

## LEADING COMMENT

# Gender and erotic plasticity: sociocultural influences on the sex drive

The Sexual Revolution of the 1960s and 1970s produced sweeping, far-reaching, fundamental changes in sexual behaviours, sexual desires, and sexual attitudes. Or did it? On closer inspection, many researchers concluded that men did not change all that much in their desires and attitudes, and their behaviour only changed because they got more opportunities to do what men had always been wanting to do. In contrast, women changed in much more fundamental ways. After the revolution, women approached sex and felt about their bodies in ways that differed sharply from previous generations (e.g., Birenbaum, 1970; Schmidt & Sigusch, 1972; Arafat & Yorburg, 1973; Bauman & Wilson, 1974; Ehrenreich *et al.*, 1986).

Thus, the Sexual Revolution was one major cultural event that had a bigger impact on female than on male sexuality. Why were women affected more than men? Although historians might provide a dozen different possible answers, I think other psychological data suggest that the answer lies in an important, deeply rooted gender difference. Female sexuality is inherently more amenable than male sexuality to influence by cultural events, historical circumstances, socialization, peer influence, and other social variables.

The term *erotic plasticity* refers to the extent to which the sex drive can be shaped by social, cultural, and situational factors. Low plasticity suggests a sex drive that is rather inflexible and independent of circumstances, possibly due to strong biological programming. High plasticity entails the capacity to change and adapt. In general, I do not consider it inherently better to have either high or low plasticity, but in order to understand and treat individuals, it is helpful to recognize possible differences in plasticity.

### **Evidence of female erotic plasticity**

Several years ago I wrote a rather lengthy review of published studies relevant to the question of whether women's sexuality has higher plasticity than men's (Baumeister, 2000). It offered three testable predictions based on the hypothesized difference in erotic plasticity. I shall provide only a brief summary here. Readers interested in assessing the full evidence for themselves may wish to consult that earlier paper.

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A first prediction is that high plasticity should enable individuals to change their sexual patterns and preferences as they move through adult life. There were multiple signs that women have higher plasticity as reflected in change over time. The Kinsey reports already noted one indication, which was that many women report substantial fluctuations over time and circumstances in the total amount of sexual activity they have, whereas men tend to keep their total amount of sex (counting all orgasms from all activities) relatively constant (Kinsey *et al.*, 1953). Other research shows that wives tend to change and adjust sexually over the course of marriage more than men do (Ard, 1977), and that women are more likely than men to add new sexual activities later in life (Adams & Turner, 1985). A man's sexual tastes appear to be fairly well set by young adulthood, but a woman's may change significantly.

Sexual orientation provides well-documented evidence of differences in plasticity. Men tend to be either heterosexual or homosexual, and these preferences generally remain the same for the rest of the man's life. In contrast, women are more likely to switch back and forth (though statistically it is necessary to control for the lower base rate of female homosexuality). Some heterosexual women may begin to experiment with lesbian activities in their 30s or 40s. Some lesbians begin desiring sex with men after many years of exclusive same-sex orientation. Far more lesbians than gay men have had heterosexual intercourse (e.g., Bell & Weinberg, 1978; Savin-Williams, 1990; Whisman, 1996).

A second prediction was that if women do indeed have higher erotic plasticity, then specific social and cultural variables would have a bigger effect on female than on male sexuality. There is ample evidence that this is true. The National Health and Social Life Survey (NHSLS; Laumann *et al.*, 1994), which is widely regarded as the best and most thorough US data available on modern sexuality, focused on two main social institutions, namely education and religion. Over and over, they found that these variables had a stronger effect on women than on men. Women with advanced degrees were significantly more likely than women with just a high school education or less to engage in oral and anal sex, to have tried same-sex activity, to use birth control when appropriate, to enjoy a variety of sexual practices, and so forth. Men with advanced degrees were not much different from men with high school only. Highly religious women were less likely to engage in such practices than non-religious women, whereas again men's sex lives did not differ much between the most and least religious men. Thus, though the results are correlational, it appears that education and religion have significant impacts of female sexuality but not much effect on male sexuality.

Other research has found similar differences. It appears that cultural differences in female sexuality are bigger than male sexuality (e.g., Barry & Schlegel, 1984), and there is also some evidence that when people move to a new country and embrace its culture, the women's sexuality changes more than the men's (Ford & Norris, 1993). Peer groups seem to affect adolescent girls' sexuality more than boys', and parents have more influence on daughters than on sons (reviewed by Baumeister, 2000).

