

Wanted faces – The effect of sexual dimorphism on perceived attractiveness and motivated behavior

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Abstract

What makes a beautiful and desirable face? While prototypical and average faces are generally considered attractive (Langlois et al., 2000), sex-dimorphic facial features that are not average also seem to have an impact on how attractive a face can be (DeBruine et al, 2007).

Whereas male preference for feminized facial features in females seems straight-forward (Rhodes et al., 2006), literature shows contradicting findings for female preferences in male faces (Holtzleitner et al., 2017). As masculine facial features can serve as cues for good genes and reproductive success (Folstad & Karter, 1992), they are also associated with personality traits like non-cooperative behavior (DeBruine et al., 2010) while female facial features are associated with warmth (Oh et al., 2018)

But which facial features are affecting not only judgements of attractiveness but also elicit effort to visually consume them? On the basis of Berridge's (1996) theories of "liking" and "wanting", it is assumed that faces can not only hold hedonic values but also have an incentive effect on induced effort (Aharon et al., 2001; Dai et al., 2010).

Hypotheses

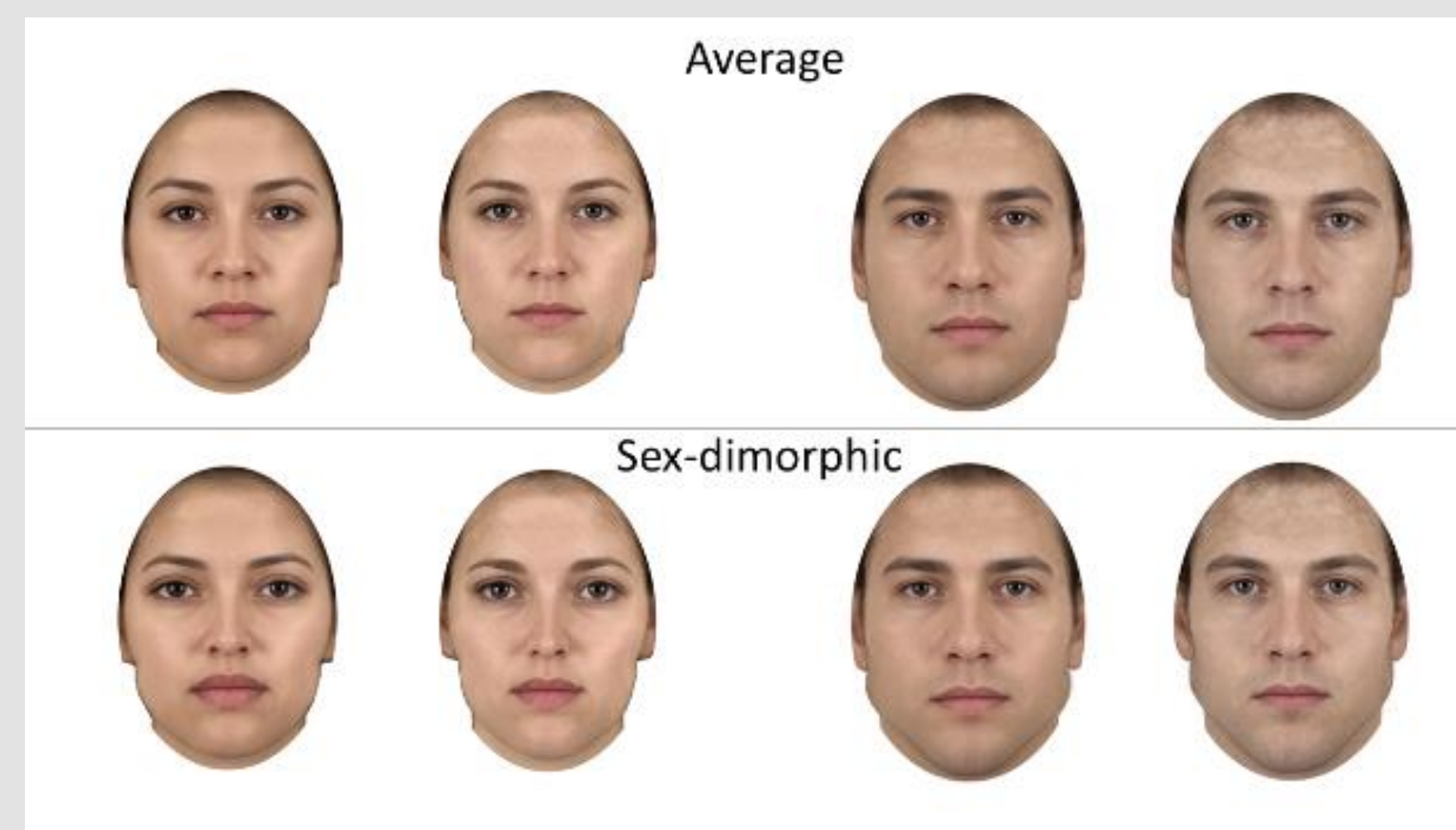
H1: Perceived attractiveness for same and opposite gender faces should not differ irrespective of their face type (average or sex-dimorphic)

H2a: Male motivated behavior is only affected by opposite gender and not by same gender sex-dimorphic and not average target faces.

