

# [Example of factors affecting the development of sexual orientations in human bein...](https://assignbuster.com/example-of-factors-affecting-the-development-of-sexual-orientations-in-human-beings-research-paper/)

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## Introduction

Policy makers and the general public have been at pains to answer the questions they are confronted with about the intricacies of lesbians and gay men. Questions are abound ranging from whether they are mentally ill to whether the much publicized conversion therapies result to a change in orientation. Questions have also been asked about their stereotyped propensity to molest children. Such scathing thoughts and remarks are fed by stereotypic cultural undertones that many a times depict gay men and lesbians as criminals, immoral, sick and every description that falls short of what our society considers ‘ normal’. The implicated individuals have suffered prejudice under the hands of the society; a society that judges them from a point of ignorance rather than from informed opinions. After a critical and analytical review of literature and scientific data from research, this paper will postulate an explanation detailing the development of diverse sexual orientations in human beings.
However, research into the matter has generated a wealth of information and data that has shed the much needed light on a matter that has been enshrouded in information darkness. The data has gone a long way in separating facts from fiction and falsehood. Most of the research findings contradict findings from earlier researchers. However, this has been attributed to flaws in methods, subjects and the fact that previous researchers labeled certain sexual orientations as normal and others as abnormal. Given this, some of their methods were possibly biased and their data skewed towards certain outcomes.

A number of factors are indicated in the development of sexual orientations in human beings. Of the several factors, the role of sex hormones has been extensively researched as a causative factor in the development of sexual orientations in human beings. For much of the twentieth century, scientists posed this as the hypothesis in the attempts to understanding the development of sexual orientation. However, this hypothesis was postulated for pathological reasons. It was used in interventions aimed at converting gay men into heterosexuals. Today, scientists researching on sexual orientation do not do it on a pathological perspective.
Nonetheless, the notion that sex hormones holds the key to understanding the development of sexual orientations is still held by the scientific community, probably more now than before. In a review of research data by neuroendocrinologists, there was no significance difference between the levels of testosterone in gay men when compared to straight men. However, significant variations between the levels of testosterone were found in lesbians when compared to straight women. Although most of the lesbians had same levels with straight women, a significant 30% were found to have higher levels of testosterone.
Genetics and biology are also significant factors in the development of sex orientation in humans. Sex determination is genetically controlled. A study has found that 52% of monozygotic twins and 22% of dizygotic twins were inclined towards homosexuality. Studies on sexual orientation focusing on chromosome linkage have reported the presence of numerous contributing factors affecting sexual orientation throughout the genome. The findings by Dr. LeVay that a region in the hypothalamus was significantly different in gay people when compared to the same region in straight individuals is also evidence that biology and genetics have a role to play in sexual orientation.
The older brother effect is also a factor affecting the development of diverse sexual orientation. Studies suggest that every older brother increases the odds of a man developing homosexual orientation by 28-48%. Most of the studies have attributed this occurrence to prenatal environmental factors like prenatal hormones. However, there has been no correlation between the strength the birth order has on a man and the degree of homosexual tendencies. This implies that the influence the older brother effect has on sexual orientation is more of a social process that a biological process.

## Differences in development of sexual orientation for males and females

Based on the evidence given, there are some differences in the development of sexual orientation for males and females. Unlike in men where there are no significant variations in the testosterone levels in gay and straight men. Research has show a significant percentage of lesbians have more testosterone that straight women. However, these levels are still lower than the levels generally found in men. Studies into the INAH3 and sexual orientation have found that INAH3contains significantly more neurons in heterosexual males when compared to heterosexual females. The study also showed that INAH3occupied a greater volume in the hypothalamus of heterosexual males when compared to heterosexual females.

## An account of an evolutionary psychologist, an evolutionary biologist or a sociobiologist for the development of varying sexual orientation(s)

An evolutionary psychologist would focus on the role one’s mind pays in the development of sexual orientation. According to an evolutionary psychologist, psychological traits in humans like perception, memory and language influence the process of sexual selection in humans. In looking for mates, some humans therefore tend to be physically attracted by their fellows of the same sex. Conversely, some humans are physically attracted to their fellow of the opposite sex owing to the effect of the effect of the psychological factors on their mind.
An evolutionary biologist would focus on the differences in the morphology of different organs in the body. He would be testing the hypothesis that biological processes are responsible for the development of sexual orientations. In so doing, an evolutionary biologist would be concerned with the alterations in the morphology and anatomy of human beings and correlating these to the homosexual tendencies in humans. More precisely, an evolutionary biologist would posit that genetics has a chief role in the development of sexual orientations.
A social biologist would look at the interplay between the social and biological processes in the development of varying sexual orientations. More precisely, a sociobiologist would be concerned with the role the environment has in the development of varying sexual orientations. He would posit that environmental factors like prenatal hormones have an effect of an individual’s sexual orientation. He would also argue on the effect of the fraternal birth order on the development of varying sexual orientations. The main hypothesis would be the effect of the older brother on the odds of exhibiting homosexual tendencies in men.

