# Homosexuality is not a chosen path

Homosexuality Is Not A Chosen Path Marsha Grant COM/1156 March 5, 2011 Kim Elliot-White Homosexuality Is Not a Chosen Path Homosexuality is the result of genetics and brain formation and is not a choice or effect of human nurturing. The debate of this topic has occurred for many years in many cultures. Brain formation as early as fetal growth in utero determines sexuality in proven studies. Genetic research shows that homosexuality linked through specific chromosome makeup. Some of society views homosexuality as a choice yet this sexuality exists in other species as well as humans.

Other creatures cannot make cognitive choices and human beings are no different with regard to choosing sexuality. Animals cannot reason nor make cognitive choices. With respect to sexuality, humans are like other animals and do not choose their sexuality. Some of the genetic researched performed regarding homosexuality was through the study of twins. Monozygotic twins, identical twins, are the only people in the world that have identical DNA. Studying identical twins would be the best research to perform any type of genetic comparison.

Ernest Kallman was the earliest to conduct studies on twins with regard to sexuality. Richard Pillard and J. Michael Bailey also performed gayness studies using monozygotic twins, dizygotic twins (fraternal twins), and non-related adopted brothers. The study’s participant selection included 56 sets of identical twins and 54 sets of fraternal twins, in which one twin was a homosexual (Bailey & Pillard, 1991). The results of the research by these men show that over half of the identical twins were self-identified homosexuals.

Reports show a discovery of over half of the identical twins studied were both homosexual. The same study showed right at one fourth fraternal twins and five percent non-related adopted brothers had the same self-identification. The fraternal twin study showed that both twins were homosexual in 22% of the cases. The closer the genetic linking the pair is, they both exhibit either straight or gay tendencies. Further experiments with females led to the same conclusion. Another scientist, Dean Hamer, studied the family trees of men openly stating to be gay by taking 40 DNA samples.

Hamer worked on the study with colleagues from the National Cancer Institute. In 1993 he found five genetic markers on section of the X-Chromosome called Xq28 (Turner, n. d. ). The genetic linking is maternal in this specific stretch of the chromosome strand because the X-Chromosome is from the mother. Because the study was specific to a specific group it received the appropriate name as the gay gene study. Statistical probabilities found in the study give even further support to his findings. Other scientists have studied other areas for natural causes of homosexuality.

Simon LeVay is a well-known neuroanotomist that studied the brains of gay men. “ Something unusual is clearly happening when the brain is organizing itself in fetal life,” (Maugh II, 1992, para. 5) LeVay states. His research involved the dimorphism, meaning of the same but possessing characteristics that differ, of the hypothalamus. The hypothalamus is extremely small and found in the central part of brain. This area of the brain governs sexual behavior and controls the pituitary gland which secretes hormones (Wade, 2005, para. 6).

Of the 41 cadavers LeVay dissected the brain, 19 heterosexual and 16 homosexual men; he found a cluster of neurons in the hypothalamus to be twice as large in heterosexual men as in homosexual men. Debates about Simon LeVay's research have risen because the examinations performed were on patients who had died from AIDS-related illnesses (Pillard, 2003, para. 7). Subsequent studies proved the same results. Laura S. Allen, another scientist, supports the same experimental conclusions that the hypothalamus was also significantly larger in the experimental subjects in her studies conducted.

The women in his studies replicated the same findings. Gayness has been studied through other hormonal study projects. To support the biological perspective scientists and doctors have performed neuroendocrine studies. The studies conducted were to prove the viewpoint that sexual orientation forms in utero. Rodent studies show females exposed to high-level of androgens, a substance that promotes male characteristics, showed more aggression and sexual drive toward other females. These female rodents would also try to mount other females in a sexual act or act of reproduction (Pillard, 2003, para. ). On the other end of this study, males receiving a deficient amount of androgen, the subjects would become submissive in reproduction and sexual drive. These males would be willing to be dominated by other males and receive the sexual act from other male rats. Human and rat DNA are 88% the same. The experimental studies of rats will mimic the same for humans. The conclusions support gender identity and sex differences in cognition programmed into the brain during fetal development.

