

Genetics or Environment: Tracing the Root Cause of Increasing Homosexual Population

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ABSTRACT

The number of homosexuals at present is enormously increasing in the Philippines. These homosexuals established themselves in the academe, government, services, industry and in the private sectors. They contributed a lot in the society shaping government policies where they were given attention especially in their demands of acceptance and equality. However, some homosexuals are also contributing the spread of disease particularly HIV-AIDS due to their sexual practices and activities. The increase of this group of individuals causes a distortion on the growth of human population since they do not produce offspring due to same sex partnership. This study investigated the root cause of homosexuality and the link of these homosexual's sexual orientation and behavior with its family influences, environment, exposure to violence and childhood experiences. It has been a long debate known as nature-nurture debate whether homosexuality is caused by genetics or environment. Using a constructed validated questionnaire, four hundred fifty-five persons that have tendencies to be homosexuals were selected and their responses were gathered. Describing their sexual orientations, out of the total 455 individuals, 56 (12.3%) were straight males and 88 (19.34%) were straight females, 96 (21.09%) admitted to be bisexual, 123 (27.03%) were gays and 91 (20%) were lesbians. The results of data analysis using Chi-square test, showed that there was a significant association between the sexual orientation and the birth order as well as an individual having a homosexual sibling and history of childhood abuse.

Keywords: Birth order, Environment, Genetics, Homosexuality, Sexual Orientation.

INTRODUCTION

The number of homosexuals cannot just be ignored in Philippines. Their numbers are increasing yearly and they are very active in the society event to the extent even in politics. These homosexuals established themselves in the academe, government, services, industry, in the private sectors even in the entertainment sectors where they dominated in acting and directing movies. They have contributed a lot in the society in shaping government policies where they were given attention especially in their demands of acceptance and equality. However, some are also contributing to the spread of disease particularly HIV-AIDS due to their sexual practices and activities even in this time of the pandemic with their night parties and

dawn activities which is obviously present in all places in the country. The alarming increase of the number of this group of individuals might cause a distortion on the growth of human population since they remain to be single and some were with same sex partners that do not produce off-springs. This study investigated the possible root cause of homosexuality. In particular, establishing how homosexuals came up with their choice of their present sexual orientation, their linkage of their choice with some influential factors like family, environment, exposure to violence and their childhood experiences or it is just by nature [1]. The importance in the conduct of this study was to explain why homosexuals increase rapidly, the cause for such rapid increase and explain why they have such homosexual behavior. Hence, questions such as, is homosexuality cause by environment factors or with its family background. A cross sectional survey was conducted among the homosexuals using a validated instrument whose contents were items that the researchers got information directly from respondents. The information gathered in the study were analyzed thoroughly using appropriate statistical methods particularly to answer the researcher's objectives on association. The results of this study perhaps can be used as a recommendation to make policy or to change some existing policies in the government particularly in the health sector, labor sector and social and development welfare that will uplift the lives of the people and therefore protect the community in general. The general objective of the this study investigated the root cause of homosexuality and the link of these homosexual's sexual orientation and behavior with its family influences, environment, exposure to violence and childhood experiences, specifically to come up with the following: to established a database of information among the homosexuals' reason of their sexual orientation and behavior from their responses, described and summarized the different responses of the homosexuals which will be used to explain their homosexual orientation or behavior and established statistically the relationship or association between the sexual orientation choice among the homosexuals and its family, exposure to violence, environment and childhood experiences.

