



# Initial experimental evidence that the ability to choose between items alters attraction to familiar versus novel persons in different ways for men and women

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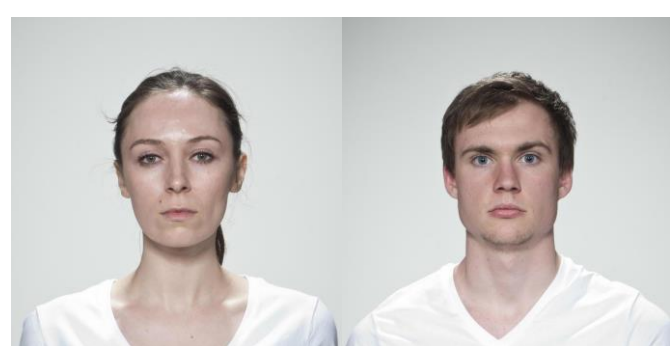
## Introduction

Nonhuman species may respond to novel mates with increased sexual motivation ('The Coolidge Effect'<sup>1</sup>). In humans, novel technological advances, such as online dating platforms, are thought to result in 'Choice Overload'<sup>2</sup>. This may undermine the goal of finding a meaningful relationship<sup>3</sup>, orienting the user toward novel possible partners versus committing to a partner. Here, we used a paradigm measuring change in attraction to familiar faces (i.e. rated on second viewing<sup>4</sup>) to investigate Coolidge-like phenomena in humans primed with choice of potential online dating partners. We examined two pre-registered hypotheses (<https://osf.io/xs74r/files/>). First, whether experimentally priming choice (viewing a slideshow of online dating images) directly reduces the attractiveness of familiar preferred sex faces compared to our control condition. Second, whether the predicted effect is stronger for men than women given the role of the Coolidge effect in male sexual motivation<sup>5</sup>.