H2b: Female motivated behavior is weakly affected by opposite gender sex-dimorphic but not by average faces.

Method and stimuli

To test the assumptions, female and male face compositions were created using the face morphing software program "Webmorph" (DeBruine, 2018). These created average faces were then delineated and adapted with gender-specific facial features that are characterized as feminine and masculine.

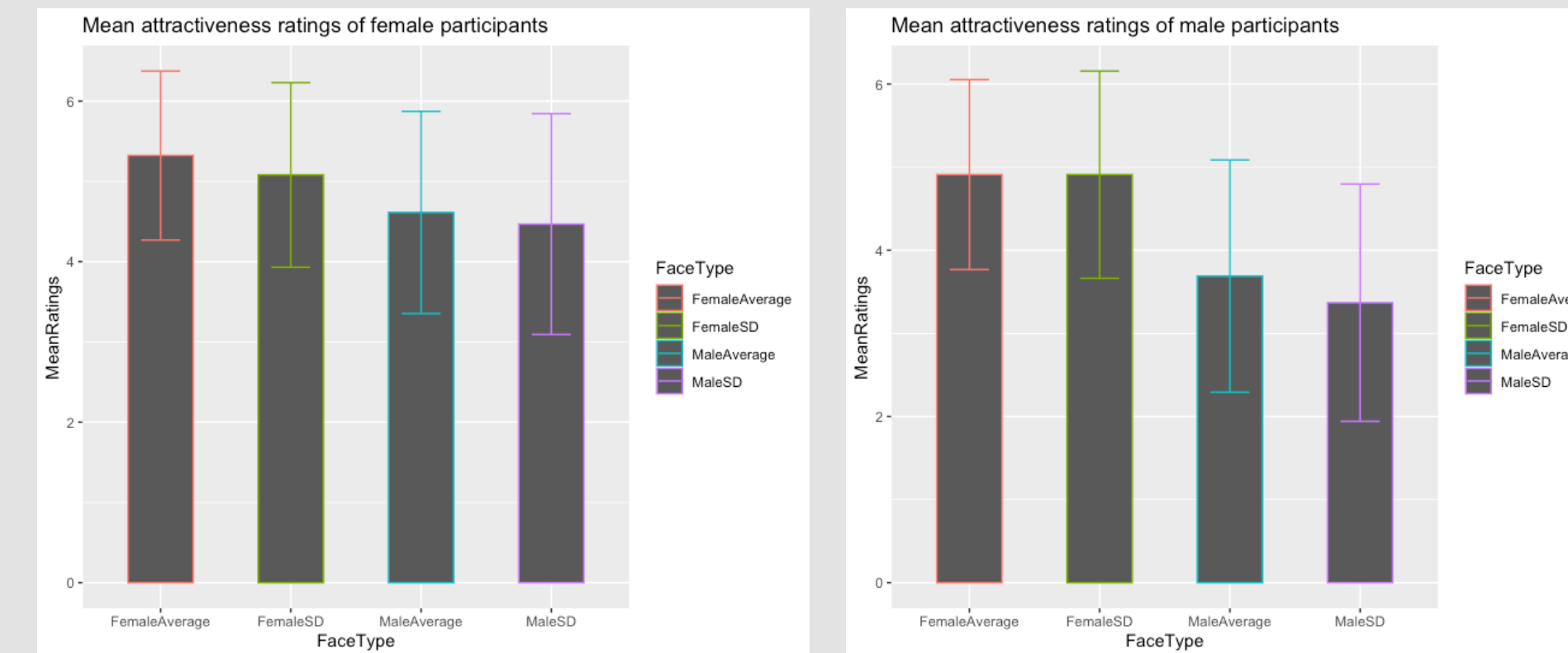


These faces were then tested in a 2x2x2x2 within-subjects sexual dimorphism (yes/no) x face gender (female/male) x type of measure (attractiveness rating/clicking task) and between-subjects participants gender (female/male) experimental design. To test both perceived attractiveness (liking) and the effect on motivated behavior (wanting). Participants had to both rate and view faces in two counterbalanced tasks. In the attractiveness task participants rated each face according to attractiveness on a 7 point scale (1=Not at all attractive, 7=Very attractive) and in the clicking task they were able to increase viewing time of each face on screen by repeatedly clicking a "View longer" button.

