Name(s)

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Project Number

S0416

Project Title

Effects of the Asymmetry of Facial Features in the Faces of Adult Males on Their Attractiveness to Adolescent Females

Abstract

Objectives/Goals

The purpose of this experiment was to determine the effects, if any, of the asymmetry of facial features and structure in the faces of adult human males on their comparative attractiveness to adolescent human females. The hypothesis was that as the asymmetry of the male faces increased, the adolescent females would find them less attractive.

Methods/Materials

Ten images of faces of adult males from a controlled source were edited to produce three similar looking variations with different degrees of symmetry in their features and structure. These 40 faces were then measured to determine their respective facial asymmetry, then composed into a test, in which female participants between the ages of 12 and 18 were asked to rate the 10 sets of faces in order from most to least attractive.

Results

Data collected supported the hypothesis. In order of most to least symmetric, the four variations of each face averaged comparative attractiveness scores of 2.69, 2.08, 0.91, and 0.31 out of 3, respectively, with non-overlapping deviations. 7 out of 10 face-trials followed a perfectly linear correlation between asymmetry and facial attractiveness. That is, the adolescent test population rated the more symmetric faces as more attractive. While the experimental design could be improved, the data collected in this experiment still reached a high quality of statistical significance.

Conclusions/Discussion

Some face-trials displayed results that did not fit the majority trend of the data, showing that some faces were rated as far more attractive for their given symmetry than they should have been. Review of these outliers determined them all to be original, unaltered faces; this may indicate that test subjects were able to identify and slightly favor the original face in each set. This observation, in tandem with the majority of data in support of the hypothesis, may indicate that optimal facial attractiveness is composed of a balance between perfect facial symmetry and natural, imperfect traits.

Summary Statement

This project explored the relationship between facial symmetry and attractiveness in humans, specifically in the adult male population.

Help Received

Mother and Father encouraged and assisted with computers when necessary; Mr. Antrim assigned the project; all test subjects made data collection possible; all works cited in the project provided invaluable information.