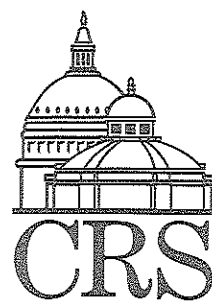


CRS Report for Congress

Homosexuality: Selected Studies and Review of Possible Origins

Edith Fairman Cooper
Analyst in Social Science
Science Policy Research Division

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HOMOSEXUALITY: SELECTED STUDIES AND REVIEW OF POSSIBLE ORIGINS

SUMMARY

The question about whether homosexuality is inherent or the result of environmental influences and choice has been debated since at least the 19th century. To date, scientific research has not explicitly proven which factor takes precedence--inheritance or environment. Some researchers believe that a hard line cannot be drawn between the two theories. Both factors might contribute in some measure to the homosexual orientation. The door, however, has been opened for further research.

During the 19th century, many members of the scientific community studied the phenomenon and believed that the condition was inborn, could not be "cured," and sufferers should be placed in asylums. This response ultimately led to the concept that homosexuality is a form of degeneracy and an illness.

Until the 1970s, the majority of researchers presumed homosexuality was a mental illness that could be "cured." In 1973, the American Psychiatric Association eliminated the term from its list of diagnostic mental illnesses. This change eventually led to the current concept among most practitioners in the mental health field, including psychiatrists, psychologists, and psychoanalysts that homosexuality is not a mental illness.

The 1940s research of Alfred C. Kinsey and his associates about human sexual behavior, brought to light many contradictions in what was previously believed to be marked distinctions in sexual orientations. The Kinsey group found that homosexual experience was more widespread and the sexual experiences of many persons more varied than expected. Therefore, defining homosexuality is not always precise. No one really knows the percentage of individuals who openly or privately consider themselves to be homosexual. The current estimates for homosexuals in the general population range between a low of two percent to a high of nine percent. Results of a recent survey of sexual practices and attitudes of men in the Nation revealed that 2.3 percent reported homosexual experiences, while 1.1 percent claimed to be exclusively homosexual.

Numerous research efforts have been conducted to see if there is a biological cause(s) for homosexuality. One method employed has been the use of twins in attempting to determine the role that inheritance and environment play in causing homosexual behavior. To date, researchers still do not clearly understand how genes contribute to determining a person's sexual orientation.

Recent neurobiological research revealed size differences in the hypothalamus region of the brain in homosexual and heterosexual men. Because of some inconsistencies and other shortcomings, experts warn that caution should be used when considering implications of the research.

Discrepancies and exceptions also exist in studies attempting to determine the impact of environmental factors on eventual homosexual orientation.

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HOMOSEXUALITY: SELECTED STUDIES AND REVIEW OF POSSIBLE ORIGINS

INTRODUCTION

Although the practice of homosexuality existed in ancient times, the term "homosexual" was not coined until 1869 by Karoly Maria Benkert, a Hungarian writer who published a pamphlet on the subject under the pseudonym, Kertbeny, according to Vern L. Bullough in his book, *Homosexuality: A History*.¹ Benkert considered the phenomenon a result of nature, endowing at birth certain males and females with the homosexual urge that placed them in, what he termed, a sexual bondage, creating in them a direct horror of the opposite sex, and the impossibility of suppressing feelings for persons of their own sex. The 19th century was referred to as an age of science. Therefore, it was not long before the medical component of the scientific community began to study this phenomenon.

Carl Westphal, a professor of psychiatry in Berlin, was the first physician to study homosexuality more scientifically. In 1869, he published the case history of one of his female patients who had exhibited homosexual characteristics from an early age. Westphal concluded that this behavior was innate (existing from birth) instead of acquired and therefore could not be considered morally evil. Additionally, Westphal noted that although elements of a nervous disorder were present, they did not indicate insanity. He referred to homosexuality as a "contrary sexual feeling." This led to much discussion and publications within the medical community. The term "inverted sexual instinct" became the term of choice. It was well into the 20th century before the word "homosexuality" took pre-eminence.

As time progressed, the question concerning whether homosexuality, although considered to be innate, could be "cured" was explored. Jean Martin Charcot, a well-known 19th century French neurologist, and his colleagues tried to "cure" homosexuality by using hypnosis. After only modest success, they referred to the phenomenon as a "constitutional nervous weakness due to hereditary degeneration." Another French physician, Paul Moreau, contended that homosexuality was like a sixth sense, "a genital sense," that he believed could suffer some form of injury like the other senses (seeing, hearing, touching, etc.) without harming other mental functions. He referred to this behavior as "an hereditary taint" that was like a predisposition to perversion encouraged by certain environmental factors, such as age, poverty, temperament, and others. The only solution, he felt, other than imprisonment, was to place such sufferers

¹Bullough, Vern L. *Homosexuality: A History*. New York, Garland STPM Press, 1979. p.196. This book was used primarily as a reference for the historical information about homosexuality discussed in the introductory section of this report.

into asylums to be cared for, since the condition probably could not be "cured." This response to homosexuality, Bullough stated, ultimately led to the concept of degeneracy, which subsequently influenced society's thinking on this matter.

Sigmund Freud and his associates believed that the condition resulted from a distortion in the natural development which leads to heterosexuality, and should not be classed as "degenerate."² Expanding upon Freud's ideas, many psychoanalysts believed that homosexuality was environmental resulting from early childhood experiences, rather than inborn, and could be treated through psychotherapeutic intervention.³ Also, most psychoanalysts defined homosexuality as a pathological (caused by disease) diversion from the heterosexual "norm." This view gradually became the consensus among professional practitioners in the United States.

In 1954, psychologist Evelyn Hooker received a grant from the National Institute of Mental Health to study homosexuality. Her research effort to determine whether homosexual men were less psychologically adjusted than heterosexual men did not reveal any significant differences between the two groups. This finding indicated, she believed, that homosexuality was not equated with maladjustment, nor was there a particular homosexual personality.⁴ Her investigation contributed to the subsequent changes that occurred in the scientific community's viewpoint that homosexuality resulted from a mental dysfunction.

Until the 1970s, most scientific research focused on homosexuality as a mental illness.⁵ This view of the phenomenon as a "sickness," also implied that it could be "cured." In 1973, the American Psychiatric Association (APA), after several years of debate, removed the term from its official list of psychiatric disorders, *The Diagnostic and Statistical Manual of Mental Disorders (DSM-II)*. By 1986, any specific reference to homosexuality as a mental disturbance was completely eliminated from the APA's *DSM-III-R* (third edition, revised). (Under the category, "Psychosexual Disorders Not Otherwise Specified," there is listed "persistent and marked distress about one's sexual orientation.") In spite of these changes, one author reports that in the 1980s, "psychoanalysts remained steadfastly committed to the pathological perspective."⁶ Currently, according to one respected observer, the majority of practitioners in various disciplines

²Bayer, Ronald. *Homosexuality and American Psychiatry: The Politics of Diagnosis*. Princeton, New Jersey, Princeton University Press, 1987. p. 22.

³Ibid., p. 121.

⁴Facts That Liberated the Gay Community. *Psychology Today*, Dec. 1975. p. 52.

⁵Garnets, Linda, and Douglas C. Kimmel. Lesbian and Gay Male Dimensions in the Psychological Study of Human Diversity. In *Psychological Perspectives on Human Diversity in America*. Jacqueline D. Goodchilds (ed.) Washington, D.C., American Psychological Association, 1991. p. 144.

⁶Bayer, *Homosexuality and American Psychiatry*, p. 191.

within the mental health field, be it psychiatrist, psychologist, or psychoanalyst, do not consider homosexuality as a mental illness.⁷

Whether homosexuality is an inborn trait that cannot be altered or results from environmental influences (such as dysfunctional family relationships and other factors) implying that it can be "cured," has been debated since the 19th century. How society perceives the causes of homosexuality can clearly influence how homosexuals are treated by society and its institutions.

This report discusses various selected scientific research studies that have explored possible causes of homosexuality. Some investigations examining biological factors are described, as well as studies that consider possible environmental influences.

Various problems in defining sexual orientation and homosexuality exist. Before research studies are discussed, definitional concerns are reviewed along with some of the issues related to determining the national incidence of homosexuality.