The Salk Institute for Biological Sciences reported “ the prestigious Proceedings of the National Academy of Sciences suggest that homosexuality is not linked to any single brain structure, but to the changes throughout the brain. ” The institute found another area of the brain was smaller in gay men, too (Maugh II, 1992, para. 3). This further discredits myths about parental influence creating a homosexual child. The previous information listed on studies gives biological support, but the information may be too scientific in explanation.

Discovery that other creatures show homosexual tendencies may not be an inclusive part of a study. Lindsay C. Young studies the Laysan albatross colonies at Keana Point, Hawaii. Revered as models of monogamous relationships, the albatross’ relationships only included one male and one female. First lady Laura Bush has praised these birds for their ability to make lifelong commitments to each other. After six months in solitude the birds reunite with their mates for breeding. After reuniting, these birds sit belly to belly, nuzzling together, and preening each other year after year.

Further research finds that one third of the couples were two females and not the assumed male and female mates. Several species have male and female that virtually have identical appearances and the Laysan albatross are in this category. Studies report, at Keana Point and another colony that Young studied on Kauai, female-female couples stay together from four to 19 years. These couples incubated eggs and reared chicks together just as the male-female couples. Other species such as the female koala perform physical acts of mounting other females in a mating position and making mating sounds during the act.

Species such as the flamingo, guppies, and warthogs have also had same-sex activity studied. Recordings of “ homosexual” or same-sex activities are found in more than 450 species (Mooallem, 2010). Other studies include how humans react differently sexually to different smells. A group of Swedish researchers studied how men and women respond differently with sexual arousal to different scents. Dr. Ivanka Savic, of the Karolinska Institute in Stockholm, performed studies on human pheromones.

Heterosexual men, heterosexual women, and gay men participated in the study. As the subjects smelled an estrogen-like compound as a scent, the hypothalamus lit up in heterosexual men but not heterosexual women. After smelling another scent, the male sweat chemical compound, the hypothalamus lit up in heterosexual women only, even though both heterosexual men and women were in the study. When gay men were subjected to the identical two scents the hypothalamus reaction was the same as the reaction received in the heterosexual women study (Wade, 2005).

This gives evidence that sexuality is not controlled by biological sex but sexual orientation. The study further supports Dr. Simon LeVay’s theory the hypothalamus linkage to one’s sexual orientation. Some researchers interpret these reports that as humans have continued to evolve that they rely more on the sense of sight versus the sense of smell. Contradiction states that if this were true women who work or live together would not tend to have menstrual cycles together. The body’s reaction is to the pheromones released during this time.

Further research on nature versus nurture continues. It will be a continued source of debate because of religious faiths that state homosexuality is immoral. The act of sex is not the question. Hormones produced in the human body are responsible for helping the brain drive sexual orientation. Other creatures exhibit the same scenarios. Homosexuality is not a choice taken but a path given. Reference Listing: Bailey, M. J. , & Pillard, R. C. P. (1991). A Genetic Study of Male Sexual Orientation. Archives of General Psychiatry, 48(12), 1089-1096.

Retrieved from http://archpsyc. ama-assn. org/cgi/content/abstract/48/12/1089 Maugh II, T. H. (1992, August 1). New Homosexuality Link Found in Brain : Medicine: UCLA researchers find a band of fibers larger than in women or heterosexual men. They suggest that sexual orientation is determined by changes throughout the organ.. Los Angeles Times. Retrieved from http://articles. latimes. com/1992-08-01/local/me-4253_1_sexual-orientation Mooallem, J. (2010, March 31). Can Animals Be Gay?. The New York Times. Retrieved from http://www. nytimes. om/2010/04/04/magazine/04animals-t. html? _r= 1 Pillard, Richard (2003). NPR Letters on the Biological Basis of Homosexuality. Online. 8 April 2003. Retrieved from http://cas. bellarmine. edu/tietjen/RootWeb/npr_letters_on_the_biological_ba. htm Turner, WJ. (n. d. ). PubMed. gov. National Center for Biotechnology Information. Retrieved from http://www. ncbi. nlm. nih. gov/pubmed/7794104 Wade, N. (2005, May 10). For Gay Men, an Attraction to a Different Kind of Scent. The New York Times. Retrieved from http://www. nytimes. com/2005/10/science/10smell. html