The Nose Influences Visual and Personality Perception

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Nasal deformities are known to attract attention, are felt to be stigmatizing, and are known to affect negatively the perception of personalities. These effects have not been studied on profile views. The objective of this study was the quantification of visual attention directed toward nasal deformities and its impact on the perception of personality traits. Forty observers were divided into two groups and their visual scanpaths were recorded. Both groups observed a series of photographs displaying profile views of 20 adult patients' faces with one or more nasal deformities or computer-morphed corrected noses. Photographs were chosen from a consecutive sample of patients (range: 17-68 years, median: 45) who requested a rhinoplasty at the Department of Otolaryngology, Head and Neck Surgery, Facial Plastic Surgery of the Cantonal Hospital Sankt Gallen, Switzerland. Patients' photographs showed a nasal deformity in one series and a computer-morphed nose in the other series and vice versa. Visual fixation times on the noses were compared between the photographs with and without a nasal deformity. Observers subsequently rated personality traits using visual analog scales. The nasal profile with a deformity received more visual attention in 17 of 20 patients (85%). The mean relative fixation duration of all nasal deformities was significantly larger compared with all computer-simulated noses (17.3 ± 6.9 [SD] vs. 10.6 ± 2.5%; p < 0.001). Cumulative personality questionnaire scores and the score for satisfaction were significantly lower for faces with nasal deformities compared with computer-morphed noses (27.8 ± 6.0 vs. 29.1 ± 6.0, p = 0.040, and 5.3 ± 1.59 vs. 5.7 ± 1.53, p = 0.017, respectively). For deformed noses, the mean relative fixation duration did not correlate with the cumulative personality score (R = -0.399; p = 0.082). To the best knowledge of the authors, an attention-drawing potential of nasal deformities on a profile view has been quantified for the first time. This seems to lead to a more negative perception of personality traits.

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