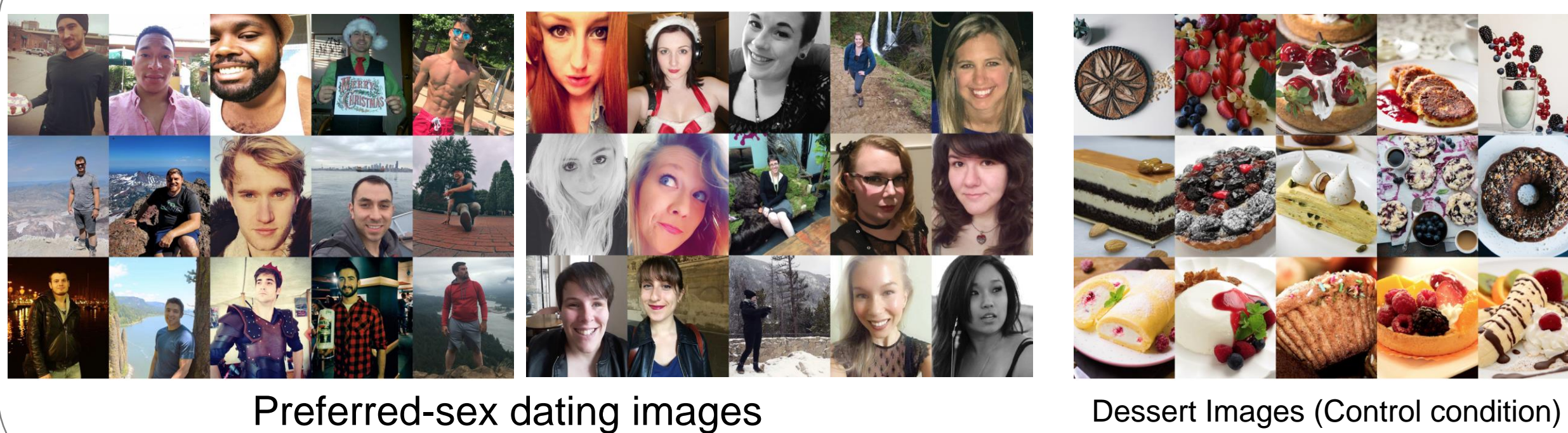
## Methods

In our first experiment ( $N=188$ ), participants rated 10 randomized test faces (10m, 10f<sup>6</sup>) for attractiveness (1 to 7 scale). Participants were then randomly allocated either to our experimental condition (look through images of 15 potential dates) or our control condition (look through images of 15 potential desserts). Image sets in each 1-minute slideshow were matched in attractiveness. Post-priming, participants rated the familiar faces and 10 (equally attractive) novel faces on the same scale. We calculated their change in preference for familiar faces. Scores above/below zero indicate a stronger preference for familiar faces/novelty respectively. A second experiment ( $N=439$ ) on single individuals was identical except that participants were allocated to one of four priming slideshows, with choice manipulated more directly (2 conditions with 15 slideshow images and 2 conditions containing a subset of 5 slideshow images). A third experiment ( $N=130$ ) was identical except that the priming phase of the experiment was absent in order to rule out alternate explanations for findings observed in Experiments 1 and 2.

### Pre-Priming Phase (10 randomized faces)



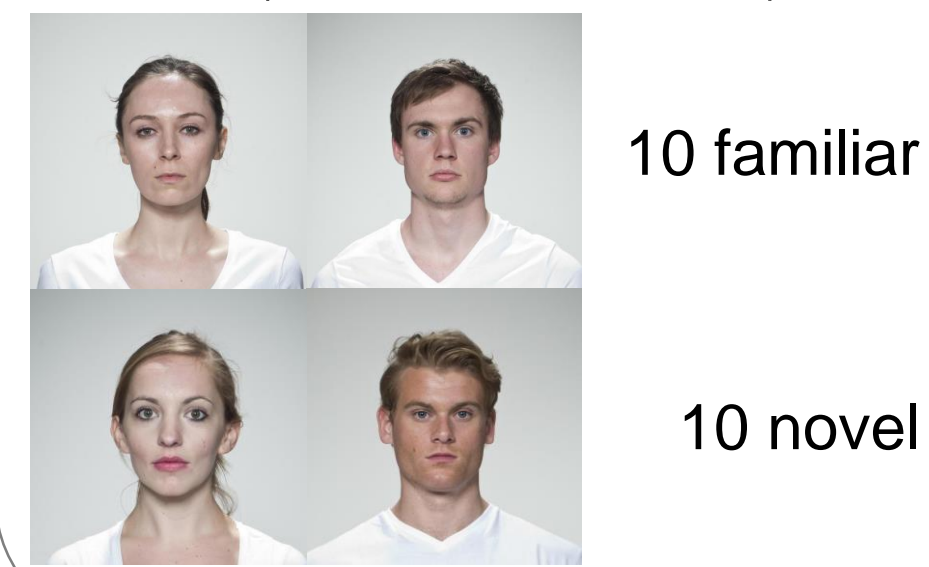
### Priming phase (look at one of two slideshows)



Preferred-sex dating images

Dessert Images (Control condition)

