Abstract

Existing evidence shows people are able to attribute an individual's behavioural characteristics based on their facial features with a certain level of accuracy; one such characteristic is the perception of physical strength in potential opponents within the male intersexual competition. Physical strength seems be assessed upon the level of masculine facial features development. However, attributions may be influenced by other factors – namely personality traits of the evaluator or the so-called Other-race effect.

In this study portrait photographs of men from Europe and Africa were rated by a group of European evaluators on a perceived physical strength. The aim of this study was to assess the link between attributed physical strength, actual physical strength (grip strength) and facial morphology described by relative facial width (fWHR) the Index of Masculinity (potential effects of age, body weight and height on said variables were controlled for). The use of stimuli of different ethnic origin enabled us to test the accuracy of physical strength attributions and actual physical strength in context to the Other-race effect hypothesis. According to its wording people tend to attribute characteristics with higher accuracy to individuals, who belong to the same population, or with whom they are frequently in contact.

The results of the study show that actual physical strength is not related to facial morphology in our samples. However, attributions of physical strength based on facial morphology do occur and are based on fWHR. Our results show a correlation between actual and attributed physical strength, while the accuracy of attributions of physical strength in relation to actual physical strength differs between stimuli of ethnic origins. The Other-race effect thus seem present in physical strength attributions.; higher accuracy was noted in the evaluation of Caucasian stimuli by the European evaluators.

Key words: facial morphology; masculinity index; fWHR; physical strength; handgrip strength; Other-race effect