The terms "gay" and "lesbian" are not used in this report to refer to homosexual men and women. According to Linda Garnets and Douglas Kimmel, a psychotherapist and psychologist, respectively, who specialize in work with gay and lesbian individuals, the terms "gay" and "lesbian" involve "a life-style that implies some degree of self-awareness and identification with the larger lesbian and gay male community." Contrastingly, the word, "homosexuality" may involve sexual acts without a gay or lesbian life-style or self-identification.⁸ Because of these differences, only the term homosexuality is used to denote male or female sexual orientations. Furthermore, male homosexuals primarily are discussed, unless specifically indicated otherwise. This is because, to date, far more scientific information is available concerning male homosexuality than female.

DEFINING SEXUAL ORIENTATION AND HOMOSEXUALITY

Distinct questions arise when trying to define sexual orientation and thus, homosexuality. This section discusses the basic definitions of sexual orientation and homosexuality and describes some of the uncertainties that exist.

As used here, the term "sexual orientation" means an individual's preferred adult sexual behavior--specifically heterosexual, homosexual, or bisexual.⁹ A

⁷Discussed during a telephone conversation with a spokesman in the Library of the American Psychiatric Association on March 29, 1993.

⁸Garnets and Kimmel, *Lesbian and Gay Male Dimensions*, p. 145.

⁹Campbell, Robert J. *Psychiatric Dictionary*, 6th ed. New York, Oxford University Press, 1989. p. 673.

homosexual has been defined as a person with a "sexual orientation characterized by erotic attraction to others of the same sex; feelings of love, emotional attachment, or sexual attraction to persons of one's own gender and/or sexual behavior with a person of the same sex." A heterosexual is an individual with a sexual desire directed toward persons of the opposite sex. A bisexual is a person who, after adolescence, consciously feels, thinks, and alternately reacts by thoughts and feelings, erotically, and/or orgasmically to both, persons of the same and of the opposite sex.¹⁰

Many experts in the field of sexuality consider sexual orientation to be complex because it involves a person's self-identification, behavior, fantasies, emotional attachments, and current relationship status.¹¹ These different factors can contribute to a "blurring" in lines of distinction between the sexual orientations as identified and described above.

Historically, most professionals in mental health fields viewed homosexuality and heterosexuality as dichotomous, which means that they were divided into two mutually exclusive or contradictory groups. This position, however, was challenged by the findings of Alfred C. Kinsey and his associates Wardell B. Pomeroy, and Clyde E. Martin in their 1948 and 1953 reports, *Sexual Behavior in the Human Male*, and *Sexual Behavior in the Human Female*, respectively. The Kinsey group's research documented human sexual behavior patterns and discovered that the homosexual experience was more widespread than was previously known, and that engaging in homosexual acts did not necessarily make an individual a homosexual.¹² The Kinsey group estimated that nearly 50 percent of all people in the United States had experienced some level of homosexual sensual feelings, and many had acted on those feelings.¹³ Such experiences usually occurred during adolescence, particularly early adolescence with the first encounter around age 14.¹⁴

The Kinsey group's findings brought about extensive controversy over the definition of a homosexual when the researchers concluded that millions of

¹⁰Ibid., p. 328, 323, 98.

¹¹Garnets and Kimmel, *Lesbian and Gay Male Dimensions*, p. 146.

¹²Sanders, Stephanie A., June Machover Reinisch, and David P. McWhirter. Homosexuality/Heterosexuality: An Overview. In McWhirter, David P., Stephanie A. Sanders, and June Machover Reinisch, eds. *Homosexuality/Heterosexuality: Concepts of Sexual Orientation*. New York, Oxford University Press, 1990. p. xxi-xxiii.

¹³Voeller, Bruce. Some Uses and Abuses of the Kinsey Scale. In McWhirter, David P., Stephanie A. Sanders, and June Machover Reinisch. *Homosexuality/Heterosexuality: Concepts of Sexual Orientation*. New York, Oxford University Press, 1990. p. 32.

¹⁴Gebhard, Paul H. Incidence of Overt Homosexuality in the United States and Western Europe. In U.S. Dept. of Health, Education, and Welfare. Alcohol, Drug Abuse, and Mental Health Admin. *National Institute of Mental Health Task Force on Homosexuality: Final Report and Background Papers*. John M. Livingood, ed. U.S. Govt. Print. Off., 1976. p. 25. DHEW Publication No. (ADM) 76-357.

people in the Nation at some time engaged in homosexual activity, or experienced varying degrees of homosexual feelings. The group's findings suggested that a large percentage of persons surveyed for their study could not be placed into either exclusively heterosexual or exclusively homosexual categories as judged by the Kinsey scale.

The Kinsey scale ranges from zero to six (0-6) and indicates the degree of a person's sexual orientation between "Exclusively heterosexual with no homosexual" at point zero (0); to point one (1), "Predominantly heterosexual, only incidentally homosexual;" point two (2), "Predominantly heterosexual, but more than incidentally homosexual;" point three (3), "Equally heterosexual and homosexual;" point four (4), "Predominantly homosexual, but more than incidentally heterosexual;" point five (5), "Predominantly homosexual, but incidentally heterosexual;" to point six (6), "Exclusively homosexual."¹⁵

The Kinsey group found that there are people in the population who have exclusively heterosexual experiences, both "overtly" (by physical sexual contact) and "psychically" (by thoughts and feelings only), as well as exclusively homosexual experiences, both overtly and psychically. The record also showed, however, that a large number of persons had combined homosexual and heterosexual histories both overtly and psychically. Some of these individuals had predominately heterosexual experiences, and some had predominately homosexual experiences. Also, there were some who had equal amounts of both types of experiences.¹⁶ More recent data have not refuted this theory.¹⁷

The controversy regarding the Kinsey group's findings and the pioneering research of psychologist Evelyn Hooker, contributed to the reconsideration of the nature of homosexuality (whether this sexual orientation indicates problems in psychological adjustment) and finally to the change in its classification by the American Psychiatric Association as a mental illness.¹⁸ One psychiatric dictionary currently states that, "[h]eterosexuality and homosexuality are not dichotomous. For both heterosexual and homosexual persons, early sexual behavior (in childhood or adolescence) may be congruent or incongruent with the direction of adult sexual expression."¹⁹ This means that early sexual activity, whether heterosexual or homosexual in nature, may not necessarily determine the direction of an individual's sexual expression in adulthood.

¹⁵Kinsey, Alfred C., Wardell B. Pomeroy, and Clyde E. Martin. *Sexual Behavior in the Human Male*, Philadelphia, W. B. Saunders Co., 1948. p. 638-639.

¹⁶Ibid., p. 639.

¹⁷Bell, Alan P., and Martin S. Weinberg. *Homosexualities: A Study of Diversity Among Men and Women*. New York, Simon and Schuster, 1978. p. 53-61. This study appears to be the most recent major study that essentially expanded Kinsey's research effort with male and female homosexuals that included minorities, as well as whites in the study.

¹⁸Ibid., p. 196.

¹⁹Campbell, *Psychiatric Dictionary*, p. 328.

Some analysts suggest that there are different "types" of homosexuals. Because of societal pressures or inner conflicts, a person's sexual behavior might be inhibited and he/she may not engage in "overt" homosexual acts but be a homosexual. Also, there are some people who are referred to as "latent" homosexuals who have an unrecognized attraction to the same sex, or may have recognized such feelings, but have not openly expressed them.²⁰ Therefore, some investigators believe that there is no such thing as the homosexual or the heterosexual. They state that the basis of sexual orientation "must always be highly qualified." Furthermore, homosexual individuals differ from one another just as heterosexuals differ based on sexual experience and social and psychological adjustment.²¹ (See Appendix A for brief descriptions of various types of homosexual behaviors.)

U.S. INCIDENCE OF HOMOSEXUALITY

No one knows the exact number or percentage of individuals in the United States who openly or privately consider themselves to be homosexual. The Kinsey group reported from the 1948 study that 10 percent of the white male population was more or less exclusively homosexual for at least three years between the ages of 16 and 55. Also, the group determined that four percent of the white males interviewed for the study (out of about 5,000) had been exclusively homosexual throughout their lives since adolescence up to the time interviewed.²²

Although these data are still used by many analysts, they have been attacked as misleading and distorted. Several researchers reanalyzed Kinsey's data and tabulated an incidence of homosexuality that ranged between a low of two percent to a high of nine percent. These studies often differed in definitions used for homosexuals and research techniques employed.²³

²⁰Ibid., p. 328.

²¹Bell and Weinberg, *Homosexualities*, p. 23, 219.

²²Kinsey, et al., *Sexual Behavior in the Human Male*, p. 651.

²³Fay, Robert E., Charles F. Turner, Albert D. Klassen, and John H. Gagnon. Prevalence and Patterns of Same-Gender Sexual Contact Among Men. *Science*, v. 243, Jan. 20, 1989. p. 338-348.

