

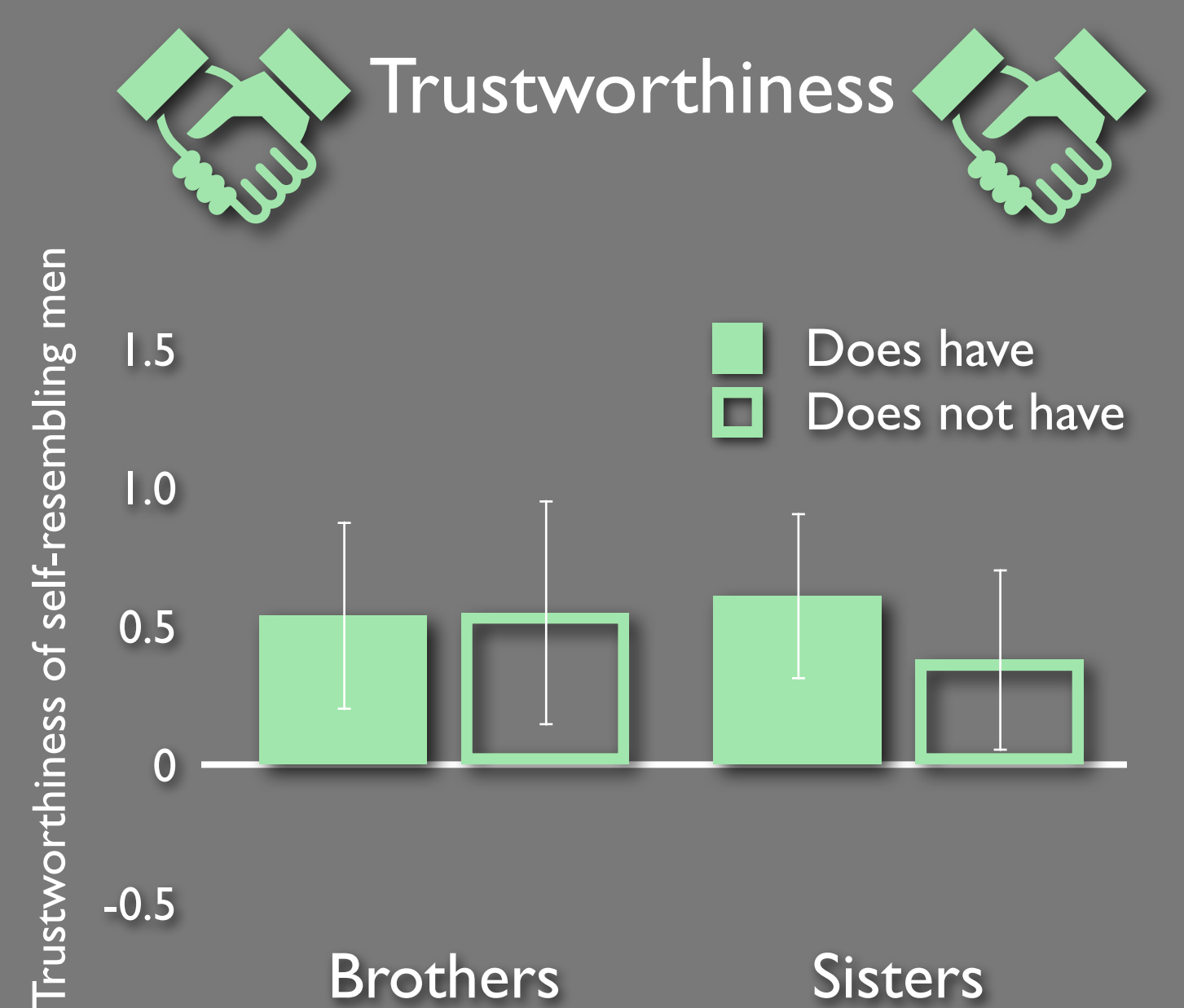
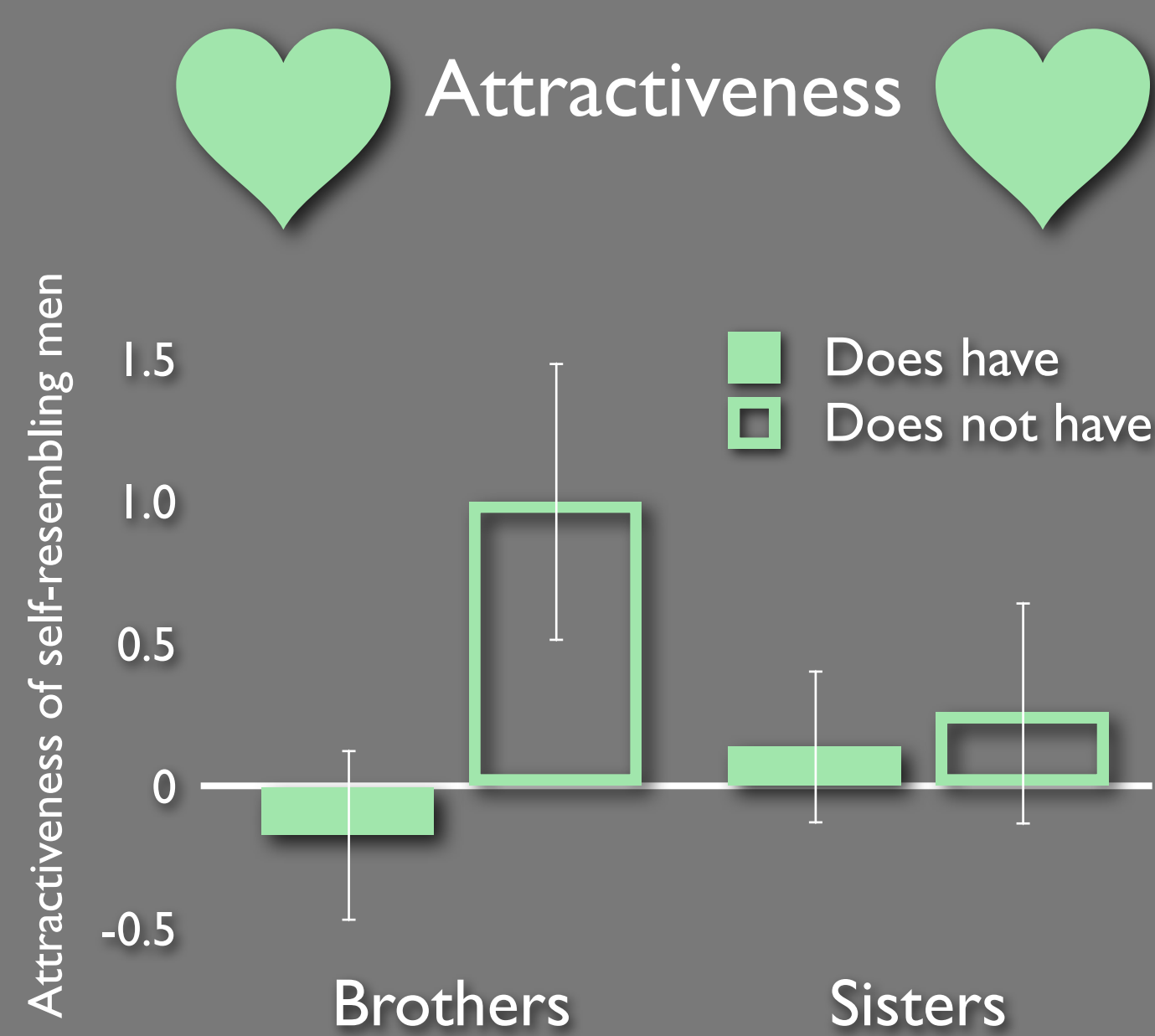
# Opposite-sex siblings decrease attraction, but not prosocial attributions, to self-resembling opposite-sex faces<sup>1</sup>

