

Men With Older Brothers More Likely to Be Gay

By RANDOLPH E. SCHMID

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WASHINGTON - Having several older brothers increases the likelihood of a man being gay, a finding researchers say adds weight to the idea that there is a biological basis for sexual orientation.

"It's likely to be a prenatal effect," said Anthony F. Bogaert of Brock University in St. Catharines, Canada, "This and other studies suggest that there is probably a biological basis for" homosexuality. S. Marc Breedlove of Michigan State University said the finding "absolutely" confirms a physical basis. "Anybody's first guess would have been that the older brothers were having an effect socially, but this data doesn't support that," Breedlove said in a telephone interview.

The only link between the brothers is the mother and so the effect has to be through the mother, especially since stepbrothers didn't have the effect, said Breedlove, who was not part of the research.

Bogaert studied four groups of Canadian men, a total of 944 people, analyzing the number of brothers and sisters each had, whether or not they lived with those siblings and whether the siblings were related by blood or adopted. He reports in a paper appearing in Tuesday's issue of Proceedings of the National Academy of Sciences that having several biological older brothers increased the chance of a man being gay. It's an effect that can be detected with one older brother and becomes stronger with three or four or more, Bogaert said in a telephone interview. But, he added, this needs to be looked at in context of the overall rate of homosexuality in men, which he suggested is about 3 percent. With several older brothers the rate may increase from 3 percent to 5 percent, he said, but that still means 95 percent of men with several older brothers are heterosexual.

The effect of birth order on male homosexuality has been reported previously but Bogaert's work is the first designed to rule out social or environmental effects.

Bogaert said he concluded the effect was biological by comparing men with biological brothers to those with brothers to whom they were not biologically related. The increase in the likelihood of being gay was seen only in those whose brothers had the same mothers, whether they were raised together or not, he said. Men raised with several older step- or adopted brothers do not have an increased chance of being gay. "So what that means is that the environment a person is raised in really makes not much difference," he said.

What makes a difference, he said, is having older brothers who shared the same womb and gestational experience, suggesting the difference is because of "some sort of prenatal factor."

One possibility, he suggests, is a maternal immune response to succeeding male fetuses. The mother may react to a male fetus as foreign but not to a female fetus

because the mother is also female. It might be like the maternal immune response that can occur when a mother has Rh-negative blood but her fetus has Rh-positive blood. Without treatment, the mother can develop antibodies that may attack the fetus during future pregnancies.

Whether that's what is happening remains to be seen, but it is a provocative hypothesis, said a commentary by Breedlove, David A. Puts and Cynthia L. Jordan, all of Michigan State.

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