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Perspectives in Biology and Medicine

Homosexuauty as a By-Product of Selection for Optimal Heterosexual Strategies

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Perspectives in Biology and Medicine
Johns Hopkins University Press
Volume 26, Number 2, Winter 1983
pp. 315-322
10.1353/pbm.1983.0018
ARTICLE

View Citation

Additional Information

In lieu of an abstract, here is a brief excerpt of the content:

HOMOSEXUALITY AS A BY-PRODUCT OF SELECTION FOR OPTIMAL HETEROSEXUAL STRATEGIES GORDON G. GALLUP, JR., and SUSAN D. SUAREZ* Optimal heterosexual strategies among humans are so different between males and females that one writer [1] was recendy prompted to proclaim that for a member of one sex to adopt the reproductive strategy of the other would be a ticket to reproductive obUvion. From the standpoint of biology and evolution, there simply is no such thing as equality when it comes to sex. We intend to show that at least some instances of homosexuality in humans might be a consequence of heterosexual frustration, dissatisfaction which derives from diese genderspecific differences, or both. Evolution Evolution is represented by changes in the composition ofa gene pool over time. Such changes are a consequence ofnonrandom or differential reproduction. Ifall individuals had an equal probabiUty ofreproducing, and who mated with whom was random, the composition ofa gene pool would remain static. Changes occur only if certain genotypes have a reproductive advantage over others. Evolution is not represented by the survival of the fittest but by the perpetuation ofthe most reproductively viable configuration ofgenes. Whether you live or die is irrelevant; we all die. Similarly, commonsense notions of fitness, as defined by size, strength, vitality, intelligence, and the like, are not necessarily important. You could be the fittest person imaginable, but if you do not reproduce or behave in ways that contribute to the reproductive success of relatives, your contribution to evolution is zero. Fitness can be defined only in terms of reproductive success. Sex is the final common path for all evolutionary change. Work supported in part by a National Science Foundation predoctoral fellowship held by the second author. The authors thank Susan Barron for technical assistance. ?Department of Psychology, State University of New York at Albany, Albany, New York 12222.© 1983 by The University of Chicago. AH rights reserved. 0031-5982/83/2602-0339101.00 Perspectives in Biology and Medicine, 26, 2 · Winter 1983 | 315 Evolution can be thought of as an unconscious existential game. Losing the game is defined as not leaving any descendants. Winning, on die other hand, is less tangible. Winning can be defined only as not having lost. The game is played according to cost/benefit ratios, and the objective is to maximize one's genetic representation in subsequent generations . Heterosexual Strategies In terms of playing this game, the best interests of human males and females are strikingly different, and the source of these differences can be traced to three basic biological differences between die sexes. In the first place, females have a reproductive advantage over males because of greater genetic assurance. Females have an absolute guarantee of sharing 50 percent of their genes with each of their offspring. Even if a female is uncertain about who the father might be, there would never be any reason to question her genetic relatedness to her infant. Males, on the other hand, lack such certainty. Even under conditions of monogamy, paternity is never completely assured because of the possibiUty of rape and/or cuckoldry. While females, therefore, are in a better position to "measure" their reproductive success at any given point in time [2], procreation requires a much greater biological investment from the female than the male. Mates do not get pregnant. The burden of pregnancy, childbirth, breast-feeding, and child rearing falls primarily on the female. Males only

participate, ifat all, at each ofthese stages by providing intermittent aid giving and resources. Females, unlike males, Uterally have to live with the consequences of reproduction. Finally, the reproductive potential of males and females is vastly different . A female's reproductive capacity is not only Umited to the release of approximately one egg per month—her reproductive Ufe span is truncated relative to males by virtue of menopause. Given that gestation in humans lasts 9 months, and that the likelihood of conception following parturition is reduced by lactational anovulation [3], the reproductive upper limit for females would be equivalent to about one baby per year (with occasional multiple births) over a period of approximately 25-30 years. Males, on the other hand, produce hundreds of thousands of sperm on a daily basis and...

HOMOSEXUALITY AS A BY-PRODUCT OF SELECTION FOR OPTIMAL HETEROSEXUAL STRATEGIES

*GORDON G. GALLUP, JR., and SUSAN D. SUAREZ**

Optimal heterosexual strategies among humans are so different between males and females that one writer [1] was recently prompted to proclaim that for a member of one sex to adopt the reproductive strategy of the other would be a ticket to reproductive oblivion. From the standpoint of biology and evolution, there simply is no such thing as equality when it comes to sex. We intend to show that at least some instances of homosexuality in humans might be a consequence of heterosexual frustration, dissatisfaction which derives from these gender-specific differences, or both.

Evolution

Evolution is represented by changes in the composition of a gene pool over time. Such changes are a consequence of nonrandom or differential reproduction. If all individuals had an equal probability of reproducing, and who mated with whom was random, the composition of a gene pool would remain static. Changes occur only if certain genotypes have a reproductive advantage over others. Evolution is not represented by the survival of the fittest but by the perpetuation of the most reproductively viable configuration of genes. Whether you live or die is irrelevant; we all die. Similarly, commonsense notions of fitness, as defined by size, strength, vitality, intelligence, and the like, are not necessarily important. You could be the fittest person imaginable, but if you do not reproduce or behave in ways that contribute to the reproductive success of relatives, your contribution to evolution is zero. Fitness can be defined only in terms of reproductive success. Sex is the final common path for all evolutionary change.

Work supported in part by a National Science Foundation predoctoral fellowship held by the second author. The authors thank Susan Barron for technical assistance.

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0031-5982/83/2602-0339$01.00

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Additional Information

ISSN	1529-8795
Print ISSN	0031-5982
Pages	pp. 315-322
Launched on MUSE	2015-01-07
Open Access	No