### Post-Priming Phase (20 randomized faces)

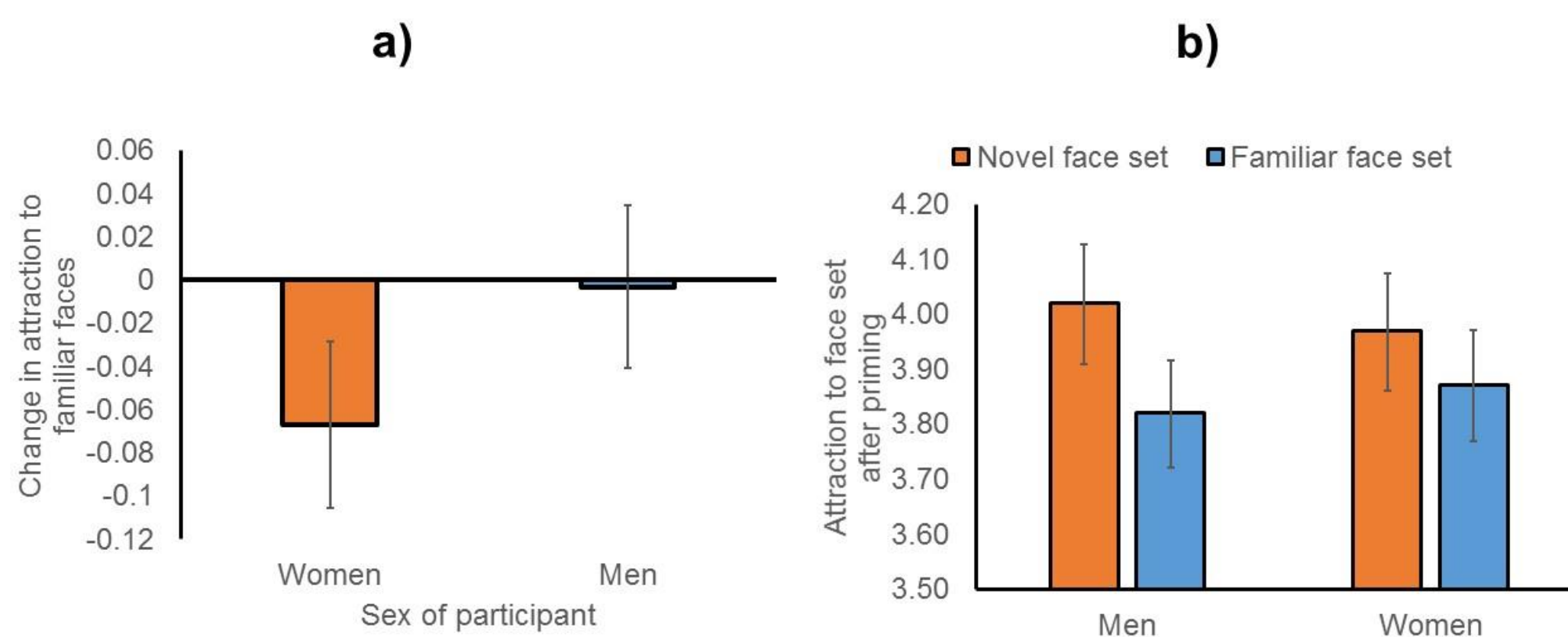


10 familiar

10 novel

## Results

In our **first experiment**, no effects or interactions were observed, although familiar faces were less attractive on second viewing versus first viewing (i.e. after priming) and the novel face set was perceived as more attractive than the familiar face set. In our **second experiment**, women's ( $p=.001$ ,  $r=.12$ , 95%CI [.03, .11]), but not men's ( $p=.87$ ), attraction to familiar faces *decreased* from baseline after priming via both slideshows (dates and desserts, see Fig. a). The effect of priming on attraction to the novel versus familiar face set was stronger for men ( $r=.25$ ) than women ( $r=.12$ , see Fig. b). Effects observed in this experiment can be attributed to our priming manipulation, as our **third experiment** (without priming) did not reveal any sex differences in preferences for novelty versus familiarity among single people. Across this sample, female faces were more attractive than male faces on second viewing ( $t(129)=3.12$ ;  $p=.002$ ,  $r=.14$ ).



## Conclusions

Priming the ability to choose between items/persons may moderate the well-established effect where 'familiarity breeds liking'<sup>7</sup>. Women are *less* attracted to the same person following our priming manipulation whereas men are *more* attracted to novel people following our priming manipulation. These findings are consistent with theorizing on the potential costs of online dating sites and platforms that may encourage rapid evaluation of potential partners<sup>3</sup>.

## References

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