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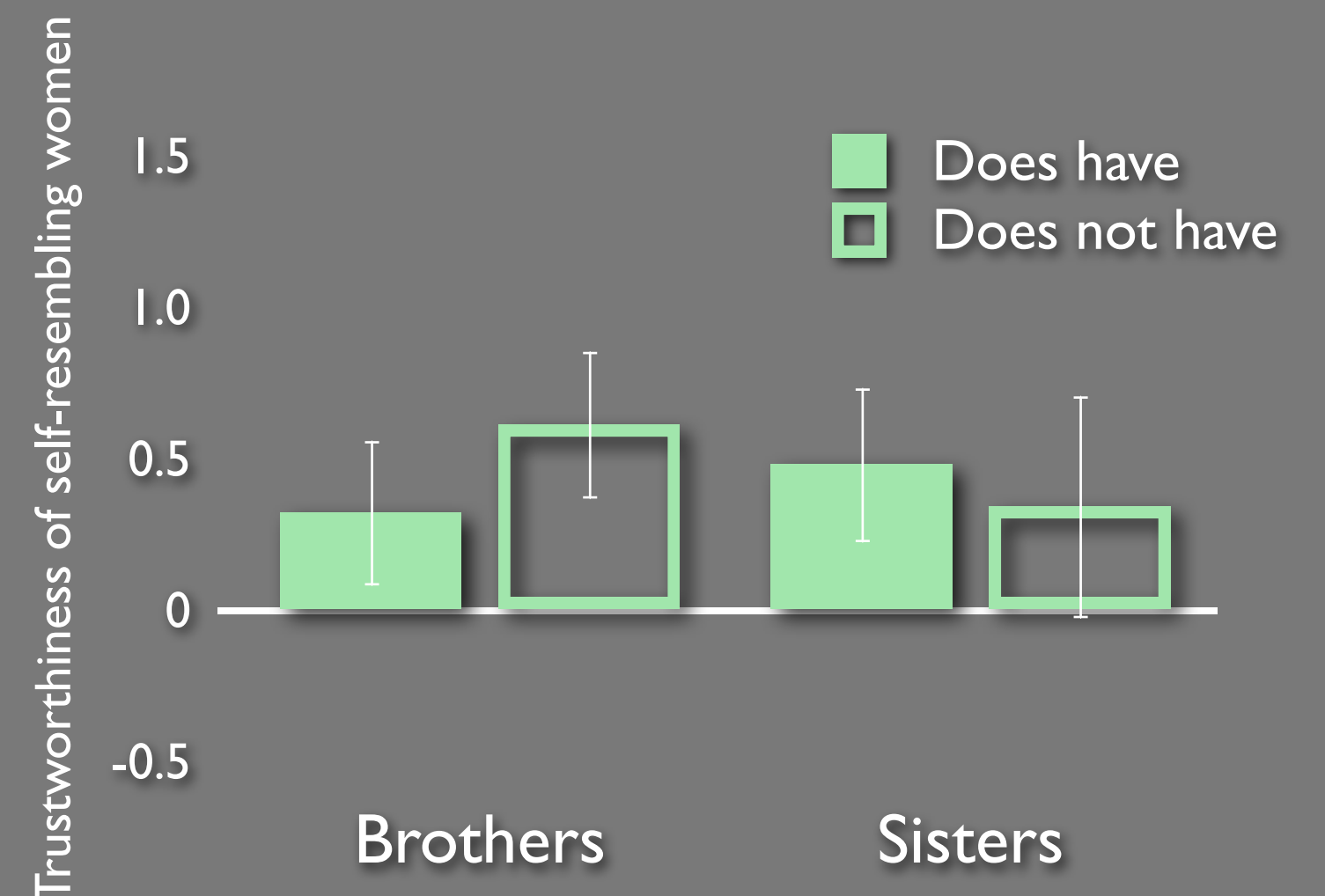
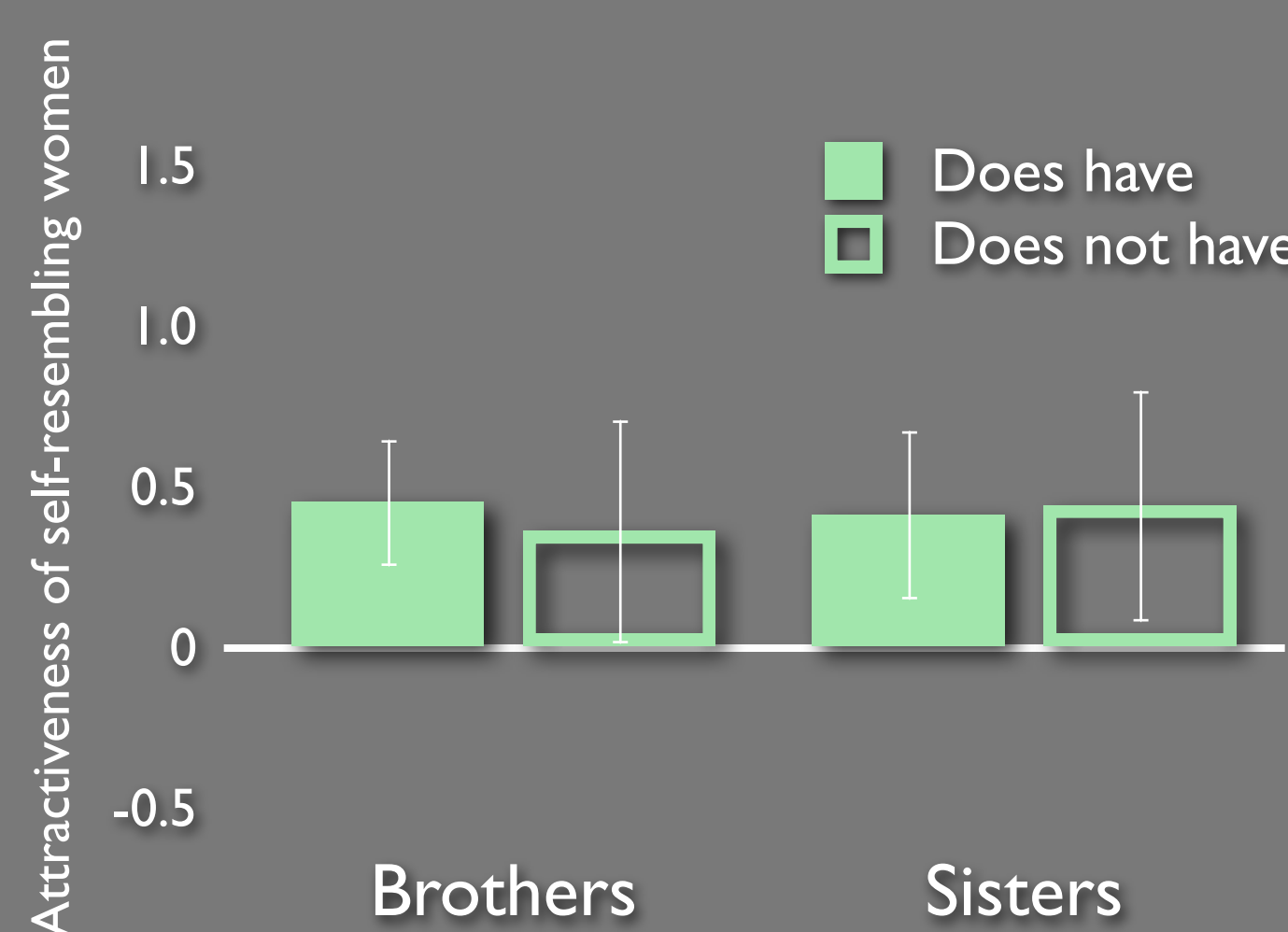
One model of human kin recognition<sup>2</sup> suggests that contextual cues of genetic relatedness, such as cosocialization and maternal–perinatal association, affect the perceived probability of genetic relatedness, which in turn modulates prosocial and inbreeding-avoidance behaviours toward specific, familiar potential siblings. Here, we test a more general alternative model in which contextual cues of kinship can influence the kin-recognition system by changing how the mechanisms that regulate social and sexual behaviour respond to cues of kinship, even in unfamiliar individuals.