Gebhard, Incidence of Overt Homosexuality in the United States and Western Europe, p. 26.

Hunt, Morton. *Sexual Behavior in the 1970s*. Chicago, A Playboy Press Book, 1974. p. 313.

Rogers, Susan M., and Charles F. Turner. Male-Male Sexual Contact in the U.S.A.: Findings from Five Sample Surveys, 1970-1990. *The Journal of Sex Research*, v. 28, no. 4, Nov. 1991. p. 491.

Smith, Tom W. Adult Sexual Behavior in 1989: Number of Partners, Frequency of Intercourse and Risk of AIDS. *Family Planning Perspectives*, v. 23, no. 3, May/June 1991. p. 102.

Recently, the *Wall Street Journal* published an article which claimed that the Kinsey group's 10 percent figure was discovered to be in error when statisticians began tracking AIDS cases during the mid-1980s. The New York City health department used the 10 percent Kinsey figure with known HIV infection rates among homosexual men to estimate the size of the city's HIV-infected male homosexual population. The health department estimated that the number was 250,000, and the total number of homosexual and bisexual men in the city's population was between 400,000 to 500,000, respectively. When HIV-infected men were surveyed, it was discovered that the number in the city's population had been overestimated. This led to the belief that the Kinsey 10 percent prevalence figure for homosexuals in the general population was too high.²⁴

A \$1.8 million four-year study was conducted and recently reported by researchers at the Battelle Human Affairs Research Center in Seattle, Washington, surveying sexual behaviors and attitudes of men in the Nation between the ages of 20 and 39. Findings from personal interviews revealed that 2.3 percent reported having homosexual experiences, while 1.1 percent claimed to be exclusively homosexual.²⁵

CAUSES OF HOMOSEXUALITY

Several theories about the causes of homosexuality exist. Recently, the most prominent scientific hypotheses focus on possible inherent²⁶ origins and environmental influences that might determine some individuals' eventual homosexual orientation. This section describes research that has been conducted attempting to substantiate these theories.

Biological Factors

There have been many studies done over the years concerning the possibility of biological causes of or proclivities toward homosexuality. The question that has occupied such studies is whether or not there are biological differences in heterosexuals and homosexuals. The discussions below focus on research that is currently receiving prominent public attention--behavioral genetic research²⁷ conducted through studies of twins, attempting to determine

²⁴Muir, J. Gordon. Homosexuals and the 10% Fallacy. *The Wall Street Journal*, Mar. 31, 1993. p. A14.

²⁵Rensberger, Boyce. Sex Survey: What Men Do and How Often They Do It. *Washington Post*, Apr. 15, 1993. p. A1, A16.

²⁶Implanted by Nature, Inborn. *Dorland's Illustrated Medical Dictionary*, 27th ed. Philadelphia, W. B. Saunders Co., 1988. p. 838.

²⁷Behavior genetics is a recent scientific discipline with the premise that genetics influence complex human behavior. Human behavioral genetic research (as opposed to nonhuman animal
(continued...)

if there is a genetic component for homosexual behavior, and neurobiological investigations examining possible brain differences in homosexuals and heterosexuals. After the twin studies are discussed, other hereditary research that explores whether a trait for homosexuality can be transmitted genetically in families is mentioned briefly. The neurobiological research is then presented.

Genetic Component: Twin Studies

Several biology-related theories have been suggested to explain homosexuality. In the 19th century, some investigators believed that homosexuals were no more responsible for their sexual orientation than they were for their eye or hair color. This conclusion was drawn because the subjects they studied were in mental hospitals and had several inherited physical and mental defects. Consequently, experts surmised that homosexuality also was an inherited defect.²⁸ This idea, however, was never proven.

In 1952, a genetic theory that seemed to have proof was presented by Franz Kallmann²⁹, a geneticist, who studied identical (monozygotic) and fraternal (dizygotic) twins in one of the largest such studies conducted at that time. In studying 85 pairs of twins, at least one of which was exclusively or predominantly homosexual, Kallmann found evidence that homosexuality was more likely to occur in both identical twins than in both fraternal twins. Since identical twins develop from one fertilized egg that has split and become two individuals, each twin has identical chromosomal inherited traits. If homosexuality was caused solely by heredity, then if one twin is homosexual, the other would be homosexual. Contrastingly, because fraternal twins develop from two separate fertilized eggs and are not genetically identical,³⁰ the probability of both of them being homosexual is much less than for identical twins, according to this view.

Kallmann reported that he had found a 100 percent concordance³¹ rate in the identical twins studied. This meant that both identical twins in each set studied were homosexuals.³² The results of Kallmann's research presents

²⁷(...continued)

studies) explore the role of inheritance in behavior by relying on family, adoption, and twin designs. (Robert Plomin. *The Role of Inheritance in Behavior*. *Science*, v. 248, Apr. 13, 1990. p. 185.)

²⁸Hunt, Morton. *Gay: What You Should Know About Homosexuality*. New York, Farrar/Straus/Giroux, 1977. p. 33.

²⁹Kallmann, Franz J. Comparative Twin Study on the Genetic Aspects of Male Homosexuality. *The Journal of Nervous and Mental Disease*, v. 115, no. 4, Apr. 1952. p. 283-298.

³⁰Bermont, Gordon, and Julian M. Davidson. *Biological Bases of Sexual Behavior*. New York, Harper and Row, Publishers, 1974. p. 228.

³¹Concordance means agreement. "In statistics, used primarily in twin studies to refer to the proportion of a representative sample of affected twins whose co-twins are or will be similarly affected." Campbell, *Psychiatric Dictionary*, p. 144.

³²Kallmann, Comparative Twin Study on the Genetic Aspects of Male Homosexuality, p. 296.

evidence that seems to indicate, at first impression, that genetic factors are relevant in the origin of homosexuality.³³

Kallmann's study has been criticized for shortcomings in his research methods, including (1) he used homosexual subjects who were mainly from correctional and psychiatric institutions, (2) he failed to explain his procedure to determine whether the twins were identical or fraternal, and (3) his finding that the identical twins studied had a 100 percent concordance rate for homosexuality was overestimated.³⁴ Some researchers' review of these results indicated that the rate was probably closer to 50 percent.³⁵ Kallmann's results and conclusions on the genetic basis of homosexuality have been questioned because of the overestimation.

Another investigator has criticized Kallmann's findings and suggests alternative explanations listed below for Kallmann's results:³⁶

- Identical twins grow up in the same environment and basically have the same life experiences. The only way the heredity theory could be proven is if identical twins were separated at birth, reared apart, and they both were homosexual. None of Kallmann's twins were reared apart;
- Heredity does not completely control human behavior in any other area, so probably would not in the area of sex. Therefore, it seems to follow that sexual preference would be in part or in large part, learned and influenced by experiences; and
- Many social scientists believe that heredity gives some individuals the general tendency to become a homosexual. The person might not become one, but has a strong tendency to become one.

Since Kallmann's 1952 study, several researchers have explored the heredity theory of homosexuality by studying pairs of identical and fraternal male twins. Some agreed with Kallmann's conclusion that the probability of both identical twins being homosexual is higher than the probability of both fraternal twins being homosexual.³⁷ Other studies, however, showed findings

³³Heston, L. L., and James Shields. Homosexuality in Twins: A Family Study and a Registry Study. *Archives of General Psychiatry*, v. 18, Feb. 1968. p. 150.

³⁴Bailey, J. Michael, and Richard C. Pillard. A Genetic Study of Male Sexual Orientation. *Archives of General Psychiatry*, v. 48, Dec. 1991. p. 1090.

³⁵Pillard, Poumadere, and Carretta. Is Homosexuality Familial? p. 470.

³⁶Hunt, Gay. *What You Should Know About Homosexuality*, p. 34-35.

³⁷Heston and Shields, Homosexuality in Twins, p. 159.

contrary to this concept.³⁸ One such study is reviewed below. Investigations of twins reared apart also have been conducted and will be discussed below.

In a 1976 twin study, conducted by psychiatrist Bernard Zuger, results did not show concordance, but discordance (i.e., one twin was homosexual and the other heterosexual) among identical twins for homosexuality.³⁹ Zuger studied one identical twin pair that showed early childhood gender role differences with one boy exhibiting "feminine" characteristics and the other "masculine." He concluded that factors other than genetic ones may have been operating either before, during or immediately after the twins' birth, as well as familial environmental influences that contributed to this dichotomy of sexual orientation in the twins. Also, he surmised that there might have been congenital⁴⁰ differences in development other than genetic. He stated, however, that this finding did not support possible environmental family influences as the cause of homosexuality in the one twin, because they had grown up in the same environment.