The question of whether homosexual orientation is genetically influenced vs. a matter of experience and choice has been debated harshly for some decades, partly because there are powerful political interests at stake. At present, there is substantially more evidence that genes play a more central role in male than in female sexuality

(e.g., Bailey & Pillard, 1995). If this pattern holds up, it will suggest that social and cultural factors have a greater impact on female sexual orientation than on male.

A third major prediction was that women would show lower consistency between their broad attitudes and their action behaviour than men would. The logic behind this is that women's sexual responses depend heavily on the immediate social context, so furnishing answers to broad, general questions would be less predictive for women than for men about responses to very specific circumstances. Again, there is ample evidence suggesting that women and girls perform more sex acts that they themselves disapprove of. Women's views about same-sex activity, or infidelity, or casual sex, or condom use in general are weaker than men's views at predicting whether they will actually engage in those activities (see Baumeister, 2000, for review). A man can predict his sexual responses pretty well because they come from inside him and do not vary much from one situation to another, whereas a woman's response depends heavily on the situation and what it means. Again, this indicates the greater plasticity of the female sexual response.

### **Any exceptions?**

There are scattered signs that the male sex drive has a phase of plasticity during childhood. Paraphilias, for example, which are thought to originate in childhood experiences, are much more common among men than among women. And perhaps surprisingly, some very rigorous data suggest that childhood sexual abuse has a stronger and more lasting effect on adult sexuality in men than in women (Laumann *et al.*, 1999). There are even some experimental studies with non-human animals suggesting that childhood experiences can affect male sexuality via a kind of imprinting, whereas female sexuality either does not have imprinting or has sufficient plasticity in adulthood that the effects of imprinting can be easily reversed (Kendrick *et al.*, 1998).

I hesitate to place too much weight on these exceptions. The evidence for the greater erotic plasticity in female than male adults is extensive and consistent, whereas for the difference in plasticity during childhood is scattered and sparse. Still, the pattern is theoretically appealing. Male sexuality is not completely immune to experience, but the window of plasticity is only there during the phase of maximum plasticity (childhood) and closes swiftly. Once a boy reaches puberty, his sexual tastes and desires are largely set in a pattern that is unlikely to change for the rest of his life, except for the gradual decline in desire with aging. In contrast, for women puberty may mark merely the beginning of a sexual odyssey that can take unexpected turns and lead in many possible directions.

### **Why the difference?**

When I first published my survey of findings on erotic plasticity (Baumeister, 2000), I offered several possible explanations and said there was no way of distinguishing among them. One explanation invoked the gender difference in physical strength and political power. Because women have long had to find sex partners who had more

power than the women themselves, it may have been adaptive for female sexuality to be flexible so as to accommodate to the men. A second explanation was based on the idea that women's sex drive is milder than men's. A less intense motivation may have greater plasticity, whereas strong and powerful drives are less prone to socializing and civilizing influences. A third explanation was based on the gatekeeper role: In sex, women start off saying no to most advances, and so sex mainly occurs when the woman changes her vote from no to yes. Possibly the flexibility needed to make those crucial changes from no to yes required more general readiness to change, which could have led to greater plasticity.

All those explanations were inherently plausible. All could be phrased in terms of either nature or culture. All have their advocates and some indirect supportive evidence.

Since that work was published, my views have come to favour the second explanation, although this conclusion remains tentative and I would not be surprised if new evidence were to come along and support a different conclusion. The second explanation assumes that men's sexual motivations are stronger than women's. Somewhat to my surprise, I learned that this conclusion is hotly disputed on political grounds, to the extent that most major sex textbooks either explicitly say it is wrong or at least present it as a quaint stereotype rather than an established fact. Popular wisdom is perhaps less questioning in this regard, and I recall the reaction of a female colleague when I mentioned that we had embarked on a literature review to see whether women desired sex less than men: 'Anyone who's ever had sex knows that!' she insisted. In any case, we did survey a great many findings, and essentially every measure and every study pointed to the same conclusion, namely that men are more sexually motivated than women (Baumeister *et al.*, 2001). We set up the review by saying, assume that there are two women, and one had a stronger sex drive than the other: What differences between the two women's sexual behaviour would you expect? And then we compared women vs. men on those behaviours. As a partial summary, men think about sex more often than women, desire sex more often, desire more partners, like more different sex acts, masturbate more often, sacrifice more resources and take more chances for sex, initiate sex more often, refuse it less often, desire it earlier in the relationship, and rate their own sexual desires as stronger than women's.

