

Italian Researchers Believe That Genetic Factors May Increase Fertility In Mothers Of Gay Males

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by Frank York

A team of researchers at the University of Padova in Italy believe they have may have found a genetic factor in women that both boosts fertility and produces homosexual sons. The study "Evidence for maternally inherited factors favouring male homosexuality and promoting female fecundity," was published in the October 2004 issue of the British *Proceedings of the Royal Society: Biological Sciences*.

Researchers led by Dr. Francesca Corna submitted questionnaires to 98 homosexual and 100 heterosexual men in Northern Italy.

An analysis of the data showed that maternal relatives of homosexuals had slightly higher reproductive success—in the admittedly limited-size sample of this study—than those of heterosexuals, and that the differences did not appear in the paternal line. They did not study lesbians.

The team noted that mothers of gay men produced an average of 2.7 babies compared to 2.3 born to mothers of straight men.

Researcher Dr. Camperio-Ciani says that whatever genetic factors are involved, this does not involve a single gene.

The *New Scientist* reported the findings this way: "The researchers discovered that women tend to have more children when they inherit the same—as yet unidentified—genetic factors linked to homosexuality in men. This fertility boost more than compensates for the lack of offspring fathered by gay men, and keeps the gay genetic factors in circulation."

Camperio-Ciani says this maternal effect, however, impacts only 7% of the population at most. Maternal and immune effects account for only 21%, leaving 79% percent

of the causation of homosexuality still a **mystery**. According to Camperio-Ciani, "Genes must develop in an environment, so if the environment changes, genes go in a new direction. Our findings are only one piece of a much larger puzzle on the nature of human sexuality."

The researchers stressed that there was ample room left for the influence of non-biological factors linked to culture and upbringing.

A report in *Nature* magazine provided additional commentary on this study. Michael Hopkin wrote: "Besides having more fecund mothers and aunts, homosexual men had more fellow homosexuals in their maternal family, again hinting that their sexuality is influenced by their mother's genes. What's more, homosexual men were more likely to have older brothers, which supports a separate theory that homosexuality is linked to changes in the mother's immune system during previous male pregnancies."

The journal *Nature* concluded:

"...this study shows that, although there may not be a 'gay gene,' it is possible that genetic factors can influence sexuality. 'We strongly believe that this set of genes influences sexual expression, but they don't determine it,' said Camperio-Ciani."

Reference

F. Corna, A Camperio-Ciani, C. Capiluppi, "Evidence for maternally inherited factors favouring male homosexuality and promoting female fecundity," *Proceedings of the Royal Society B: Biological Sciences*, October, 2004. Michael Hopkin, "Mother's genetics could influence sexual orientation," [news@nature](#), October 12, 2004.