A 1991 study by J. Michael Bailey and Richard C. Pillard (a psychologist at Northwestern University in Evanston, Illinois, and psychiatrist at the Boston University School of Medicine, respectively) entitled, "A Genetic Study of Male Sexual Orientation"⁴¹, has been described as more thorough and considerably larger than previous studies. These experts concluded that genetics play a significant role in the origin of homosexuality, thus supporting Kallmann's theory. The study found, however, that Kallmann overestimated his data on twin concordance.⁴² After interviewing 161 homosexual men, the researchers sent questionnaires to twins and adoptive brothers--56 identical twins, 54 fraternal twins, and 57 adoptive brothers. Through analyzing questionnaire responses, they discovered that 52 percent of identical twins were either homosexual or bisexual (Kallmann indicated 100 percent concordance), compared with 22 percent of the fraternal twins, and 11 percent of the adoptive brothers. Therefore, the research indicated that it is more likely for both identical twins to be homosexuals or bisexuals than for either fraternal twins or adoptive brothers. Similarly, the probability is greater for both fraternal twins to be homosexual or bisexual than for adoptive brothers.⁴³

³⁸Eight investigations are mentioned in Bernard Zuger's study, that is discussed in this section of the report, which discovered identical twins where one was homosexual and the other heterosexual. This finding disproved Kallmann's theory.

³⁹Zuger, Bernard. Monozygotic Twins Discordant for Homosexuality: Report of a Pair and Significance of the Phenomenon. *Comprehensive Psychiatry*, v. 17, no. 5, Sept./Oct. 1976. p. 661-669.

⁴⁰An attribute or anomaly possessed and manifested by an individual since birth. Campbell, *Psychiatric Dictionary*, p. 149.

⁴¹Bailey and Pillard, A Genetic Study of Male Sexual Orientation, p. 1089-1096.

⁴²Ibid., p. 1094.

⁴³Ibid.

A significant inconsistency in this study involved the perceived rate of homosexuality among non-twin biological brothers of the participants. The twin participants reported what they believed to be the sexual orientation of their non-twin brothers (who were not directly surveyed). Out of 142 non-twin brothers, 13 (9.2 percent) were thought to be homosexual. This percentage was lower than what was found for the adoptive brothers who are not, of course biologically related. Hypothetically, if a significant genetic component was evident, then the non-twin siblings would have had a greater probability of being homosexual than the adoptive brothers. Bailey and Pillard stated that the 9.2 percentage rate is considerably less than would be expected when compared with other similar research that has been done in twin studies. They emphasized the desirability of verifying this finding of lower than expected rates of homosexuality in non-twin brothers of homosexual twin subjects.

Bailey and Pillard concluded that "genetic factors are important in determining individual differences in sexual orientation, and the rates of homosexuality in different types of relatives are consistent with some genetic influence."⁴⁴ These findings, however, do not clarify the magnitude of the influence of genes on sexual orientation, which is referred to as the "heritability estimate." A heritability estimate could not be accurately determined because the base rate of homosexuality in the general U.S. population is necessary to compute such an estimate. Currently, there is no consensus regarding the general population's homosexuality percentage rate. Although many analysts believe the Kinsey data estimating the percentage of homosexuals in the general population are distorted, and several reanalyzed the Kinsey data and suggested lower estimates, Bailey and Pillard used what they feel are the most common figures--the Kinsey group's low estimate of about four percent and a high estimate of 10 percent. Using these population figures, they assessed that the influence of genes on sexual orientation falls somewhere between the range of 30 to 70 percent, which is significant when contrasted with environmental influences.⁴⁵

Generally speaking, scientists still do not understand how genes influence an individual's sexual orientation. Simon LeVay, who has done extensive research concerning differences in homosexual and heterosexual brains (discussed below) has hypothesized that genes could affect the area of the brain (hypothalamus) where he found differences. On the other hand, genes could be the source of a biological characteristic that makes people treat others a certain way. Bailey and Pillard theorized that about 30 to 70 percent of sexual orientation differences may be attributed to genes, and LeVay believes, as do many other experts, that other factors must significantly contribute in determining one's sexual orientation.⁴⁶ Bailey feels that "the strongest non-

⁴⁴Ibid., p. 1093.

⁴⁵Ibid.

⁴⁶Adler, Tina. Study Links Genes to Sexual Orientation. *APA Monitor*, v. 23, no. 2, Feb. 1992. p. 13.

genetic influence on sexual orientation is biological, specifically the hormones that fetuses are exposed to."⁴⁷ This theory is briefly discussed below.

In a study reported in 1993, Bailey, Pillard and associates⁴⁸ used the same research strategy to examine genetic influences on female homosexuality. The researchers reasoned that if genetic factors exist for homosexuality, they are probably different for female homosexual orientation than those possibly contributing to a male homosexual orientation. They predicted, however, that the homosexuality rate would be higher for identical twins than fraternal and would be lowest for adopted sisters.

Subjects were recruited through advertisements placed in lesbian-related publications in several cities across the Nation. Out of a total of 115 female homosexual identical and fraternal twins recruited, 107 pairs of twins were used--71 identical and 37 fraternal. Also, 35 adoptive sisters participated. Similar to the male homosexual twin study, the researchers discovered that 48 percent of the identical twin pairs, 16 percent of the fraternal twin pairs, and six percent of the adoptive sisters were homosexuals.

The analysts stated that "[a]lthough we found evidence that female orientation is at least somewhat heritable, the question of what, precisely, is inherited remains."⁴⁹ Bailey and Pillard expressed concerns about the validity of the findings because of the method used to recruit participants, which they felt could cause the results to be misleading. They suggested that the use of twin registries for future sexual orientation studies would eliminate this particular research bias. The most significant difference in the female study and the previous male study was that far more relevant research statistics are available for the males than for the females. There is a dearth of genetic data on female homosexuals.

General Concerns About Twin Studies

Several concerns about Bailey and Pillard's male twin study and twin studies in general have been reported. One psychologist observed that such studies do not prove that any behavioral trait is heritable. Twin studies, he felt, proved nothing concerning the gene versus environment argument. He observed that identical twins share many more experiences than other siblings and are more inclined to be similar in all areas.⁵⁰

⁴⁷Ibid.

⁴⁸Bailey, J. Michael, Richard C. Pillard, Michael C. Neale, and Yvonne Agyei. Heritable Factors Influence Sexual Orientation in Women. *Archives of General Psychiatry*, v. 50, Mar. 1993. 217-223.

⁴⁹Ibid., p. 221.

⁵⁰Adler, Study Links Genes to Sexual Orientation, p. 13.

Other reported problems with twin studies include: (1) findings may be unapplicable to the general population because of the unique characteristics of individuals who are twins; (2) most of these studies get participants by advertising in gay publications, which does not guarantee a representative sample; and (3) when the studies actually are conducted, it is sometimes difficult to score individuals as being homosexual or heterosexual.⁵¹

Studies of Twins Reared Apart

Leonard Heston, a psychiatrist at the University of Washington in Tacoma, who has conducted several male homosexual twin studies, made the observation about the difficulty of scoring individuals as homosexual or heterosexual. He noted that in one of his studies conducted with a pair of identical twins who had been reared apart, one twin who had been raised in the city was clearly homosexual. The other had been raised on a farm, gotten married, and had children. Between the ages of 16 and 22, however, the married twin had experienced an affair with an older man. Heston surmised that if the married twin had grown up in an environment where homosexuality was more common, he might have maintained the homosexual relationship.⁵² This case, however, was just one situation studied. Heston has done other studies of twins raised apart.⁵³ As a result of his research and others, Heston concluded that both genetic and environmental factors contribute to homosexuality in twins.⁵⁴

Genetic Component: Familial Studies

A family study concerning sexual orientation has provided evidence that homosexuality is biological, according to Richard Pillard and James Weinrich (both of the Boston University Medical Center) in their research report, "Evidence of Familial Nature of Male Homosexuality."⁵⁵ Using a family study method (interviewing certain family members about the sexual orientation of their siblings), Pillard and Weinrich recruited and interviewed 51 predominantly homosexual and 50 predominantly heterosexual men (referred to as index subjects) who provided information about the sexual orientation of their siblings (115 sisters and 123 brothers).⁵⁶ The siblings were interviewed as well and

⁵¹Ibid.

⁵²Ibid.

