subscale consists of 11 statements (e.g. "I impose my will on others") and participants indicate how accurately each statement describes them using a 1 (very inaccurate) to 7 (very accurate) scale. Internal consistency was very good (Cronbach's alpha = 0.75).

The face images were rated for femininity and attractiveness by 29 participants using 1 (very low) to 7 (very high) scales. Inter-rater agreement was very high (both Cronbach's alpha > 0.94).

Results

Regression analysis revealed a significant negative relationship between women's scores on the dominance subscale and their femininity ratings ($t = -2.16$, $\beta = -.32$, $p = .033$).

The relationship between women's scores on the dominance subscale and their attractiveness ratings was not significant, however ($t = 0.93$, $\beta = .14$, $p = .36$). Including age as an additional predictor did not alter this pattern of results.



Conclusions: Ratings of women's femininity were negatively correlated with their scores on the dominance subscale of the IPIP. This finding suggests an association between facial masculinity and dominance in women, complementing prior work reporting that masculine women are perceived to be more dominant than their relatively feminine peers⁶⁻⁸.

References: [1] Quist et al. (2011). *Personality and Individual Differences*, 50: 1089-1093. [2] Fink et al. (2007). *American Journal of Human Biology*, 19, 82-87. [3] Mueller & Mazur (1996). *Behavioral Ecology*, 8, 569-579. [4] Goldberg (1999). *Personality Psychology in Europe*, 7, 7-28. [5] Havlicek et al. (2005). *Biology Letters*, 1, 256-259. [6] Watkins et al. (2010). *Personality and Individual Differences*, 49, 967-971. [7] Jones et al. (2010). *Animal Behaviour*, 79, 57-62. [8] Perrett et al. (1998). *Nature*, 394, 884-887.

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