Emotional Expressions and Shade of Skin Tone Affect Perception of Sex

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We are very sensitive when it comes to processing faces. Subtle differences in physical properties of a face, such as configuration of facial parts, facial features, emotional expressions, skin shade, etc., can influence our facial perception. We are interested in testing if perception of the sex changes when skin tone as well as emotional expressions are manipulated on an androgynous face. In our study, participants were asked to rate masculinity and femininity on a pair of androgynous faces presented on a computer screen, in which facial expressions (angry or happy) and skin shade (dark or light) were manipulated. Data suggest that participants rated an angry androgynous face with darker skin shade as more masculine than the same angry face with lighter skin shade. Such bias in skin shade was not observed when a happy androgynous face was presented. Furthermore, an angry androgynous face with darker skin shade was rated as more masculine than a happy androgynous face with lighter skin shade. These data suggest that we process angry and happy faces differently, possibly because we are more sensitive to details of threatening faces, such as skin shade, than those of non-threatening faces. This mechanism may be an advantage in the evolutionary process. Our results will add to more understanding of face processing.

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