⁵³Eckert, Elke D., Thomas J. Bouchard, Joseph Bohlen, and Leonard L. Heston. Homosexuality in Monozygotic Twins Reared Apart. *British Journal of Psychiatry*, v. 148, 1986. p. 412-425.

⁵⁴Heston and Shields, Homosexuality in Twins, p. 159.

⁵⁵Pillard and Weinrich, Evidence of Familial Nature of Male Homosexuality. *Archives of General Psychiatry*, v. 43, Aug. 1986, p. 808-812.

⁵⁶Fourteen of these siblings were half-siblings, and three were adopted. On average, the homosexual index subjects had more brothers than the heterosexual index subjects.

surveyed through a questionnaire regarding their sexual orientation, which verified the accuracy of the information received from the index subjects. Only the information obtained directly from the siblings was counted.

It was discovered that there was a four percent incidence of homosexuality among the brothers of the heterosexual men canvassed, as would be predicted given a national prevalence percentage for homosexuality (Pillard and Weinrich used Kinsey's four percent figure for the general population). However, 22 percent of brothers of the predominately homosexual men were found to be either bisexual or homosexual, which is higher than the national population average for homosexuality. This 22 percent figure might actually be underestimated because younger siblings also were used. Siblings under the age of 20 might not yet have considered a sexual orientation label for themselves, or might not have been willing to share that information with researchers. Therefore, Pillard and Weinrich surmise that the 22 percent might be on the low side, but probably by only a small amount. This is because some respondents who rated as "predominantly heterosexual, only incidentally homosexual," which is level "one" on the Kinsey scale, might later admit information that would place them higher in the Kinsey rating toward the homosexual orientation. A lowering of a person's Kinsey rating, they observed, over his/her life span is very rare.

The investigators stated that the results should not be taken to imply that male homosexuality might necessarily run in families because of genetic or hormonal reasons. On the contrary, they concluded that environmental causes seemed dominant. The participants frequently suggested that they believed an overprotective mother and a detached father caused a son to be susceptible to a homosexual orientation. Pillard and Weinrich results indicated a combination of environmental and biologic causes for homosexuality.

Pillard and Weinrich felt that their findings were strongly based and are supported by informal polls taken at some of their lectures before homosexual audiences. First, by asking for a count of all men with brothers, then all men with at least one homosexual brother, they speculated that about 25 percent of those who raised their hand for the first count kept it up for the second. If 25 percent is correct, they believed that this reflected two things about the familial theory of homosexuality: (1) "most homosexual men would not have any homosexual brothers," and (2) "homosexuality in pairs of brothers would be common enough that any male member of the homosexual community could easily come up with examples drawn from among his acquaintances." This means, Pillard and Weinrich state, that such an occurrence is uncommon, but far from rare, and widely suspected by many homosexuals themselves.

Neurobiological Component: Brain Differences

Simon LeVay, a neuroscientist at the Salk Institute in San Diego, California, discovered that two small groups of nerve cells in the anterior hypothalamus of the brain (the region that is involved in the regulation of sexual behavior) were significantly larger in heterosexual men than women.

Also, they were more than twice as large in heterosexual men than in homosexual men.⁵⁷ These two groups of specialized nerve tissue, LeVay surmised, could be involved in generating male-typical sexual behavior correlated with sexual orientation. Furthermore, he speculated that one or the other of these groups of nerve tissue was large in persons sexually oriented toward women (which are heterosexual men and homosexual women) and smaller in persons sexually oriented toward men (which are heterosexual women and homosexual men). These findings, LeVay believes, suggest that sexual orientation could have a biological connection.

LeVay measured the specialized nerve tissue from 41 subjects at routine autopsies of individuals. Eighteen were homosexual men and one bisexual man (for a total of 19 subjects), all of whom had died from acquired immunodeficiency syndrome (AIDS) complications; 16 subjects were presumed to be heterosexual males, six who had died from AIDS, and 10 from other causes; Six subjects were presumed to be heterosexual women, one died of AIDS and five from other causes. All were near the same age--a mean age of 38.2 for homosexual men; 42.8 for the heterosexual men; and 41.2 for the heterosexual women. Brain tissue from deceased homosexual women was not available. Therefore, only the hypothesis regarding the sexual orientation of men could be examined.

The researcher noted several problems with using brain tissue from deceased homosexuals who died of AIDS. They are:

- (1) Brain tissue from homosexual women is not available because they have not been as affected by the AIDS epidemic as homosexual men have. Therefore, the theory that the specialized nerve tissue is larger in homosexual women than in heterosexual cannot be explored;
- (2) The small size of the specialized nerve tissue in homosexual men could be the result of AIDS complications and not sexual orientation. Until tissue becomes available of homosexual men dying from other causes, the possibility that the small size of the specialized nerve tissue reflects the result of disease peculiar to homosexual AIDS patients cannot be excluded; and
- (3) The inability to obtain detailed information about the sexuality of the diseased men, who as AIDS patients often are characterized as having had numerous sexual partners, limits the ability to make correlations between brain structure and the noted differences in the sexual practices of homosexual and heterosexual populations.

⁵⁷LeVay, Simon. A Difference in Hypothalamic Structure Between Heterosexual and Homosexual Men. *Science*, v. 253, Aug. 30, 1991. p. 1034.

In addition to these problems, LeVay also noted the existence of two exceptions in the samples used: (1) presumed heterosexual men with small specialized nerve tissue; and (2) presumed homosexual men with larger specialized nerve tissue. These situations suggested the possibility that the size of the specialized nerve tissue may not be the only determinant of sexual orientation. These exceptions also could be the result of assigning subjects to the wrong groups.

In spite of these shortcomings, LeVay states that his discovery of the differences in the size of the specialized nerve tissue in heterosexual and homosexual men indicates that sexual orientation is "amenable to study at the biological level and... opens the door to studies of neurotransmitters or receptors that might be involved in regulating this aspect of personality."

LeVay's research, as yet, has not been substantiated. Other investigators state that speculation regarding the implications of the research should be made cautiously. One reason that confirmation of this research is considered very necessary is because controversy and contradiction always has surrounded sexual dimorphism (combining qualities of two kinds of individuals) studies. Brain structures are very difficult to see clearly in tissue slices, authorities report, and researchers debate what is the most reliable measure of the size of the specialized nerve tissue, whether by volume measurements, which LeVay used, or by actual cell counts.⁵⁸

Prior to LeVay's study, Richard Swaab, a neuroscientist at the Netherlands Institute for Brain Research in Amsterdam, found that the section of the brain that controls daily rhythms, the suprachiasmatic nucleus (SCN), is twice as large in homosexual men than in the brains of heterosexuals. LeVay observed that the SCN does not play a role in sexual behavior. It might, however, be affected by the same factors that cause homosexuality but probably not likely to be part of the cause.⁵⁹

Sandra J. Witelson and her colleagues at McMaster University who have studied sex hormones and brain development in rats, have hypothesized that differing levels of testosterone, the sex hormone that stimulates the development of masculine characteristics,⁶⁰ possibly could influence the development of the part of the brain LeVay studied. Witelson discovered that the development of the anterior hypothalamus in rats depends on testosterone levels before and immediately after birth. In fact, it was observed that when male rats were castrated at birth, the production of testosterone decreased and the region in the anterior hypothalamus that is associated with sexual behavior was smaller than

⁵⁸Barinaga, Marcia. Is Homosexuality Biological? *Science*, v. 253, Aug. 30, 1991. p. 957.

⁵⁹Ibid.

⁶⁰Testosterone is a male sex hormone produced mainly in the testicles. *The Book of Health: A Medical Encyclopedia for Everyone*. (3rd ed.) Randolph L. Clark, and Russell W. Cumley, eds. New York, Van Nostrand Reinhold Co., 1973. p. 968.

expected when compared with non-castrated male rats. In contrast, when female rats were injected with testosterone, the same region in the anterior hypothalamus was observed to be larger than in non-injected female rats. When these altered rats reached adulthood, the males showed more "female" sexual behavior while the females showed more "male" sexual behavior.

Many scientists search for comparable findings in humans. Witelson and associates have found that homosexual males and females show a left-hand preference in many tasks. Scientific research that examined people with abnormal sex-hormone levels suggest that handedness is a brain feature that can be influenced by sex hormones during brain development. Therefore, Witelson and colleagues surmise that there might be irregular brain organization in homosexuals also caused by irregular sex hormone levels.⁶¹

Further research is needed regarding all of these theories, since most findings are inconclusive and many areas remain uncertain.