But is this difference the basis for the difference in plasticity? The general principle would be that weaker motivations lead to greater plasticity. The test case would be to find some motivation that is stronger in women than in men and see if in that case men exhibit greater plasticity. Most experts would assume that the desire to raise and care for children is stronger in women than men. And, sure enough, the father role seems to have much greater plasticity than the mother role. The mother-child relationship appears to be quite similar across cultural and historical boundaries, whereas fatherhood changes drastically (and in fact has done so even in North American culture in the past half century) (Fukuyama, 1999). This suggests that higher plasticity is not simply a trait of women generally (as the differential power explanation would predict) nor something that pertains only to sexuality (as the gatekeeper explanation would suggest). Rather, there may simply be a general pattern

in which plasticity decreases as motivational strength increases. The stronger the desire, the less scope for compromise, transformation, or modification.

## **Implications**

The gender difference in erotic plasticity has many implications for both basic theoretical understanding of sexuality and practical applications. Let me focus here on three implications most relevant to therapists.

First, the default or first-try therapeutic approach might be different by gender. Interventions aimed at fixing sexual problems can be sorted broadly into the physiological ones (such as hormone treatments) and insight-based ones (such as cognitive therapy). High erotic plasticity means that sexual responses are strongly influenced by what things mean. The high level of erotic plasticity among women suggests that many of women's sexual problems will not respond easily to purely physiological interventions, and therapists might instead find it useful to work with the woman's interpretation and understanding of sexual events. In contrast, the lower erotic plasticity among men suggests that meanings play a much lesser role, and therapeutic interventions may do better by emphasizing body instead of mind. Put more crudely, the first step in dealing with a presenting complaint about sexuality may be to ask the woman about her thoughts and feelings but to perform a physical check-up on the man. (Of course, these are only broad generalities, and there will be exceptions in both directions.)

Second, sexual self-knowledge and self-understanding will prove far more elusive for women than for men. High erotic plasticity entails that the sexual self is a moving target. It may be possible for many men to know their sexual tastes, desires, and response patterns quite well throughout life, because these are not likely to change much. But a woman may continue to surprise herself. Even if she achieves a full and thorough understanding of her sexual self at age 20, this knowledge may be obsolete at 30 or 40.

Third, the prospects for successful sex therapy may be better for women than for men in many cases. As already noted, recovery from childhood sexual trauma appears to be more common and thorough among women than among men (Laumann *et al.*, 1999). (It is even worth speculating that female erotic plasticity may have evolved in order to help women recover from childhood sexual events, insofar as girls are more likely than boys to have been targeted by adults for sexual exploitation during our evolutionary history.) Men's low plasticity entails that it is difficult to bring about a significant change in their sexuality once they are past the age of puberty, and if a problem or maladaptive pattern has been stamped in, it may be highly resistant to change. Women's sexuality can change throughout life, and so there is more reason to hope that things can change for the better at any point.

## **Conclusion**

This brief comment has summarized a great deal of information, and readers interested in more details are invited to consult my original and full-length

presentation of these ideas (Baumeister, 2000). One effect of the brevity of this article is that it cannot directly furnish a sense of the relative strength of the evidence. Let me therefore summarize my views. In a nutshell, the gender difference in plasticity is solid, whereas the evidence for the reasons and for the exceptions is fairly weak.

There are a great many findings supporting the basic point that women's erotic plasticity is higher than men's. That point is supported by evidence with all different levels of methodological rigour, and it is greatly enhanced by convergence across very diverse methods. Frankly I would be shocked if further work were to reverse or disconfirm that general conclusion, in part because the evidence presently available to support it is so extensive and so nearly unanimous.

In contrast, the suggestion that male sexuality may have a childhood window of plasticity is suggested by a smattering of studies but hardly a proven fact. The evidence is diverse and the idea is intriguing, but far more data are needed. Likewise, I noted that my own perspective currently favours explaining the difference plasticity on the basis of differential strength of sex drive, but this too is a very tentative conclusion based on a small number of observations, and I would not be at all surprised if new findings were to change my opinion on that issue.

Thus, I think we can safely say we know that women have higher erotic plasticity than men, but we do not really know why, nor do we know for sure whether there are some exceptions (especially the possible phase of plasticity during male childhood).

Nature–nurture debates are a perennial fact of social science, and the field of sexuality has seen particularly bitter and acrimonious arguments between those who seek to explain sex in biological or evolutionary terms and those who treat sex as a social construction that is highly subject to cultural, historical, and situational influences. Almost certainly, each adult human being's sex life is a product of some degree of nature and some of cultural influence, but the relative importance of those two sources can be argued at length. My research has led to the conclusion that the balance between nature and culture differs by gender. In sex, at least, men are more natural and women are more cultural.

ROY F. BAUMEISTER

*Department of Psychology, Florida State University,  
Tallahassee, FL 32306-1270, USA*

*Email: Baumeister@darwin.psy.fsu.edu*

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