This study particularly focused on the root cause of how homosexual population increased for the past years in the province of Cotabato and in some cities (Region 11 and Region 12) in the island of Mindanao, Philippines. The study only limits on the lesbian, gay and bisexual (LGB) individual responses and not the entire LGBTIQA+ [2] in the modern terminology since LGB were the only common cases which we termed in the study homosexuals in the aforementioned places. The authors wanted to know if the increase of these homosexuals is due to genetics or the environment which they evolved as mentioned in [3]. One important aspect also is to know how these homosexuals choose their gender identity and sexual orientation. Deutsche Gessellschaft fur Internationale Zusammenarbeit (GIZ) & [4] studied the sexual orientation and gender identity as human rights issues in development cooperation discriminated in job selections and other activities. An article published in a Newsweek magazine discussed whether DNA makes some men gay [5]. [6] studied the root causes of male and female homosexuality that was mentioned in their love won out series book. This study discussed the truth that comes out about male homosexuality and the heart of the matter about female homosexuality. Further, in terms of biological factors in homosexuality, [7] determined the biological causes and consequences of homosexual behavioral and their relevance for family law policies. Lastly, [1] discussed whether male homosexuality comes from nature or it is a culture. This debate continues on whether or not male homosexuality is a result of biological or cultural factors. Biological theorists produced evidence but not always robust, while for the social theorists confirmed their positions, criticize with good arguments however without

direct evidence. In 2008, [8] published results written by researchers from Queen Mary's School of Biological and Chemical Sciences, and Karolinska Institutet in Stockholm by led by Dr. Niklas Långström that genetics and environmental factors (which are specific to an individual, and may include biological processes such as different hormone exposure in the womb), are important determinants of homosexual behavior. On the other hand, [9] found in their study at Lebanon that among bisexual men reported greater internalized sexual orientation stigma and less open to their family and were more likely to face family pressure to have a heterosexual marriage than gay men.

It has been a long debate whether homosexuality is caused by genetics or environment, also known as nature-nurture debate. Results of some researches in this field generated controversies because of the belief that nature and nurture are two mutually exclusive reasons. Even though it is clear that genetics and environment were complementary to each other. Our present study explores the proximate causes of sexual orientation and the more puzzled form of homosexuality. One of the identified causes of homosexuality was the birth order of an individual which is a by-product of a biological mechanism. In fact, it was [10], first introduced the so-called fraternal birth order (FBO) effect which stated that the probability of a boy growing up to be gay increases for each older brother born to the same mother. For every older male sibling a male child has, the odds are increased by 33% that he will become homosexual. [11] concluded that the birth order effect changed personalities of later born son into feminine direction. Accordingly, [12] presented direct biochemical evidence indicating that the increased incidence of homosexuality in males with older brothers results from a progressive immunization of the mother against a male specific cell-adhesion protein" (cited in [13]).

METHODOLOGY

The study was conducted through a cross sectional survey among potential and identified homosexuals in the province of Cotabato and some cities (Davao City, Digos City, Koronadal City and General Santos City of the island of Mindanao, Philippines. These particularly cities can be found in Region 11 and Region 12. The study collected data using a prepared interview questionnaire. The sampling of respondents was done using purposive and convenience non-random sampling. Following ethical policy issues, no blood was being extracted among the respondents by the researchers. The sampling size of this study was initially agreed in the proposal to be at least 250 respondents so that 80% power can be achieved at 5% level of significance however in the actual collection of data many volunteered to be considered as a respondent hence there were 455 respondents considered in the study. Thus, we were able to get more information from the respondents that lead us to a better understanding of the issues raised in the start of the study that can be provided in the analysis of the data when of estimates were calculated for the parameters of the population. The information gathered from the respondents were described using descriptive statistics using frequency and percentage. Further, to establish the link of and family, environmental and childhood experiences factors, Data were subjected under Chi-square test, a kind of a categorical data analysis methodology and other test example the Fisher's Exact Test.

RESULTS AND DISCUSSIONS

This research study utilized the 455 respondents' information of which 56 (12.3%) were straight males and 88 (19.34%) were straight females, 96 (21.09%) admitted to be bisexual, 123 (27.03%) were gays and 91 (20%). The detailed number of respondents with its

corresponding order in the family is shown in table 1. Although, there have been several studies on the birth order effect, most of the researchers only focused on the birth order effect on male respondents and have not included female respondents. The present study had shown that there was a birth order effect in an ethnically diverse sample of both female and male individuals from the province of Cotabato and in other places in Mindanao.

