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Evolution and Human Behavior 24 (2003) 351–356

Evolution and Human Behavior

# Facial attractiveness predicts longevity

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Received 21 August 2002; received in revised form 3 June 2003

**Abstract**

In the current investigation, 20 undergraduate students rated 50 high school yearbook photographs from the 1920s on two measures, attractiveness and perceived health. These measures were then correlated with each other and with the photographed subjects' longevity. Facial attractiveness was found to predict future longevity, but perceived health did not. The results are discussed in terms of sexual selection theory.


*Keywords:* Evolutionary psychology; Sexual selection; Facial attractiveness; Health; Longevity; Good genes; Parental investment potential

## 1. Introduction

What makes someone beautiful? It was once widely thought that standards of beauty were highly variable across cultures (Berscheid & Walster, 1974), but recent research suggests that a person found beautiful by a North American college student will also be found beautiful by a Russian doctor and by a South American hunter–gatherer (Jones & Hill, 1993). This universal appreciation of beauty grants those endowed with its blessing a cornucopia of benefits.

Recent research suggests that there are six main attributes that humans find universally attractive in others: youth, facial averageness, body symmetry, prominent secondary sexual features, body type, and perceived health (Berry, 2000; Kalick, Zebrowitz, Langlois, &

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1090-5138/03/$ – see front matter 
doi:10.1016/S1090-5138(03)00036-9

Johnson, 1998). It has been hypothesized that these features have evolved to be attractive because of the selective benefits accruing to those who chose their mates on these criteria, benefits that might be material, genetic, or both.

In general, genetic benefits of mate choice have been harder to demonstrate than material benefits (Andersson, 1994), and despite some persuasive applications of the idea to human mate choice (e.g., Gangestad, 1993; Grammer & Thornhill, 1994), the notion that criteria of attractiveness are "good genes" cues remains controversial. To date, only two studies have assessed whether facial attractiveness is indicative of good health. The first, by Kalick et al. (1998), indicated that although ratings of facial attractiveness do not predict actual health, ratings of perceived health do. In contrast, the second, by Shackelford and Larsen (1999), found that ratings of attractiveness do indicate actual health.

The primary goal of the present study was to examine whether ratings of facial attractiveness and of perceived health predict longevity. It was expected that if individuals are judged to be attractive because they have characteristics that indicate good health, as predicted by the good genes theory, then their good health and resulting freedom from disease would result, on average, in increased longevity. It was also expected that if people are able to accurately perceive an individual's health (Kalick et al., 1998), then our measure of perceived health would also correlate with longevity. Finally, although it was not the primary focus of this research, we expected that this investigation would replicate previous studies by showing that ratings of facial attractiveness are highly correlated with ratings of perceived health (Kalick et al., 1998).

## 2. Method

### *2.1. Participants*

Twenty undergraduate participants, 10 male and 10 female, were recruited as judges for the experiment. All were enrolled in an introductory psychology class at the University of Waterloo and participated in exchange for course credit.

### *2.2. Stimulus photographs and associated longevity data*

Fifty photographs, 25 of males and 25 of females, were used in this study. They were taken from a local high school's 1924–1927 yearbooks. All the photos were of students either in grade 11 or 12, making them approximately 17 years old at the time. The photographs were all in black and white and ranged in size from $1.5 \times 1.5$ to $2.0 \times 2.0$ cm. As with most high-school yearbook photos, the photographs always showed the complete face and neck of the student without any shadow.

Longevity was used as an objective measure of each stimulus person's health. The longevity of the students in the photographs was determined using the Ontario Cemetery Finding Aid (OCFA), a public database run by the government of Ontario, which contains the records of over 3 million graves within the province of Ontario, Canada. Each entry details