# The Influence Of Mothers And Fathers In The Development Of Same-Sex Attraction

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Researcher Dean Hamer, whose name is associated with "gay gene" studies, has an interview segment on a YouTube video from an ex-ex-gay website where he says that upbringing has nothing at all to do with the development of homosexuality (SSA). In support of that claim, he cites the Bell, Weinberg and Hammersmith study from 1981.

But a recent paper from Taiwan (Lung and Shu, 2007) shows, for the first time in a modern sociological survey, that in some places and in some cultures, the influence of mothers and fathers and upbringing can be extremely strong in the development of SSA; in fact, likely accounting for most of the influences (although the influence of neuroticism was also shown to be important).

This research from Taiwan shows that cultural factors are influential, and that they cause the relative importance of genetic and environmental factors to shift.

In this paper, I review the intellectual history of this argument in order to put the Taiwanese paper in context.

### **A Little History**

In the West, there have been two main sources of material on the importance of parents-- one backing their importance, and the other, not.

The first consists of reports from psychiatrists and therapists, taken from work with their clients as they described their parental backgrounds. These reports went back to the mid-twentieth century and even earlier. These reports could hardly be disputed as influential in the backgrounds of the particular population of clients, but they did not enable us to make statements about the SSA population as a whole. For that purpose, sociological surveys were necessary. The basic impression from the papers published by psychiatrists and therapists was that in male SSA, "smothering mothers" could be to blame, and emotionally or physically absent fathers. Sissiness, perhaps resulting from maternal over-protection, was another facet of the same family configuration.

The second source was researchers Bell, Weinberg and Hammersmith (1981). They published the results of a large sociological survey on a sample gathered by the Kinsey Institute before 1970, which contained a high percentage of homosexually oriented people, and hence allowed statistically reliable conclusions (though it wasn't a random sample, so we have to be a bit careful about the conclusions). They tried to present this study as definitive—assembling a list of almost every social factor asserted by someone at some time that possibly influenced their

development, and then checked to see if they did correlate with later homosexuality. Their results were at odds with the previous anecdotal evidence gathered by the clinicians. Each of the family factors correlated with a homosexual outcome in only a small minority of cases. Other, unknown factors were more important.

## **Explaining The Disparity**

One possibility to explain the disparity between the Bell and Weinberg research and the earlier clinical studies is that Bell and Weinberg could have asked the wrong questions. But in that case, the therapists would also have been wrong, since their explanations for SSA had apparently failed Bell and Weinberg's test.

A second possibility is that biological causes were predominant, not social ones, and the authors speculated that might indeed be so. Yet a third possibility was not even considered – that random reactions to common environmental factors predominated. (Whitehead, 2007). The evidence points fairly strongly to the latter being the case.

Combining all the apparently relevant social factors, the authors were able to explain 30% of homosexuality using their mathematical model (Bell, Weinberg & Hammersmith 1981) (or download chapter 11 from *www.mygenes.co.nz*). However, in one part of their book, they said the 30% finding was "significant," but at another part, they called it "not significant." The contradiction between these two statements led to many subsequent writers simply stating that "no social factors" produced homosexuality.

Researchers Van Wyk and Geist (1984) pointed out that this dismissal of a 30% correlation was incorrect, but they were ignored. The truth is that a finding of 30% in any study using this type of statistical method is significant. But as to explaining most homosexuality, it was indeed "not significant." Most homosexuality was not explained (Bell, Weinberg & Hammersmith 1981).

No more studies of this extent or on this scale have been done until now, and the literature, deferring to Bell/Weinberg/ Hammersmith's paper, perpetuated the untruth that "family factors have no effect (at all)".

Neuroticism was also associated with SSA in some studies, but not others, and the general conclusion was that the association between homosexuality and neuroticism was inconsistent.

### **Twin Studies Show No Social Factors?**

Twin studies, especially from the year 2000-on, seemed to support the idea that social factors had no causal influence on homosexuality. Twin studies subdivide influences into genetic factors;

shared environmental factors; and environmental factors experienced by one twin but not the other. Twin studies could not detect a significant influence on homosexual development from shared environmental factors. (Kendler, Thornton, Gilman, & Kessler, 2000; Bailey, Dunne, & Martin, 2000; Bearman & Bruckner, 2002; Santtila et al., 2008).

But this conclusion was not as clear as it seemed, because (Whitehead & Whitehead, 2007) the twin study methodology for homosexuality tends to overestimate the genetic percentage at the expense of the influence of the percentage of shared environment. As noted by Visscher et al. (Visscher, Gordon, & Neale, 2008) "...the twin literature based upon the classical twin design and model selection procedures could be severely biased..." – that is, twin studies will simply not detect shared environmental influences unless sample sizes are very large, and shared influences are very strong.

