

[Print this page](#)

## Raw Data: Do Brothers Make You Gay?

09.01.2006

### Boys with older brothers are more likely to be gay. But is it nurture or nature?

by Stephen Ornes

#### THE STUDY

"Biological Versus Nonbiological Older Brothers and Men's Sexual Orientation," published in the July 11 *Proceedings of the National Academy of Sciences*.

#### THE PROBLEM

Can brothers really make you gay? Ten years ago, a study by Anthony Bogaert and Ray Blanchard outed a surprising relationship between siblings and sexuality: Boys with older brothers are more likely to grow up gay. In the wake of the "gay gene" media frenzy, Bogaert and Blanchard's results had plenty of doubters. But over the course of the past decade, a number of independent studies have verified this "fraternal birth-order effect." So now Bogaert is asking the next logical question: Do older brothers exert their influence psychologically or biologically?

#### THE FINDINGS

To explore his hunches about homosexuality, Bogaert turned to Canadian classifieds. He placed ads in both gay-oriented and general-interest publications in Toronto, Montreal, and Niagara, inviting gay, bisexual, and heterosexual men with both biological and adopted older brothers to get paid to participate in his study. The ads attracted 521 usable subjects, whose data Bogaert combined with information from previous research studies, giving him a total of 944 subjects.

The subjects provided information about siblings and ranked themselves on a 7-point sexual spectrum that ranged from "exclusively homosexual/gay" (1) to "exclusively heterosexual/straight" (7) in terms of both attraction and behavior. Bogaert then compared the "degree" of homosexuality to data about older siblings. He found that having biological older brothers, not adopted brothers, was significantly linked to sexual orientation, regardless of whether a gay man was raised with them or not. The effect was so strong that Bogaert estimates that about 1 in 7 gay men can chalk up their sexual preference to having an older biological brother.

Moreover, the more brothers a man has, the more likely he is to be gay. According to Bogaert, every older brother increases the probability that a man is homosexual by 33 percent. The average estimate of the base rate of male homosexuality is around 4 percent of the general population. So a man with 1 older brother has around a 5.3 percent probability of being homosexual. For the youngest of 3 brothers, that figure rises to 7 percent. Hypothetically, a man with 9 older biological brothers, according to Bogaert's estimates, has about a 50 percent chance of being gay. Notably, Bogaert's estimate breaks down at 12 brothers, when the probability exceeds 100 percent.

#### THE RESEARCHERS

A psychology professor at Brock University in Ontario, Bogaert has been studying human sexuality for the last 15 years. Although he acknowledges there is still room for the nature/nurture debate, he notes that his results suggest homosexuality has a strong biological basis. But how that works remains unknown. "A mother's immune system may 'remember' certain male factors," suggests Bogaert. He speculates that certain immune proteins or hormones may then cross the placental barrier in later pregnancies and somehow predispose a developing fetus to homosexuality. Regardless of how it works, says Bogaert, "I think it does push the pendulum toward the nature side."

---

[Read commentary on the study linking biological older brothers to homosexuality.](#)

[SUBSCRIBE TO DISCOVER](#) 