Genetic Basis of Homosexuality

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The team's position on the basis of genetics in homosexuality is pro. We believe that a person's exhibition of homosexual tendencies is due to genetics. There are three point in supporting this argument. First, an increased frequency of homosexuality in identical twin supports a genetic link to homosexual behavior. Two, the current data on homosexuals would be further strengthened towards a genetic basis if sampling methods were corrected. Finally, the implications of a genetic basis of homosexuality allow for a better understanding of homosexual behavior and methods to control and help them.

One method of determining the presence of a genetic link to behavior is to check the commonness of Monozygotic twins (MZ), which are identical twins verses the commonness of that behavior in Dizygotic twins (DZ), fraternal twins. "We predicted that the rate of homosexuality would be higher for MZ than for DZ cotwins..."(Baily, A Genetic Study of male sexual orientation, p. 1090). When tested to determine the orientation of the studied homosexual's cotwin, the result was that "Fifty two percent (29/56) of the MZ cotwins were either homosexual or bisexual... compared with 22% (12/54) of the DZ cotwins and 11% (6/57) of the adoptive brothers" (Baily, A Genetic Study..., p. 1092). Baily was not the first to conduct a study on these two types of twins. "The first noteworthy genetic study.. was done by Kallmann.., who found a 100 percent concordnace rate for thirty-seven male MZ twin pairs, compared at a 15 percent rate for twenty-six..DZ pairs.... The study is generally held in low regard. Nevertheless, no one has offered a plausible alternative to genetic influence to account for Kallmann's strinkingly different.. rates" (Baily, Biological Perspectives..., p. 121). Although research into the genetic basis of homosexuality has not been statistically pure, the research has however been done and has suggested that genetics are at work.

The team's position is that although the sampling methods in Baily's experiment were not perfect, they were as good as could have been obtained. The team also regards the presence of other supporting evidence as further fact to a genetic basis of homosexuality.

The critics of a genetic base for homosexuality charge that the sampling methods of the Baily experiment were poor and "They are extremely limited, however and one must be cautious in interpreting the results" (McGuire, p. 60). However, more than just Baily's experiment have shown that differences do occur.

> "Three highly publicized reports of brain structures are related to sexual orientation. The first.. found that the suprachiasmatic nucleus of the hypothalamus to be 1.7 times larger in homosexual than in heterosexual men.... The most noted finding of a brain difference.. was reported by LeVay (1991).... The [hypothalamic] nuclei of the homosexual men were also less than half the size of the of the heterosexual men's, and were indistinguishable from those of the women.... The most recent brain study.. demonstrated sex and sexual orientation differences in the anterior commissure of the corpus collosum.. with the homosexual men's the largest" (Baily, Biological Perspectives..., pp. 116-117).

While McGuire's skepticism is justified, small physical structure differences which have been detected in many studies which suggests a biological difference between homosexuals and heterosexuals. This view, different than the environmental basis supporters would like to believe, of a biological difference is helped by the reporting that,, "Apart from homosexual's somewhat greater nonconformity, the reported backgrounds of homosexuals and heterosexuals were similar" (Meyers, p. 380). The easiest conclusion to make from the information that homosexuals are biologically different and that the difference is not caused by the background of the individual is homosexuals are affected by a factor internal to their body, genes.

The team regards implications of a genetic basis for homosexuality as important evidence and backup tests for our point. A genetic basis for homosexuality allows a multitude of implications to be formed. Since homosexuality is genetic, the genes neccessary must be transfered to a new generation. Easily criticized is the link between homosexuals and a new generation. Mutation has been proven to not be the cause, "Even at its lowest estimated

base rates, homosexuality occurs far more frequently that the highest known mutaino rates; thus mutation alone cannot account for the persistence of 'gay genes,' if they exist(Baily, p. 119)" A far better link is that although the homosexual may not create children, a close family relative probably will. All of this is dependent upon an easily spread gene. According to Bancroft, a group of scientists have "found a convincing correlation between homosexual orientation and the inheritance of.. markers at [a region].. of the X chromosome" (Bancroft, p. 439). All people carry at least one X chromosome. "All heritabilities computed assuming a 4 percent rate exceeded .50" (Baily, Biological Perspectives...., p. 122).

Since homosexuality is caused by a gene, the mental health of homosexuals should cease to be discussed, instead those who believe homosexuality to be wrong should concentrate upon curing the genetic and protein factors. "These facts [homosexuals are not dangerous to society] led the American Psychiatric Association in 1973 to drop homosexuality from its list of 'mental illnesses' "(Meyers, p. 380). Genetic causes of homosexuality make other parameters of homosexuals interesting. "Several studies have reported homosexual mem to have a higher incidence of left-handedness than heterosexual men. (Bailey, Biological Perspectives..., p. 115)" In addition, Bailey also gives evidence that the spatial abilities of homosexual men are lower than heterosexual men (Biological Perspective, p. 115).

Personal View

I believe that although there might be some genetic basises for homosexuality, any such genes should be considered harmful as would cancer genes. While it may be theorized that only genetics is considered to be responsible for homosexuality, the fact remains that animals are influenced by both genetic and environmental factors and any research stating that someone with a certain set of genes will always be homosexual is most certainly wrong. Since genes are commonly involved in the manufacture of proteins, any of the organ structure differences in homosexuals attributed to only genetics should be studied for possible interactions from proteins and not purely genetic build. Because parts of the Bible mention homosexuals, it is clear to me that homosexuals have been present for a long time and some mechanism for the forming of new homosexuals is at work. I do not believe however that homosexuality is only hereditary, as a 'gay gene' would suggest. Because of the uncertainty of the origins of homosexuality and the long period of its existence, homosexuality will probably never be totally understood and sadly will probably never be eradicated.

References

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