156 women judged the attractiveness and trustworthiness of male and female faces that had been experimentally altered to resemble their own face. Self-resemblance biases were calculated by subtracting a matched control participant's judgments of these same faces from the experimental participant's judgments.

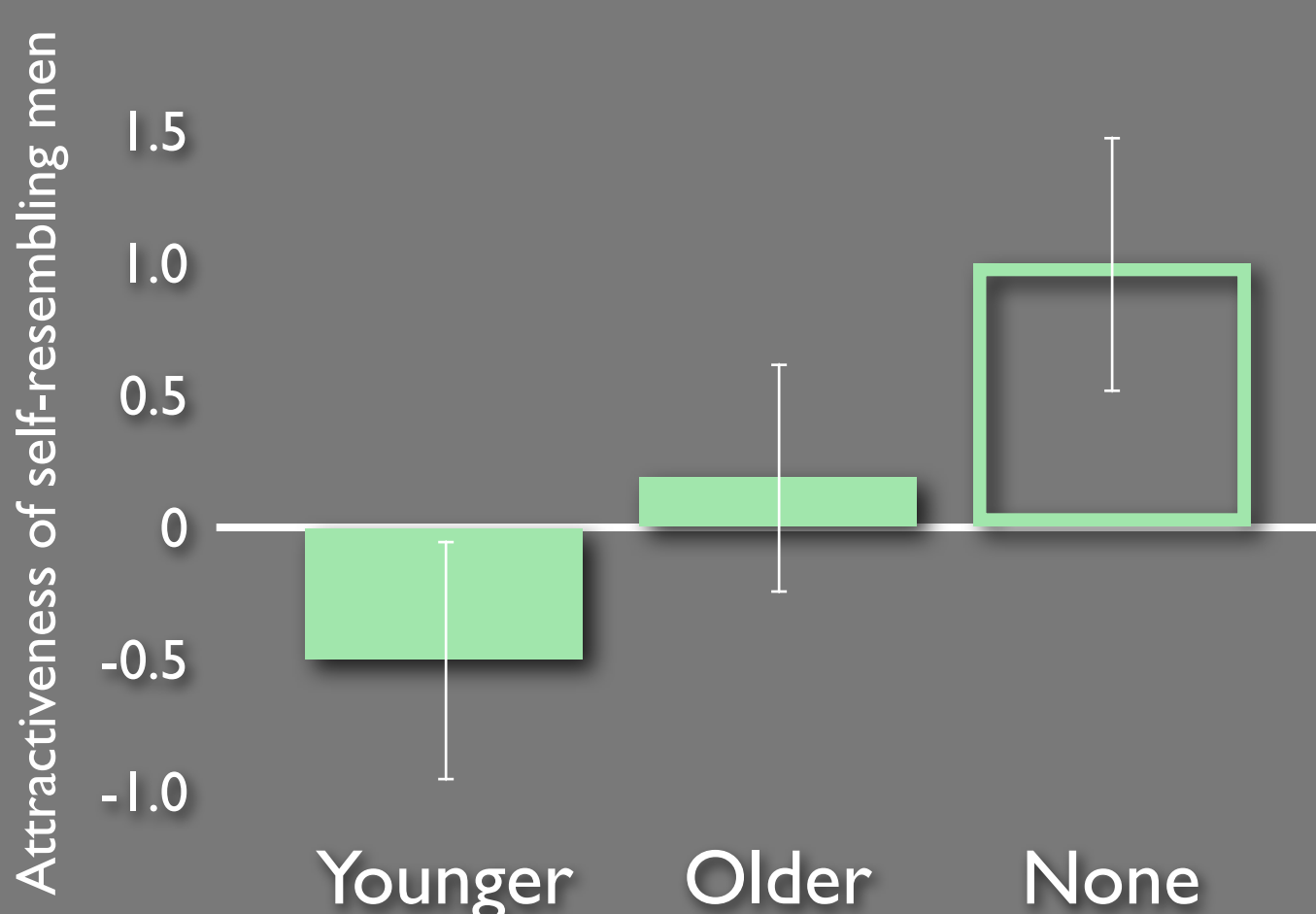
For self-resembling male faces, brothers, but not sisters, affected attractiveness, but not trustworthiness, judgments.



For self-resembling female faces, neither brothers nor sisters affected attractiveness or trustworthiness judgments.



Having opposite-sex siblings influenced inbreeding-relevant perceptions of facial resemblance (i.e., male attractiveness) but not prosocial perceptions (i.e., male trustworthiness, female attractiveness and female trustworthiness). Women with brothers were less attracted to self-resembling, unfamiliar male faces than were women without brothers, while both groups found self-resemblance to be equally trustworthy for the same faces.



This effect was also stronger in women with only younger, rather than only older, brothers, consistent with the proposal that only younger siblings exhibit the highly reliable kinship cue of maternal–perinatal association<sup>2</sup>.

Our findings provide evidence that experience with opposite-sex siblings can directly influence inbreeding-avoidance mechanisms and demonstrate a striking functional dissociation between the mechanisms that regulate inbreeding and the mechanisms that regulate prosocial behaviour toward kin.

References: <sup>1</sup> DeBruine et al. (2011). *Proc Nat Acad Sci USA* 108, 11710–11714.

<sup>2</sup> Lieberman, Tooby & Cosmides (2007) *Nature*.

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