Table 1. Frequency of sexual orientation with sibling order.

Sexual Orientation	Sibling order					Total
	Only Child	First	Second	Third	Fourth	
Male	10	17	12	6	12	57
Female	24	19	15	17	13	88
Bisexual	7	29	22	14	24	96
Gay	10	42	25	28	18	123
Lesbian	10	24	23	18	16	91
Total	61	131	97	83	83	455

Conducting an analysis using a Chi-square test of the contingency table 1 resulted in the existence of a significant association between the variables birth order and the sexual orientation ($\chi^2 = 31.903$, $df=16$ with $p\text{-value}=0.010$). The expected frequencies according to sibling order is in table 2 presented below.

Table 2. Observed and expected frequencies between sexual orientation and sibling order

Sexual Orientation		Sibling Order				
		Only Child	First	Second	Third	Fourth
Male	Observed	10	17	12	6	12
	Expected	7.6	16.4	12.2	10.4	10.4
Female	Observed	24	19	15	17	13
	Expected	11.8	25.3	18.8	16.1	16.1
Bisexual	Observed	7	29	22	14	24
	Expected	12.9	27.6	20.5	17.5	17.5
Gay	Observed	10	42	25	28	18
	Expected	16.5	35.4	26.2	22.4	22.4
Lesbian	Observed	10	24	23	18	16
	Expected	12.2	26.2	19.4	16.6	16.6

One of the important thing to ponder in this result is the association between sexual orientation and sibling order which was significant. The results showed that most respondents who admitted to be bisexuals were expected to be in first, second and fourth of the sibling order while gays were expected in the first and third of the sibling order and lastly among the lesbians, they were mostly expected to be in the third of the sibling order this results were through in the study of [13]. Among the bisexuals there was a gap in the order and maybe consider it as a psychological confusion during the teenage years of the respondents. Perhaps this is also true among the gays but for among the lesbians is showed in the later sibling order [14].

Another interesting result can also be bound in the Table 3 (below), showing the association between the sexual orientation of the individual and having a homosexual sibling. Based on our

observation of the table 3, data shows that only few of the respondents' sexual orientation have a homosexual sibling however on the Chi square test result, there existed a significant association between sexual orientation and the respondents having a homosexual sibling ($\chi^2 = 14.859$, $df=4$ with $p\text{-value}=0.005$).

Table 3. Frequency of sexual orientation with and having a homosexual sibling

Sexual Orientation	Do you have a homosexual sibling?		Total
	No	Yes	
Male	51	6	57
Female	85	3	88
Bisexual	75	21	96
Gay	101	22	123
Lesbian	77	14	91
Total	389	66	455

Further, it was also a common assumption that when an individual turned out to be homosexual, that individual experienced abuse may it physically or emotionally during his/her childhood days. Numerous researches stated that individuals who experienced childhood abuse specifically sex abuse were more likely to turn up lesbian, gay or bisexual individuals.

This study further investigated that first if a respondent experienced a childhood abuse on any form might have an association with the individual's sexual orientation. The results among the respondents who experienced childhood abuse was presented in table 4 which gave the details of the respondents. Of the survey results, out of 455 individuals surveyed, only 97 (21.31%) respondents have history of childhood abuse and among the 97 respondents who have history of child abuse, 29 (29.90%) are gays, 27 (27.84% are bisexual and 18 (18.56%) are lesbians. Again using Chi-square test, result suggested that indeed there was an association between sexual orientation and history of child abuse ($\chi^2=11.846$, $df=4$ with $p=0.019$).