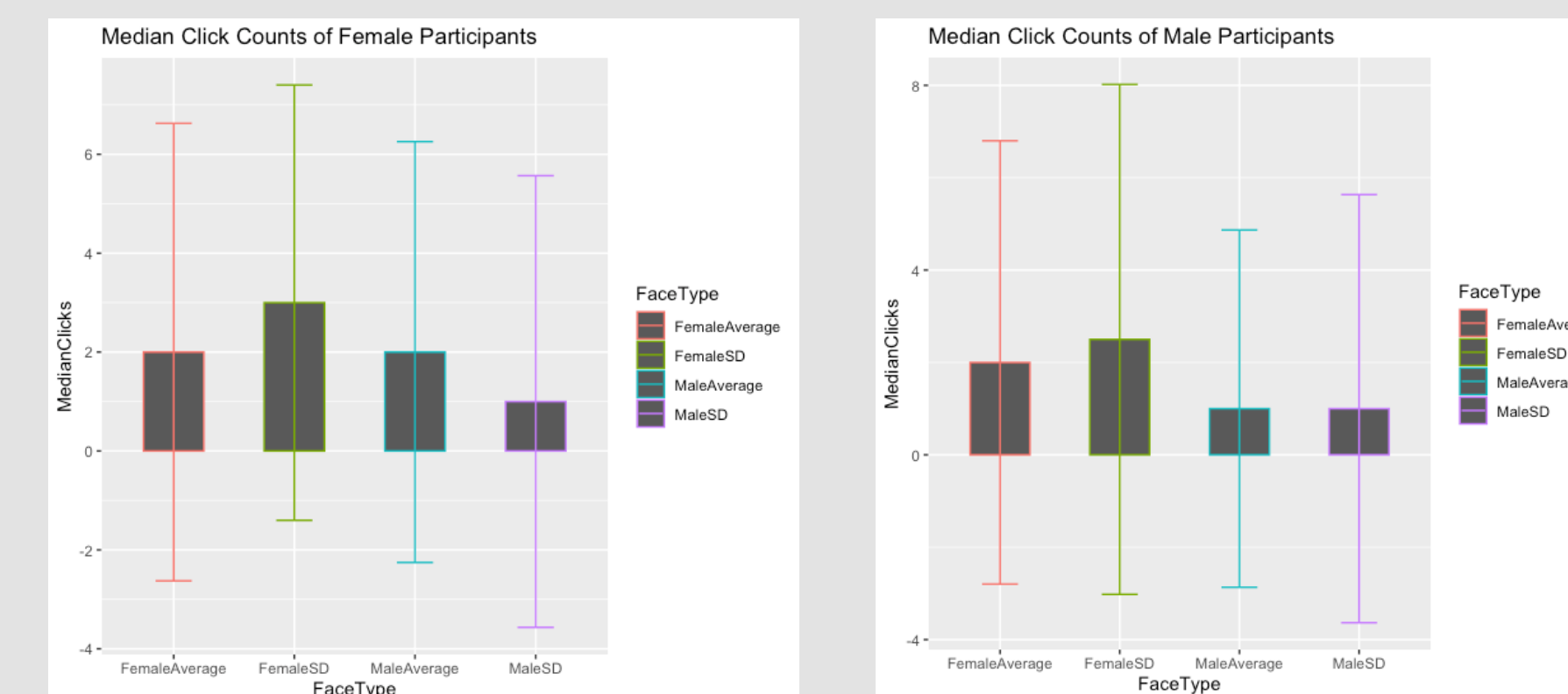
Results

Attractiveness ratings

Contrary to the assumption that attractiveness ratings for same and opposite gender faces should not differ, both female and male participants rated female faces as more attractive than male faces (see Figures 1 and 2).



Male participants did significantly click more for sex-dimorphic female faces than sex-dimorphic male faces and surprisingly also did so in the average face condition. This implies that male participants were not only willing to put in more effort to visually consume very feminine but also average female faces (see Figure 3). There was no significant effect of male sexual dimorphism on female motivated behavior, with no influence of masculine facial features on female induced effort.



Discussion

Not only male but also female participants liked female faces of both conditions (average and sex-dimorphic) more than male faces, which partly replicated the findings that feminized facial features are generally more liked (Oh et al, 2018, Rhodes et al, 2003).

Male participants did click more for female sex-dimorphic faces than for male faces. Contrary to the assumption, male participants also clicked more for average female faces than for average male faces (although with a smaller effect), which implies that average female facial features are sufficiently influential on male motivated behavior.

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