## Sexual orientation based on research on other animals including other higher primates

Extensive research has been done on animals to try and explain the phenomenon of sexual orientation. Form the research; we can learn that hormones have an important role to play in the development of sexual orientation. In a research where embryonic rabbits were castrated by a researcher in order to measure the effect of testosterone of sexual orientation, the castrated male rabbits matured as females. This shows that the hormone testosterone has an effect on the development of sexual orientation in animal and by extension, humans. The role of hormones in the development of varying sexual orientations has been extensively researched. For instance, researchers have manipulated the levels of sex hormones in developing animals. The manipulations caused animals that would be heterosexual to preferentially mate with others of the same sex.
Higher primates have also been implicated in homosexual behavior by studies carried out by primatologists. 60% of all sexual activities involving Bonobos, a higher primate, occur between two and sometimes more females. More precisely, Bonobos represent the highest frequency of homosexual behavior in all species. Homosexuality has been indicated in all apes, a group where humans fall, and as well in other primates. Through this, we can learn that our stereotypic prejudices against the homosexuals in society and branding them immoral and criminals are misplaced. The development of sex orientation is not a phenomenon that we are in full control of.

## Existing evidence to help understand the development of diverse sex orientation

Scientific evidence derived from research on the matter of the development of sex orientation exists. This evidence has been generated from studies carried out on animals and the examination of dead human subjects. For instance, the manipulation of sex hormone levels in animals that are in their developmental stage was done in order to study the effect sex hormones have on the development of diverse sex orientations. The animals that would have otherwise exhibited heterosexual behavior preferentially mated with members of the same sex. This increasingly shows that the role played by sex hormones on the development of sex orientation is very significant.
Studies on the spotted Hyena have shown that due to increased levels of testosterone in Utero, even female Hyenas are more aggressive and exhibit homosexual tendencies leading to mounting. In the highly matriarchal family of hyenas, those with lower levels of testosterone are more submissive and allow to be mounted, even the male hyenas. This shows the adverse role that testosterone plays in the development of sexual orientation in animals. This collaborates findings that the hormone has the same effect on the development of sex orientation in human beings. The fact that hyena families are majorly matriarchal is also attributed to testosterone levels in the dominant mother.
A study was carried out where male embryonic rabbits were castrated to measure the effect of testosterone on the development of sex orientations. Castration inhibited the production of testosterone in the testis of the rabbit. The castrated rabbits would have otherwise matured as males. However, they matured as female rabbits, a finding that was very interesting in the scientific community. This shows the magnitude of the effect that sex hormones play in the development of sex orientation

## Factors to explain the persistence of different sex orientations throughout evolutionary history

Some factors are implicated as responsible for the persistence of different sex orientations throughout evolutionary history. Genetics has been adversely mentioned in numerous studies as a factor affecting the development of sexual orientation. Given that genetically encoded attributes are heritable, it is apparent that these genes are inherited by the first filial generation and subsequent generations of gay parents. The genes do not have to necessarily express themselves into preferentially homosexual siblings. However, these genes are preserved through generations. The role of biology comes into play when individuals with these genes mate.
It has been established that gay individuals make attempts to reproduce through kin selection. They also make considerable efforts to bring up the children, probably even better than straight individuals. This increases the chances of survival for these children, a fact that preserves their genes. In a situation where genetically predisposed individual pair up with other genetically predisposed individuals, the role of biology takes effect. This could amplify the anatomical variations in organs that have been found in gay individuals. For instance, it has been established that both hemispheres of the brain are equal in size in gay men and lesbians. All these anatomical variations could be amplified to biological processes, thereby preserving the genes over generations.

## Conclusion

The review of the literature pertinent to the development of sexual orientation has arrayed and dispelled the stereotypic connotations to the effect that gay and lesbians are discordant individuals with loose morals. That being said and done, I can confidently posit that the development of sex orientation is a cocktail of both biological and social processes. The interplay of genetics and the role of hormones in our bodies coupled with social processes affect the development sex orientations in human beings. With this in mind, I encourage us to be accommodative of varying and diverse sex orientation. This is especially because the development of their sex orientation is not any dissimilar from the development of our ‘ normal’ attributes.

## Works cited

Burnes, Theodore R. Opening the Door of a Bigger Closet: Sexual Orientation Identity Development for Lesbian, Bisexual, and Queer College Women of Color. Santa Barbara, Calif.: University of California, Santa Barbara, 2006. Print
LeVay, Simon. Gay, Straight, and the Reason Why: The Science of Sexual Orientation. Oxford: Oxford University Press, 2011. Print.
Ponseti, J. et al., Assessment of Sexual Orientation Using the Hemodynamic Brain Response to Visual Sexual Stimuli. The Journal of Sexual Medicine (2009): 1628–1634. Print