

The 2000 U.S. Census found the highest percentage of same-sex unmarried partners in San Francisco, Miami, and Santa Fe (Tarmann, 2002).

- Men who have older brothers are somewhat more likely to be gay, reports Ray Blanchard (1997, 2001). Assuming the odds of homosexuality are roughly 3 percent among first sons, they rise to about 4 percent among second sons, 5 percent for third sons, and so on for each additional older brother. The reason for this curious phenomenon—the “fraternal birth order effect”—is unclear. Blanchard suspects a defensive maternal immune response to foreign substances produced by male fetuses. The maternal antibodies may become stronger after each pregnancy with a male fetus and may prevent the fetus’ brain from developing in a male-typical pattern. Women with older sisters, and women who were womb-mates of twin brothers, exhibit no such sibling effect (Rose & others, 2002).

So, what then does determine sexual orientation? One theory proposes that people develop same-sex erotic attachments if segregated by gender at the time their sex drive matures (Storms, 1981). Indeed, gay men tend to recall going through puberty somewhat earlier, when peers are more likely to be all males (Bogaert & others, 2002). But even in a tribal culture in which homosexual behavior is expected of all boys before marriage, heterosexuality prevails (Money, 1987). (As this illustrates, homosexual behavior does not always indicate a homosexual orientation.) Another theory proposes the opposite: that people develop romantic attachments to those who differ from, and thus are more fascinating than, the peers they associated with while growing up (Bell, 1982; Bem, 1996). The bottom line from a half-century’s theory and research: If there are environmental factors that influence sexual orientation, we do not yet know what they are. If someone were to ask me, “What can I do to influence my child’s sexual orientation?” my answer would have to be “I haven’t a clue.”

### The Brain and Sexual Orientation

New research indicates that sexual orientation is at least partly biological (Hershberger, 2001). Researcher Simon LeVay (1991) discovered this while studying sections of the hypothalamus taken from deceased heterosexual and homosexual people. As a gay scientist, LeVay wanted to do “something connected with my gay identity.” He knew he had to avoid biasing the results, so he did the study “blind,” without knowing which donors were gay. For nine months he peered through his microscope at a cell cluster he thought might be important. Then one morning, LeVay sat down and broke the codes. His discovery: The cell cluster was reliably larger in heterosexual men than in women and homosexual men. As the brain difference became apparent, “I was almost in a state of shock. . . . I took a walk by myself on the cliffs over the ocean. I sat for half an hour just thinking what this might mean” (LeVay, 1994).

It should not surprise us that brains differ with sexual orientation. Remember our maxim: *Everything psychological is simultaneously biological*. The critical question is, when did the brain difference begin? At conception? In the womb? During childhood or adolescence? Did experience produce the difference? Or did genes or prenatal hormones (or genes via prenatal hormones)?

LeVay does not view this neural center as a sexual orientation center; rather, he sees it as an important part of the neural pathway engaged in sexual behavior. He acknowledges that it’s possible that sexual behavior patterns influence the brain’s anatomy. In fish, birds, rats, and humans, brain structures vary with experience—including sexual experience, reports aptly named sex researcher Marc Breedlove (1997). But LeVay believes it more likely that brain anatomy influences sexual orientation. His hunch seems confirmed by the discovery of a similar hypothalamic difference between the 6 to 10 percent of male sheep that display same-sex attraction and the 90+ percent attracted to females (Larkin & others, 2002; Rosselli & others, 2002).

Laura Allen and Roger Gorski (1992) also concluded that brain anatomy influences sexual orientation after discovering that a section of the corpus callosum (the fibers connecting right and left hemispheres) is one-third larger in homosexual men

“Gay men simply don’t have the brain cells to be attracted to women.”

Simon LeVay, *The Sexual Brain*, 1993