Table 4. Frequency of sexual orientation with and history of child abuse

Sexual Orientation	Have you been abused as a child?		Total
	No	Yes	
Male	42	15	57
Female	80	8	88
Bisexual	69	27	96
Gay	94	29	123
Lesbian	73	18	91
Total	358	97	455

To see a clearer picture, a contingency table was created wherein the sexual orientation were grouped into two categories heterosexuals (female and male) and homosexuals (bisexual, gay and lesbian) shown in table 5.

Table 5. Frequency of sexual orientation (grouped into two categories) with and history of child abuse

Sexual Orientation	Have you been abused as a child?		Total
	No	Yes	
Male and Female	122	23	145
Bisexuals, Gay, and Lesbian	236	74	310
Total	358	97	455

Out of 97 respondents who experienced child abuse in any form, 74 (76.29%) respondents turned out to be bisexual, gay or lesbian. We want to determine if an association between the variables with two categories existed. Using a one sided test of Fisher's Exact Test, results showed that there was a significant association between sexual orientation and history of abuse ($p < 0.033$), which showed that individuals who are bisexuals, gay, and lesbian were more likely to have an history of child abuse (see Table 6) with observed value of 74 which is greater than the expected value of 66.1. This incident was mentioned also in [15]. On the other hand, individuals in the male and female group were less likely to have a history of child abuse with an observed value of 122 which is less than the expected value of 114.1.

Table 6. Cross- tabulation of sexual orientation (grouped into two categories) and history of childhood abuse

Sexual Orientation		Have you been abused as a child?		Total
		No	Yes	
Male and Female	Observed	122	23	145
	Expected	114.1	30.9	145.0
Bisexuals, Gay, and Lesbian	Observed	236	74	310
	Expected	243.9	66.1	310.0
Total	Observed	358	97	455
	Expected	358.0	97.0	455.0

Among the 97 respondents who answered they have a history of child abuse, 34 (7.5%) of them experience a verbal abuse having the highest frequency while the lowest frequency is verbal and physical abuse 2 (0.4%) of the respondents.

Table 6. Frequency of the forms of Child Abuse

Form of Abuse	Frequency	Percentage
No experience	348	76.5
Verbal	34	7.5
Emotional	14	3.1
Sexual	8	1.8
Physical	22	4.8
Verbal and Physical	2	.4
Verbal, Emotional and Physical.	18	4.0
Verbal, Emotional, Sexual and Physical	9	2.0
Total	455	100.0

CONCLUSION

Some important results of the study that cannot be neglected among the homosexual respondents either be a bisexual, gays or lesbians, were there exposure to the environment especially in the kind of games they played during childhood and their exposure to some homosexual celebrities especially in the entertainment industries which contributed to their sexual orientation for example gays playing female games like “Chinese garter” or gays watching drama or noon-time show in the television dominated by gays like Vice Ganda, a popular gay entertainer in the Philippines . Further the persons who took care of their childhood also contributed to their sexual orientation mostly gays were cared by their solo mother while lesbians by solo father while for bisexual mostly by their grandparents.

The choice of some individuals of how they look at their sexual orientation depend on many factors. In our study we have seen that some of these factors were significantly associated with the individual's sexual orientation. As we have investigated some of the root cause of homosexuality and the link of these homosexual's sexual orientation to their behavior with its family influences, environment, exposure to violence and childhood experiences existed to be significantly associated particularly the individual's sibling order, existing homosexual siblings, exposure to violence in their childhood, their exposure to the environment of which how they look people as their role models. These are just some of the factors that contributed to the sexual orientation of an individual being homosexuals. The important questions were, Is this the individual's choice? Or it was merely influential among his family or environment due to his or her experiences in life during his or her childhood which really significantly affected his or her choice during his or her adolescent period.

The challenge now is for our government regulators to prevent distorting mindset for children that leads to a wrong decision in life. The government should see to it that children should be treated properly with love, care and good guidance in his family or in his environment. Preventing children to be exposed in domestic violence, bullying like teasing and exposure to some unethical and immoral events should be the government's highest regard in the society so to prevent catastrophic downturn in our population growth and health in the near future.

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