Behavioral Theories

This section of the report will examine behavioral and environmental theories about the causes of homosexuality. Some investigators believe that past experiences of a large number of male homosexuals add support to the idea that homosexuality is biological. They also indicate, however, that environmental factors play a strong part in the eventual adherence to the atypical sexual orientation. How early a child and/or adolescent identifies himself as "different" is discussed, as well as the role that some researchers believe parents play in influencing their child or adolescent's future sexual orientation. In addition, information is included that reviews survey results about some causative theories that many people in society believe are true about the origin of homosexuality. These findings are listed along with a researcher's analyses of the theories.

Examining the literature for this section of the report revealed that there is a striking dearth of behavioral research studies investigating female homosexuality.

Sexual and Gender Identity Development

"Sexual identity" is sometimes used interchangeably with "gender identity." Some investigators, however, make distinctions in their definitions. Sexual identity is biologically determined and identifies a person as either anatomically male or female. Gender identity is considered behavioral noting the inner conviction that one belongs to one sex and not the other.⁶² An extension of this concept is "gender role," which refers to culturally fixed behaviors and

⁶¹Barinaga, Is Homosexuality Biological? p. 957.

⁶²Wiedeman, George H. Homosexuality, A Survey. *Journal of the American Psychoanalytic Association*, v. 22, no. 3, 1974. p. 663.

appearances that differentiate between masculinity and femininity. One researcher includes these two definitions for anatomical identity and gender role as components that comprise sexual identity, but also includes a third, sexual orientation. This expert believes that all of these components can contribute to an individual's gender identity.⁶³ This report uses gender identity to refer to this developmental phase.

Childhood Gender Identity

Young boys who grow up to become homosexuals usually have been characterized as having exhibited various "feminine" behaviors as children. There are exceptions. A minority of homosexual adult males report a lack of early "feminine" behaviors, and having childhood characteristics no different from other boys who grew up to a heterosexual orientation.⁶⁴

A large number of homosexual men, however, report feeling "different" from other boys early in childhood. Many of them indicate that homosexual feelings were always there. Most report, however, that such feelings began between the ages of eight and 13 or 14 years.⁶⁵ Others have expressed memories of erotic feelings, usually toward their fathers, as early as ages four or five years.⁶⁶ This period of development coincides with what is referred to as the Oedipal complex stage in boys who have a heterosexual orientation when, according to Freud's theory, boys erotically desire their mothers and have feelings of rivalry and hostility toward their fathers.⁶⁷ Prehomosexual boys often display what has been termed an inverted Oedipus complex where just the opposite occurs.⁶⁸

The feelings that they have for their fathers, according to one expert, initially causes them to feel "different" from other boys their age. In the Freudian analysis, as boys with a heterosexual orientation usually imitate the characteristics of the father in order to attract the mother, prehomosexual boys often display the characteristics of the mother in order to attract the father. Such patterns of display are labeled by many in U.S. society as "feminine" and are considered to be gender atypical for four, five, or six-year-old boys. These

⁶³Green, Richard. *The "SISSY BOY SYNDROME" and the Development of Homosexuality*. New Haven, Yale University Press, 1987. p. 6.

⁶⁴Saghir, Marcel T., and Eli Robins. *Male and Female Homosexuality: A Comprehensive Investigation*. Baltimore, Williams & Wilkins Co., 1973. p. 30.

⁶⁵Isay, Richard A. *Being Homosexual: Gay Men and Their Development*. New York, Farrar/Straus/Giroux, 1989. p. 23.

⁶⁶Ibid., p. 29.

⁶⁷Atkinson, Rita L., Richard C. Atkinson, Edward E. Smith, and Ernest R. Hilgard. *Introduction to Psychology*. San Diego, Harcourt Brace Jovanovich, Publishers, 1987. p. 474.

⁶⁸Campbell, *Psychiatric Dictionary*, p. 494.

"feminine" characteristics may include a relative lack of aggressiveness, and greater shows of compassion and sensitivity than most other boys of those ages display. Many times, these characteristics persist into adulthood, and are recalled by several homosexual men as contributing to secretiveness, isolation, and unhappiness in later childhood years.⁶⁹

Several research studies comparing the childhoods of adult homosexual males with adult heterosexual males have found that most of their subject prehomosexual boys exhibited "feminine" behaviors, which led to teasing by their peers and being labeled as "sissies." Many adult homosexuals reported similar childhood experiences of having no male friends, avoidance of rough "boys" games, and playing mostly with girls. A large number remembered a consistent desire to become a girl or a woman before they became adults. Some even cross-dressed.⁷⁰ "Childhood gender nonconformity," an investigator found, was more strongly related to adult homosexuality than any other variable in an interview study of 600 homosexual men and 300 heterosexual men.⁷¹

Adolescent Gender Identity

One writer has noted that many psychoanalysts regard the period of adolescence as an opportunity for "homosexually inclined" boys to have another chance to put aside these inclinations. Because of the stigma that is attached to boys who display "feminine" characteristics, a deliberate effort usually is made during adolescence to lose many of these traits acquired during childhood and have gender role behavior conform to anatomy.⁷² These youths may further this effort by experimenting with heterosexuality much like some heterosexually inclined youth, which the Kinsey group discovered, experiment with homosexuality during this developmental period. The cited studies indicate, however, that the homosexually inclined youths usually continue to maintain a predominantly homosexual fantasy life and impulses.

Gender identity continues to develop in prehomosexual boys in the midst of feeling guilty because of sexual feelings and impulses that are "different" from their peers and family members who are exclusively heterosexual. Their self-esteem in most cases continues to be damaged because of previous childhood labelings and rejections of other boys, and the labeling of themselves as "different."⁷³

Many times such youths try to convince themselves that these feelings will disappear and eventually be replaced by the proper sexual desire some time in

⁶⁹Isay, *Being Homosexual*, p. 29-30.

⁷⁰Green, *The "SISSY BOY SYNDROME"*, p. 15.

⁷¹Ibid., p. 11.

⁷²Isay, *Being Homosexual*, p. 20.

⁷³Ibid., p. 48.

the future. Because of this belief, these individuals do not acknowledge that they are homosexual. One researcher states that usually because of negative childhood experiences and the desire to fulfill heterosexual societal expectations, a large number of such adolescents suppress or deny their sexual orientation. Furthermore, this investigator has found that usually these individuals do not acknowledge that they are homosexuals until they have an erotic experience that cannot be denied, which will make them "suddenly" aware of their true sexual orientation.⁷⁴ In contrast, some youths have a more gradual realization. Usually this awareness becomes evident because of the type of erotic fantasies they have and eventually, actual overt homosexual experiences they have in middle or late adolescence.⁷⁵

Parental Influences

Much of society has placed the cause of homosexuality primarily at the parents' door step. Most people who believe that parents are responsible feel that homosexuality occurs because of a child's experiences within his/her immediate surroundings. Homosexuality has been connected with broken homes, unhappy childhoods, and poor relationships with parents. Of course, most individuals who grow up in such environments do not become homosexuals. The way a person reacts to a negative environment might determine what methods are used to substitute or make-up for these type of experiences.⁷⁶

The well-known environmental theory regarding the cause of homosexuality is that a child grows up in a household with an aggressive, overprotective, domineering mother and a passive, weak, and sometimes absent or emotionally distant father.⁷⁷ Some researchers believe that homosexuality is a developmental problem that results from early conflicts between a father and son. They argue that a strong mother's influence can be a factor that undermines a father-son relationship and cripples a boy's self-reliance and gender development. A boy fails to dis-identify himself with his mother, experiences conflicts with his father (if one is in the home) and does not internalize the male gender identity. The failure to identify with the male gender alienates the father, as well as childhood male peers.⁷⁸ Even though the mother's role is influential, other research indicates that the breakdown in

⁷⁴Ibid., p. 50, and Henckne, Joel D. Conceptualizations of Homosexual Behavior Which Preclude Homosexual Self-Labeling. *Journal of Homosexuality*, v. 9, no. 4, Summer 1984. p. 53.

⁷⁵Isay, Being Homosexual, p. 56.

⁷⁶Ibrahim, Azmy I. The Home Situation and the Homosexual. *The Journal of Sex Research*, v. 12, no. 4, Nov. 1976. p. 263, 275.

⁷⁷Green, *The "SISSY BOY SYNDROME,"* p. 51.

