Perceiving happiness in an intergroup context: The role of race and attention to the eyes in differentiating between true and false smiles

Online Supplemental Material

Stimuli Development

To create the facial stimuli, we collected photographs of true and false smiles from 84 individuals recruited on a university campus (22 Black females, 20 Black males, 21 White females, and 21 White males). For true smiles, the photographer encouraged the activation of muscles around the eye (e.g., by attempting to make participants laugh). For false smiles, photo subjects were instructed to smile with their mouths while maintaining neutral eyes. Using Adobe Photoshop (San Jose, CA), all photographs were cropped to create oval images that focused on facial features and excluded the target's hair. In keeping with past work (Kawakami et al., 2014), photographs were grey-scaled, standardized for size (360 × 450 pixels), and the mean luminance (brightness) was set within a restricted range of 187.46 to 188.68 pixels per intensity level.

To assess the perceived happiness of each facial component (i.e., eyes and mouths), we split the image of each target face into top and bottom halves. This produced stimuli related to a true mouth, a false mouth, true eyes, and false eyes for each target. In an initial pretest, White undergraduate students (N = 63) rated the resulting stimuli on a nine-point scale anchored at 1 (*not at all happy*) and 9 (*very happy*). To limit participant fatigue, each student viewed half of the total stimuli, randomly selected and presented individually. Based on these ratings, 64 target individuals (16 from each gender and race) were selected and for each target an image of a true smile and a false smile was created. Importantly, for each target we composed images that utilized the same mouth for the true and false smile image with only the eyes differing (i.e., with