

Facial morphology as a social signal

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Individual differences in human facial morphology are a source of information for the rapid acceptance of social characteristics of individuals. However, due to confounding with facial expressions and inconsistencies in measurement criteria, the relationship between facial morphology and social trait acceptance is still controversial. In this study, we examined the relationship between metrics of facial morphology and social trait acceptance, such as “reliable”, “dominance”, and “masculinity”, using artificially generated face stimuli with no facial expression. We also investigated the effect on social trait acceptance of partial loss of facial morphological information due to the wearing of masks, which has become routine in the Corona Disaster. Furthermore, we investigated the effect of blushing, which is associated with the emotion of embarrassment and evolutionarily unique to humans. The results revealed that facial width to height ratio (fWHR) affects social trait acceptance, and that the two metrics of fWHR have different effects. Wearing a mask partially changed the acceptance of social traits. The blush effect was found to be effective only for the “masculinity” rating by women subjects. The results of this study clarify the sociobiological significance of human facial morphology and provide empirical evidence for psychosocial interventions in face-to-face communication.