⁷⁸Nicolosi, Joseph. *Reparative Therapy of Male Homosexuality*. Northvale, New Jersey, Jason Aronson, Inc., 1991. p. 77, xvi.

the father-son relationship may be the more important factor in the development of homosexuality.⁷⁹

The Father-Son Relationship

Since the mother-son relationship typically develops because of her nurturing and care, the son's identifying with the "second other," his father, is considered to be most important for his normal masculine development. Freud and other psychoanalysts expressed the opinion that it is important for a father to be available and supportive in order for his son to develop gender identity. According to this theory, the father must be a dominant force within the home if the young child is to identify with him; it is crucial that a strong father-son relationship takes place. This additional developmental task of identifying with their fathers that heterosexual boys have to undergo has been perceived as difficult by some theorists and they believe this extra step, unnecessary for heterosexual girls, explains why there is a notably higher incidence of male homosexuality compared to female.⁸⁰

Some analysts believe that gender identity receptiveness is most critical during the second half of the second year of life. It is thought that during this time a boy is most likely to decisively identify himself as male upon realizing that he is separate and different from his mother and is like his father. He then exhibits a special interest in his father and wants to grow and become like him. Research indicates that if the father is warm and accepting toward his son, a relationship develops, the father mirrors and affirms the boy's maleness, and the boy dis-identifies with the mother and becomes masculine.⁸¹

It is also during this period of development that many experts believe that the father has to influence the son's dis-identification with his mother by showing him that he can maintain a close but independent relationship with her. This reinforces and clarifies his separateness and differentness from his mother. The triangular relationship with parents--mother-father-son--is where some investigators feel the breakdown occurs in a homosexual's family background. The typical, or even "stereotypic," situation seems to occur with an abnormally close relationship between a mother and son, and a father who is distant from both of them.⁸²

⁷⁹Ibid., p. 80.

⁸⁰Greenson, Ralph R. Dis-identifying From Mother: Its Special Importance for the Boy. *The International Journal of Psycho-Analysis*, v. 49, Parts 2-3, 1968. p. 370.

⁸¹Abelin, Ernst L. The Role of the Father in Core Gender Identity and in Psychosexual Differentiation. In Selma Kramer, moderator, and Robert C. Prall, reporter. *The Role of the Father in the Preoedipal Years. Journal of the American Psychoanalytic Association*, v. 26, 1978. p. 148.

⁸²Nicolosi, *Reparative Therapy of Male Homosexuality*, p. 28.

One writer states that such a relationship does not have to continue if the mother and father work together to help the son shift identification from the mother to the father. Some mothers might not assist in this endeavor, he notes, but a dominant, nurturing father could counteract her influences. Contrastingly, if the father is unloving and difficult, a mother who is less emotionally available to the son when he voices his complaints about the father, might help the son learn to tolerate the frustrations of having a difficult father.⁸³ Most authorities recognize, however, the central importance of the father developing masculinity in the son.⁸⁴

Similarly, it is widely believed that if the father is absent because of death or divorce, the presence of a male figure--grandfather, uncle, older brother, neighbor--is important in helping a young boy develop maleness. There are reported cases,⁸⁵ however, where the heterosexual father regularly and positively interacted with the son, but the son grew up to embrace a homosexual orientation. In another situation studied, a boy grew up without a father, had limited contact with other males during his first two or three years of life, but was a masculine boy who grew up to embrace a heterosexual orientation. This investigator, because of many exceptions to the rule, doubts "that socialization influences fully explain the development of 'femininity' and/or homosexuality."⁸⁶

Some might conclude that the examples in the preceding paragraph support the biological theory that homosexuality is innate. Upon investigation, however, this conclusion is questionable. The same investigator discussed a case with twins.⁸⁷ One was initially homosexual but later became bisexual, while the other was initially heterosexual but later also became bisexual. Their parents raised one to be more feminine (always with the mother)⁸⁸ and the other more masculine (always with the father). Additionally, the more masculine twin was named for the father, which seemed to influence later identification patterns and sexual role. They were known as "Mom's Boy" and "Dad's Boy." Initially, neither chose to be with the particular parent selected for them. The father was less pleasant to the son who was cared for by his mother, and this son later

⁸³Ibid., p. 29.

⁸⁴Ibid.

⁸⁵Green, *The "SISSY BOY SYNDROME,"* p. 385.

⁸⁶Ibid., p. 384.

⁸⁷Ibid., p. 322-352.

⁸⁸This twin had a physical illness at three years of age which required hospitalization. The mother spent most of the time with him, while the father interacted with the other. Because of the son's physical problem with his arm, the father did not "roughhouse" with him, but encouraged him to stay with his mother and help her in the house with the chores. Also, the ill boy interacted with his younger sister. His "feminine" traits were noticed at age four.

acknowledged that he was afraid of his father. Eventually, "Mom's Boy" chose to be with her because of the harsh treatment of his father.

It appears that different nurturing and socializing methods from early childhood years contributed to the twins' later initial sexual orientations. The twins' initial sexual orientations, the researcher found, differed no more than in other "feminine" and "masculine" type boys studied. He reasoned that this was the case because of the "constraining influence of their common genetics." In other words, because they were twins, and had the same genetic make-up, their common genes limited the impact of their different childhood experiences on their later erotic behaviors. The initially homosexual twin later married, had relationships with a few men on the side, but preferred women for a love relationship. The initially heterosexual twin later developed an ongoing homosexual relationship for monetary purposes, while being engaged to marry a woman. The expert concluded:

That genetics does not account entirely for gender-role behavior is demonstrated by the twins' different activities in childhood. That genetics does not account entirely for sexual partner preference is demonstrated by the twins' different patterns of adolescent and adult erotic behavior. And the greater degree of homosexual orientation in the previously "feminine" twin demonstrates the influence of early gender-role behavior on later sexual orientation.⁸⁹

The Mother-Son Relationship

As previously noted, many investigators have found that very close mother-son relationships occurred in the early childhoods of many homosexuals. A researcher has observed that frequently a mother who lacks a warm relationship with her husband, uses the son to substitute for the emotional absence of the husband. On the other hand, if a loving bond exists between the father and mother, this provides a model male-female relationship for the son, as well as security for the mother who will not feel the need to maintain an overly intimate relationship with her son.⁹⁰

According to some analysts, if there is a consistent miscommunication or hostility between the mother and father, which results in regular arguments and fighting, and a son sympathizes and identifies with the mother's hurts and at the same time does not have a close attachment with the father, the son might disassociate himself with the male figure and view masculinity as brutal and insensitive. Eventually, the son might decide he does not want to be like the father, vows not to be like him, begins to identify more with the mother, and

⁸⁹Green, *The "SISSY BOY SYNDROME,"* p. 352.

⁹⁰Nicolosi, *Reparative Therapy of Male Homosexuality,* p. 82-83.

does not take on the male role. This type of mother-son interaction might contribute to later homosexual behavior of the son.⁹¹

Exceptions to the usual close mother-son attachments are evident as well. Sociology professor Azmy Ibrahim in his study, "The Home Situation and the Homosexual,"⁹² revealed that out of the 31 homosexuals he interviewed, just as many (40 percent) had negative relationships with their mothers, as those who reported negative relationships with their fathers. Some complained that their mothers were emotionally cold toward them and they could not communicate with them. Also, some stated that they were afraid of their mothers, which might have led to an eventual fear of all women. Ibrahim hypothesized that this situation might have caused these particular boys to dislike women and decide to confine themselves to men. He concluded that the theory that homosexuality results from a strong identification with the mother should be re-examined.

Theories Related To Some Societal Beliefs And Attitudes

In 1970, the Institute for Sex Research, at Indiana University, founded by Kinsey and now referred to as the Kinsey Institute for Research in Sex, Gender, and Reproduction, conducted an extensive national survey through a grant from the National Institute of Mental Health (NIMH). This survey attempted to examine the sexual norms and experiences of adults in the Nation, as well as their moral judgments about certain sexual activities. More than 3,000 individuals were interviewed and results incorporated in a book, entitled, *Sex and Morality in the United States: An Empirical Enquiry Under the Auspices of the Kinsey Institute*.⁹³ Homosexuality was a topic examined to assess societal attitudes and stereotypes.

A section on "Causes and "Cures" of Homosexuality" was included under the general topic, "The Social Reaction Toward Homosexuality." Participants were asked whether they felt that some lay and professional theories about the causes of homosexuality were true for most homosexuals. Some of the popular causal beliefs and the percentages of persons who felt they were true are presented below. Also, analysis of these beliefs, as presented by Morton Hunt⁹⁴ is included with each theory.

⁹¹Ibid., p. 83.

⁹²Ibrahim, *The Home Situation and the Homosexual*, p. 263-282.

