

Is Lesbianism Hereditary?

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Evidence from a recent twin study suggests that female sexual orientation has a genetic basis. Through advertisements in lesbian publications requesting twin volunteers, investigators recruited 115 women, 86% of them (by their own account) lesbian and 14% bisexual. Two-thirds had been raised with a monozygotic (MZ, or genetically identical) twin sister, and one-third had been raised with a dizygotic (DZ, or fraternal) twin sister. Some also had adoptive sisters who were unrelated genetically. Interviewers asked the women about their sisters' sexual orientation and, with their permission, mailed the co-twins and adoptive sisters a questionnaire that covered the topic.

The sexual orientation of 108 co-twins and 35 adoptive sisters could be confidently determined by their own or their sisters' reports. Thirty-four (48%) of 71 MZ co-twins were homosexual or bisexual, as compared with six (16%) of 37 DZ co-twins and two (6%) of 35 adoptive sisters. MZ twins also had a much higher rate of homosexuality than DZ twins and adoptive sisters when two

other definitions of homosexuality were used, and even when bisexuals were not counted as homosexual.

The original volunteers were also confident about the sexual orientation of 73 genetically related sisters and 104 genetically related brothers who were not their twins. Fourteen percent of the sisters were homosexual or bisexual about the same as the rate among DZ co-twins. Only 5% of the brothers were homosexual, although male homosexuality is thought to be more common than female homosexuality in the general population. According to the authors, this result suggests that male and female homosexuality do not run in the same families and probably have different causes.

To judge the heritability of lesbianism - the proportion of the variance (individual differences) in sexual orientation associated with genetic difference - the authors used several models incorporating different estimates of both the rate of female homosexuality in the general population and the likelihood

that an unusually high proportion of the volunteer subjects would have homosexual relatives. On any plausible combination of assumptions about these matters, the heritability of female homosexuality was at least .40 and at most .76. Shared environment - the common upbringing of the twins and their adoptive sisters - had no significant effect in any of the statistical models. Although environment counted for almost as much as heredity in determining women's sexual orientation, the crucial environmental influences were not the same even for twins brought up together.

J. Michael Bailey, Richard C. Pillard, Michael C. Neale, and Yvonne Agyei. Heritable factors influence sexual orientation in women. Archives of General Psychiatry, 50:217-223 (March 1993). ▼

Send your questions to:
Auntie Pearl
 PO Box 4156
 Burlington, VT 05406

Health Resource Organizations

AIDS HOTLINES:

Vermont 1-800-882-2437
 New Hampshire 1-800-752-2437
 New York State 1-800-541-2437
 Massachusetts 1-617-522-4090
 Maine 1-800-851-2437
 National 1-800-342-2437
 Canadian 1-613-563-2437

AIDS Community Awareness Project

(ACAP)
 PO Box 608
 St. Johnsbury VT 05819
 (802) 748-1149

AIDS Community Resource Network (ACoRN)

PO Box 2057
 Lebanon NH 03766
 (603) 448-2220

Bennington Area AIDS Project

PO Box 1066
 Bennington VT 05201
 (802) 442-4481 or 1-800-845-2437

Brattleboro AIDS Project

PO Box 1486
 Brattleboro VT 05302
 (802) 254-4444 (Helpline)
 (802) 254-8263 (Office)

Franklin-Grand Isle AIDS Task Force

P. O. Box 241, St. Albans VT 05478
 (800) 524-7742 • (802) 638-7834

Friends Vermont

Emotional, Spiritual, & Psychological Support
 PO Box 402
 Bristol, VT 05443
 1-800-639-3316

Gay/Lesbian Alcoholics Anonymous

GLAA, P.O. Box 5653
 Burlington, VT 05402

Friends Vermont Emotional, Spiritual & Psychological Support

PO Box 402 • Bristol, VT 05443
 1-800-639-3316

Lesbian Cancer Support Group

(802) 660-8386

North Star (Holistic Health Care)

RR2 Box 3255
 Morrisville VT 05661 • (802) 888-2858
Vermont AIDS Council
 PO Box 275
 Montpelier VT 05601 • (802) 229-2557

Vermont C.A.R.E.S.

(Committee for AIDS Resources, Education, and Services)
 PO Box 5248
 30 Elmwood Avenue
 Burlington VT 05401
 (802) 863-2437 (Burlington)
 1-800-649-2437 (Rutland and Washington County support groups)

Vermont Department of Health

1-800-882-2437 (AIDS Hotline) or
 (802) 863-7245 (AIDS Program office)

VT PWA Coalition

PO Box 1055 • Brattleboro, VT 05302
 1-800-698-8792 or (802) 222-5123

Vermont Women's Health Center

336 North Avenue
 Burlington VT 05401 • (802) 863-1386