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Effects of Cranial and Facial Hair on Perceptions of Age and Person

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WHEN SEEING SOMEONE FOR THE FIRST TIME, individuals often make numerous inferences about the person's personality and character (e.g., Goldstein, Chance, & Gilbert, 1984; Klatzky, Martin, & Kane, 1982). Given that people form impressions from faces, a question that follows is: Which facial cues are responsible? This study was an investigation of the effects of two specific physical features of male faces—cranial and facial hair—on such impressions.

Particular interest was focused on whether the quantity of cranial and facial hair affects perceptions of age. As men grow older, the distribution pattern of hair on the head changes, they acquire the capacity to grow beards, and many experience hair loss caused by male-pattern baldness. Thus, we expected faces with less cranial hair and with beards to appear older than those with more cranial hair and without beards. Effects of hair were also investigated with regard to three central dimensions: attractiveness, intelligence, and sociableness (Berscheid & Walster, 1978; Fiske & Cox, 1979; Rosenberg, Nelson, & Vivekananthan, 1968).

Twenty-nine female and 19 male undergraduates from the University of Richmond participated. Faces were constructed from the feature variants available in the Mac-a-Mug Pro identification kit, a computer-assisted composite system containing a large library of digitized photographs of facial features. Sixteen base faces were first constructed by randomly selecting variants of four features: eyes, ears, nose, and mouth. Two experimenters independently classified the cranial variants into two sets based on quantity.

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Less cranial hair was defined as appearing to be balding, having the characteristic of raised frontal hairlines; more cranial hair was defined as appearing to have full heads of hair, having nonbalding hairlines. Variants were omitted in cases of experimenter disagreement.

From each cranial hair set, 16 variants were randomly selected and paired with base faces. For the facial hair presence condition, 16 randomly selected beards were overlaid on the chins. Chins lacking facial hair served as stimuli in the facial hair absence condition. Thus, 64 faces were constructed. Four stimulus booklets were formed, each with all 16 base faces and with 4 faces representing each of the four cranial-facial hair conditions. The order of faces in the booklets was randomized.

Given a booklet, subjects estimated the age (in years) of the people depicted and rated the faces on attractiveness, intelligence, and sociableness. Ratings were based on 6-point scales ranging from *not at all* (0) to *extremely* (5). Subjects were not told that quantity of hair on the faces was being manipulated.

Data were collapsed to produce four cranial-facial condition scores for each subject and entered into 2 × 2 × 2 (Rater Gender × Cranial Hair × Facial Hair) mixed-model analyses of variance (ANOVAs). Age estimation showed main effects of cranial hair, $F(1, 46) = 93.42$, $p < .0001$, and facial hair, $F(1, 46) = 105.66$, $p < .0001$: Faces with less cranial hair looked older ($M = 33.35$) than those with more cranial hair ($M = 27.53$), and faces with facial hair ($M = 33.40$) looked older than those without facial hair ($M = 27.48$). Attractiveness ratings showed a main effect of facial hair, $F(1, 46) = 13.09$, $p < .001$: Faces without facial hair ($M = 1.55$) appeared more attractive than those with facial hair ($M = 1.22$). Intelligence ratings showed main effects of cranial hair, $F(1, 46) = 45.80$, $p < .0001$, and rater gender, $F(1, 46) = 5.27$, $p < .05$: Faces with less cranial hair ($M = 2.61$) appeared more intelligent than those with more cranial hair ($M = 1.84$), and women ($M = 2.39$) attributed greater intelligence to the faces than the men did ($M = 1.97$). Sociableness ratings showed a main effect of facial hair, $F(1, 46) = 16.05$, $p < .001$: Faces without facial hair ($M = 2.15$) appeared more sociable than those with facial hair ($M = 1.78$). A replication using 20 male and 28 female students at the University of Wales (United Kingdom) ranging in age from 18 to 60 years ($M = 29$), showed virtually the same pattern of results.

The results showed that, although male faces with less cranial hair appeared older, they also appeared more intelligent (cf. Cash, 1990). That faces with less cranial hair were perceived as older is not surprising; loss of cranial hair is a feature of age itself. This, in turn, may explain why faces with less cranial hair appeared more intelligent. Subjects might have assumed that older people have more life experience and, thus, are wiser. Attractiveness and sociableness were not influenced by the quantity of cranial

hair. Clean-shaven faces were regarded more favorably than bearded faces. They appeared younger, more attractive, and more sociable. Apparently, it matters where there is (and where there is not) hair on male faces.

These results have other implications. For example, male-pattern baldness induces many men to spend a great deal of effort, time, money, and sometimes pain (e.g., hair transplantation) to enhance their appearance. Although this subject population was not tested, the findings suggest that they might have more severe, more negative impressions of themselves than others do of them. Another implication is that criminals could dramatically influence impressions by altering their cranial and facial hair, which could reduce the utility of verbal descriptions (Ellis, Shepherd, & Davies, 1980; Shepherd, Davies, & Ellis, 1981) and make subsequent recognition by witnesses more difficult (Baddeley & Woodhead, 1983).

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