⁹³Klassen, Colin J. Williams, and Eugene E. Levitt. *Sex and Morality in the U.S.: An Empirical Enquiry Under the Auspices of the Kinsey Institute*. Middletown, Connecticut, Wesleyan University Press, 1989. 462 p.

⁹⁴Hunt, *Gay: What You Should Know About Homosexuality*, p. 29-33, 40.

THEORY 1

[Y]oung homosexuals became that way because of older homosexuals;
 About 43 percent believed this theory accounted for more
 than half of all homosexuals.

This idea was termed "seduction" by Hunt. He states that only one out of four homosexuals in different studies attribute seduction by an older homosexual as the reason for their homosexuality. Psychologist, C. A. Tripp has found that usually the "victim" of a seduction was inclined toward homosexuality already. Therefore, the seduction probably triggered what would have eventually developed.⁹⁵

THEORY 2

Most homosexuals are products of "how their parents raised them";
 Almost 40 percent believed that this reason was the cause,
 and 14 percent felt this applied to all homosexuals.

Some homosexual men have stated that they feel their parents were responsible for their sexual orientation. Either a strong mother who wanted a girl treated the boy like a girl and taught him "girlish" instead of "boyish" ways, or a girl's parents wanted a boy and taught her to be a "tomboy." In contrast, many homosexuals do not behave like persons of the opposite sex, even though they are drawn sexually and emotionally to persons of the same sex. Personal statements of homosexual men and women do indicate, Hunt writes, that "upbringing" probably did have some effect on the "effeminate" male and "masculine" female, and the transvestite (a person who may be homosexual and dresses, acts, and lives like a member of the opposite sex).

THEORY 3

Homosexuals have simply failed to attract the opposite sex;
 Less than 30 percent believed this brought about the
 difference.

No investigator, Hunt reports, has found any evidence to support the belief that homosexuals are unattractive to persons of the opposite sex. However, there might be some truth to this idea, he states. Some homosexual men might feel that they are not attractive to females because their appearance is not "manly" enough. A few homosexual females might think they are not "feminine" enough to attract males. Many times, teenagers have feelings of unattractiveness but tend to eventually outgrow them. Some do not, however, because they have hidden tendencies toward homosexuality, and persons of the opposite sex might translate this as a lack "sex appeal." Hunt believes that unattractiveness might, in some cases, be related to homosexuality, but as a result of it, not a cause for it.

⁹⁵Ibid., p. 29.

THEORY 4

Homosexuals are born that way. Forty percent believed that very few if any homosexuals were "born that way." Thirty percent, however, did believe this theory.

This theory was previously discussed at length. Hunt surmises that heredity does not specifically cause homosexuality, but may give some persons the "tendency" to become a homosexual. With certain environmental influences, such individuals might become homosexual.

The 1970 survey participants also were asked whether they felt homosexuality could be "cured." About 62 percent responded that they believed it is a reversible "sickness" in about half of all people who practice this sexual orientation. Forty percent thought that this was the case for all homosexuals, but a "cure" was difficult. Fifty percent of respondents did not believe that very many homosexuals could change their sexual orientation "by just wanting to", while 29 percent doubted that any homosexual could do so. About 25 percent of the participants felt that male homosexuals could become heterosexuals with the help of "sexually skilled women," while about 33 percent felt that at least half of all lesbians could become heterosexuals with the help of "sexually skilled men."

CONCLUSIONS AND POLICY CONCERNS

What is really known about the causes of homosexuality? An author who has written on the subject in general concluded that a nature/nurture dichotomy does not exist for the causes of homosexuality. Both biological and environmental factors, he believes, should be considered in developing a true picture of homosexuality.⁹⁶ There is considerable support for this view in the research studies reviewed in this report. All the studies examined appeared inconclusive in determining whether homosexuality is exclusively inborn or environmental. It appears that no expert can definitively say what causes some people to have this atypical sexual orientation. Many exceptions to what is generally believed exist, whether concerning genetic determination or parental influences. Research does seem to indicate, however, that there is not just one absolute cause, but several factors that play a role in a homosexual orientation.

A key policy question remains--Is the homosexual orientation a "voluntary" lifestyle choice? The research studies examined did not appear to provide definitive answers to the question. If genetics and environmental influences both play roles in the eventual life practice of homosexuality, as some of the investigators seemed to believe, does an individual really consciously, and "voluntarily" make the choice, or do inborn traits and the results of upbringing contribute to an "irresistible" urge to maintain the homosexual orientation?

⁹⁶Ruse, Michael. Nature/Nurture: Reflections on Approaches to the Study of Homosexuality. *Journal of Homosexuality*, v. 10, no. 3, Winter 1984. p. 141, 149.

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APPENDIX A. Types of Homosexual Behavior of Some Men and Women

The following categorizations are types of behavior many homosexual men and women exhibit that are extracted from samples researchers Alan Bell and Martin Weinberg presented in their book, *Homosexualities*.⁹⁷ The descriptions are summaries of how these analysts described each homosexual behavior type. As with any categorization, they should be used with caution.

CLOSE-COUPLED[S]

Partners in this type of relationship were closely bound together, and depended upon each other for sexual and interpersonal satisfactions rather than upon outsiders. They had a special relationship and did not seek other partners. They had the smallest number of sexual problems, and were unlikely to regret their homosexuality. They seldom went to pick-up establishments such as bars or baths, but tended to spend more evenings at home together and less leisure time in individual pursuits. They reported high levels of sexual activity and their sex lives were gratifying to them. They appeared well-adjusted and had rarely experienced difficulty related to their sexual orientation, such as being arrested, trouble at work, or assault and robbery. Most men and women homosexuals of this type were more self-accepting, less depressed and lonely, and the happiest of all the types depicted.

OPEN-COUPLED[S]

Individuals in these type of relationships were not as fully committed to one partner as Close-Coupled. They lived together, but were not happy with their circumstances and relied more on a large circle of homosexual friends to seek satisfactions. They placed less importance on their relationship with their partner and did more "cruising." They were less happy because they worried about their cruising and the possibility of their actions being publicly exposed. They reported more sexual activity than the typical homosexual respondents. Psychologically, however, they were about as content, vivacious, depressed, tense, paranoid, or worried as the average homosexual respondent.

⁹⁷Bell and Weinberg, *Homosexualities*, p. 219-228.

FUNCTIONALS

The Close- and Open-Coupled groups were similar to married heterosexuals. Functionals, however, were more closely compared with "swinging singles." Their lives seemed to be organized around their sexual experiences. They had more sexual activities with a larger number of partners than any of the other groups defined. They were the least likely to regret being homosexual. They cruised frequently and generally displayed a great deal of involvement in the gay world. They were not interested in finding a partner to settle down with. They engaged in a variety of sexual activities, considered themselves to have high sex appeal, and had few, if any, sexual problems. Of all the groups, they were the most interested in sex, vivacious, and the most involved with a number of friends. They were the most likely to have been arrested, booked, or convicted for a "homosexual" offense. This might have been the case because of their greater openness, high attendance at gay bars, and perhaps their relative lack of concern or suspicion of others, in addition to a certain degree of recklessness.

DYSFUNCTIONALS

The dysfunctional groups' lives appeared to offer them little gratification, and they seemed to have great difficulty in managing their existence. This group displayed the poorest adjustments sexually, socially, and psychologically than the other homosexual respondents. They were the most regretful about their homosexuality. They had more sexual problems than the other groups, and were particularly prone to worry about sexual adequacy. They cruised frequently, had relatively large numbers of partners, and complained about not having sex often enough. Also, they had problems finding a suitable partner, and tended to think that they were sexually unappealing. There were more reports of robbery, assault, or job difficulties in the men among this group. Furthermore, they were more likely to have been arrested, booked, and convicted regardless of the reason. The females within this group were less vivacious, and more likely to have undergone long-term professional help for emotional problems. The men were more lonely, depressed, worrisome, tense, and unhappy than any of the other men respondents.

ASEXUALS

The most prominent characteristic of this group is their lack of involvement with others. They had the lowest level of sexual activity of all the groups, had fewer partners, felt they had low sex appeal, and tended to have a number of sexual problems. Also, they were less interested in sex than the other men. The Asexuals were the least likely group to consider themselves as exclusively homosexual. They were less overt about their homosexuality, and had fewer homosexual friends. Most of the men and women in this group spent their leisure time alone, and had less frequent contact with their friends. They described themselves as lonely, and the men felt unhappy. The women in the group were most likely to have sought professional help concerning their sexual orientation, but to have quickly given up counseling. They tended to have the highest incidence of suicidal thoughts, (not necessarily related to their homosexuality).

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