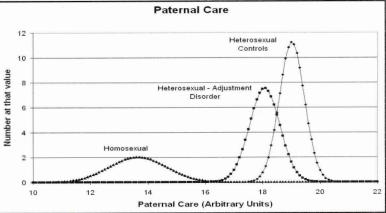
But more importantly, twin studies actually conceal the level of shared environmental influences. This shows up instead as noncommon environmental influence, that is, people reacting in a very individualistic way to the same influence. A case could even be made that individualistic erratic reactions are predominant with the common environmental influences, and that the individualistic erratic reactions to biological factors are minor. This point has already been made in Whitehead (2007; and in a much fuller way in another paper submitted for publication. See also chapter 10 on the website above).

#### Enter Lung And Shu Into The Debate

At this point in the debate, the paper by Lung and Shu (2007) appeared. In the Taiwanese subjects, the study showed a very strong influence of parental style on the development of homosexuality, as well as significant neuroticism in the homosexual subjects. This was not a marginal result like so many research results tend to be, but it was unequivocal. It showed that these influences were predominant.

This seemed to contradict much of the research that had gone before (interestingly, Lung and Shu don't seem to have heard of Bell, Weinberg and Hammersmith, or the twin studies!). But how can the papers be so contradictory? I believe there are good reasons; they are cultural, and they shed light on why we obtained different results in the West.

Lung and Shu seem to be associated with the military in Taiwan and their subjects were drawn from the annual intake of 140,000 young recruits. In that country, military service is compulsory, hence the recruits represent the whole population of men. There are inevitably those who find military training almost unbearable, and many in Taiwan are diagnosed with Adjustment Disorder (a DSM mental health category). From these, the authors selected 51 homosexuals, and 100 non-homosexuals. The controls were 124 recruits without Adjustment Disorder. Recruits with mental-health issues other than these were eliminated from the study. It seems obvious that this study was possible because Lung and Shu were told by the authorities to study recruits who could not cope with military life. However, it means that the study of homosexuality is complicated by the Adjustment Disorder, which the authors had to take into account in the interpretation of



their results. No other study has involved those with an accompanying mental condition like this. However, it seems to me that the authors allowed for the Adjustment Disorder quite adequately, using a control group. Overall, the sample is much more representative than many in the West.

The homosexual recruits had much higher neuroticism than controls. There was no control group for neuroticism; this is a weakness in the study. We don't know absolutely clearly whether this group was inherently neurotic and it led to homosexuality, or the neuroticism was produced by interactions with their parents (which is what the authors present as the causal pathway).

Regardless, it is an important factor. To give the flavor of the extraordinarily clear-cut results, we need only look at the well-known Parental Bonding Instrument that the authors used (a questionnaire which measures relationships to parents). I present here the results for Paternal Care.

These are numbers on a scale, but you don't need to know how that compares with the realities of the family – merely compare the numbers. The results were  $13.65 \pm 1.00$  (standard deviation) for the homosexual group,  $18.07 \pm 0.53$  for the non-homosexual group and  $19.02 \pm 0.44$  for the controls.

This means the heterosexual Adjustment Disorder group had parental issues indistinguishable statistically from the controls (In Fig 1, the curves for both groups mostly overlap.) But the parental issues for the homosexual group were much, much more important. (There is no overlap at all between the curves.) In fact, the homosexual group is so far separated from the non-homosexual that it represents some kind of record – a Taiwanese man (with Adjustment Disorder, and more neurotic than usual) is classed as homosexual or non-homosexual depending (almost entirely) only on the absence of care he received from his father -- i.e., a distant father. There would be a very low error rate, because the standard deviations are so relatively small. I know of no other indirect social indicator of homosexuality with such a power to discriminate. Similarly, the homosexuals were found to be very significantly deprived of maternal care; but also, there was a very high degree of "protection" by both mothers and fathers. This seems paradoxical--but the general picture is of parents who are psychologically very distant, but performing their parental duties, and overprotecting the proto-homosexual by keeping him a little Mommy's boy, and not exposing him to the difficulties of life.

Allowing for the Adjustment Disorder, other results showed the homosexual men were also much more introverted and neurotic. Some critics query the absence of all the control groups they would like to see. It is true some are missing. However in the next section we explain why many researchers think this is not important, because Lung and Shu use a technique which relies on statistical models and how well it fits the evidence. This is probably good enough.

#### Social Factors Explain 62% Of Homosexuality

In their statistical model to explain homosexuality, Lung and Shu managed to explain 62% of the variance by parental factors and

neuroticism level; i.e., 62% of homosexuality of their sample can be explained by parental factors, with higher-than-normal levels of neuroticism. It is quite rare to get a figure as high as this when a sociological survey is involved.

The relative strengths of the factors found important were Maternal Care 0.42, Maternal Protection 0.21, Paternal Care 0.21, Neuroticism 0.64. Paternal Protection, although individually the most important, and highlighted by the authors, exerted its effect through production of neuroticism. (General mental health itself did not directly affect development of homosexuality.) Unfortunately, because of the peculiarities of modeling mathematics, we cannot directly add the parental factors together to get an overall effect and compare them with the neuroticism result, but we can say that other parental factors and neuroticism are roughly comparable in effect.

Interestingly there is evidence that the fathers did not find the sons' homosexuality and reject them. The parental protection was high, and this was evidence that they were concerned to protect and shield them.

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