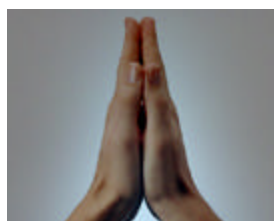


Pointing the finger at female philanderers

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by Henry Nicholls



Female embryos exposed to unusually high androgen levels in the womb are more likely to end up as sexually promiscuous women, argues an evolutionary psychologist. But the strongest predictor of

sexual behavior is still alcohol consumption, he admits.

Prenatal exposure to varying androgen levels is reportedly linked to a broad array of human characteristics, including sexual orientation, schizophrenia, skin color, and the relative lengths of a person's fingers.


Men tend to have longer ring (fourth) fingers than index fingers and women tend to have longer index fingers than ring fingers. This difference between the sexes is thought to be influenced by prenatal exposure to androgens and estrogens, and has in turn been correlated with the disparate characteristics listed above.

The latest behavior that can be predicted just by looking at a hand is a woman's sexual inclination, suggests Andrew Clark, an evolutionary psychologist at McMaster University in Ontario, Canada. The ratio between the second and fourth fingers, known as the 2D:4D digit ratio, reflects willingness to engage in casual sex, he says.

Clark's study is motivated by efforts to understand the physiological mechanisms that underlie variation in human sexual behavior and the evolutionary arguments that might explain it. He started by recruiting first-year female psychology undergraduates and got them to complete the Sociosexual Orientation Inventory (SOI), a set of questions that is supposed to reveal readiness to have uncommitted sex.

The hypothesis under scrutiny was that testosterone in the prenatal environment, estimated by calculating the 2D:4D ratio, could have a masculinizing effect on a woman's mating psychology. And Clark's research seems to support this idea. Women with more male-like finger ratios scored higher on the SOI scale, he reports

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"These findings support the hypothesis that prenatal testosterone levels affect adult mating tactics," concluded Clark, "with high prenatal testosterone leading to 'malelike' short-term mating tactics," he noted.

But that is not the end of the story. Clark found three other factors that seem to be independent predictors of female SOI. The more attractive a woman considers herself to be and the better she is at spatial rotation tasks, the more promiscuous she is, he says. But the strongest predictor of SOI seems to be the amount of money a woman spends on alcohol, he adds.

Interpreting the association between alcohol and sexual activity is not easy, says Clark. "Sociosexual variability that is observed in women may be 'artificially' increased because of variation in exposure to alcohol," he told *BioMedNet News*. "However, it's also possible that alcohol expenditure could be related to a woman's desire to seek out situations where she's more likely to engage in promiscuous behavior, either because of the pharmacological effects of alcohol or because of the social contexts where alcohol is bought, or both," he said.

John Manning, a psychologist at the University of Central Lancashire in the UK, agrees that trying to disentangle cause and effect is difficult "You could tie yourself in knots over this," he said. But the other findings make sense, he says. "Early sex hormone exposure round about the time when brain organization is going on is probably a very important event in terms of behavior."

This is good, provocative research "because it tells us to go on and look a bit further," says Manning. "The bottom line from the work is that if you have exposure to quite high testosterone [levels] *in utero* and you're female, you tend to show quite a number of male-type behaviors, particularly associated with sexual behavior," he said.

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