Behavior

Blinded by beauty

A fetching face and other aspects of human sexual attractiveness have evolved, at least in part, as signs of an individual's physical health and suitability for mating, according to a recent body of research. But even without plastic surgery, looks can deceive.

Extremely handsome or pretty people are mistakenly rated as healthier than their plainer peers, a new study finds. Estimates of physical health prove most accurate for folks with moderately attractive faces, report psychologist S. Michael Kalick of the University of Massachusetts at Boston and his coworkers.

Sexually alluring traits may have evolved as advertisements for mates, with each conveying a mix of truthful and manipulative information, the scientists propose in the January PSYCHOLOGICAL SCIENCE.

Kalick's group relied on archived health data for 164 men and 169 women born between 1920 and 1929. Most of these study participants came from white, middle-class families. Medical exams and histories were obtained annually from age 11 through 18, once between age 30 and 36, and once between age 58 and 66.

Male and female raters judged the attractiveness of each volunteer's face from photographs taken at age 17 to 18. The raters agreed closely in their assessments of each photo.

Attractive teens exhibited no tendency toward better overall health or greater resistance to infectious diseases at any point in their lives, the researchers found.

A second set of raters then examined the photos and ranked each participant's overall health as a teen, young adult, and older adult.

The most attractive people—those in the top 25 percent of the ratings—drew overly positive estimates of their health as teenagers and adults. Volunteers who fell in the bottom 25 per-

cent of attractiveness ratings evoked mistakenly negative health predictions. Raters made fairly accurate health judgments only for participants in the middle range of attractiveness.

The archived data held no clues to any link between aspects of reproductive health, such as fertility problems or miscarriages among women, and facial attractiveness.

Other elements of sexual attractiveness, such as a highly symmetrical face (SN: 1/28/95, p. 60) or a small waist-to-hip ratio in women (SN: 8/21/93, p. 120), may provide a more accurate insight into physical health and fertility than drop-dead good looks, the scientists suggest.

—B.B.

Genetic hint of psychosis

An as-yet-unspecified gene in a small segment of chromosome 6 appears to contribute to the psychotic symptoms that characterize schizophrenia, a research team reports. Earlier attempts to implicate the same DNA region in schizophrenia achieved mixed results (SN: 11/4/95, p. 292), but those investigations focused on people exhibiting a broader range of symptoms.

Schizophrenia consists of psychotic features, such as disorganized thinking and bizarre delusions, and so-called negative symptoms, such as apathy and social withdrawal.

Linda M. Brzustowicz of Rutgers University in Newark, N.J., and her colleagues evaluated 28 genetic markers on chromosome 6 for links to schizophrenia in 183 people from 10 Canadian families. Schizophrenia was diagnosed in about one-quarter of the participants.

Markers delineating a certain chromosome 6 segment appeared progressively more often as individuals displayed more severe psychotic symptoms, regardless of whether they received a diagnosis of schizophrenia, the scientists assert in the December 1997 American Journal of Human Genetics. —*B.B.*

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rise in [juvenile-onset] diabetes. Much of this needs further follow-up study." —N. Seppa

Mightn't the children who received immunizations also have received nonsteroidal anti-inflammatory drugs (NSAIDS) such as aspirin, which are used almost indiscriminantly by many well-meaning parents and which, by limiting fevers, must have an effect on the immune system?

I think there is a tendency in the medical-scientific community to look for exotica. NSAIDS need to be studied more extensively.

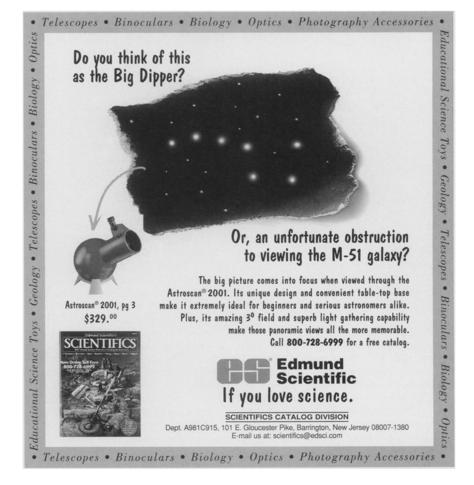
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Water loss may add to quake risk

Perhaps depletion of soil moisture by vegetation is a seasonal factor affecting earth-quake frequency ("California shakes most often in September," SN: 12/13/97, p. 373). Plants use water held in surface soils and shallow aquifers over the growing season, so soil moisture levels are typically lowest in September. At least 50 to 100 centimeters of water may be lost through evapotranspiration.

Even accounting for the associated increase in plant biomass, the reduction in pressure associated with this water loss would probably be on the order of 50 millibars. Perhaps the effects of atmospheric pressure and soil moisture depletion are additive.

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