orbicularis oculi muscle activation or not). These 128 images were used in all experiments except 2.

Investigation of Possible Stimuli Confounds

One reviewer suggested that the stimuli used in Experiments 1 and 3-6 might systematically differ in pupil dilation in the photographed individuals. In particular, he/she suggested the possibility that Black targets expressing false smiles might have more dilated pupils than the other target categories, presenting an alternative explanation for some of the results. To investigate this possibility, the photographs were printed and a research assistant, masked to condition and study purpose, measured the ratio of pupil to iris for each stimulus using a ruler—to get an objective measure of pupil dilation. The research assistant reported that because the images were initially grayscaled before they were presented to participants, eye contrast was often obscured and she was unable to accurately measure the eyes of many of the stimuli. This finding suggests that even if pupil differences were present, they were unlikely to affect participants' responses.

Additionally, we addressed the possibility of not just pupil size as a confound, but also other potential stimuli-based differences. In particular, in Experiment 2 we replicated the pattern of findings from Experiment 1 using a new set of stimuli (as recommended by Westfall, Judd, & Kenny, 2015). This set of faces was created using FaceGen software, which allowed us to manipulate the stimuli faces in a highly controlled manner such that true and false smiles only differed in the eye regions, and such that the magnitude of any morphological differences in expression was the same across target race.