

behaviors, the theories give short shrift to a peculiar human trait – third-party policing of other people's sexual behavior. From incest taboos to prescribed and arranged marriages to the rape or exile or execution of people who violate sexual rules, human beings have a uniquely complicated social environment in which to behave sexually. A complete theory of human sexual behavior needs to explore and account for this extraordinary species-typical elaboration of the social context. What, for example, is the role of parental pressure in sociosexuality, as parental interests respond to such externals as sex ratio, resource levels, and infant mortality? Even if parents attend to exactly the same cues as their offspring, *their* reproductive interests (as manifested largely in the number and survival of the grandchildren produced by all their children) will rarely correspond exactly to those of an individual child. There are major parent–offspring conflicts to be explored here, not only by administering the same instruments to both parents and children but also by asking parents to answer on behalf of their children.

Finally, the possibility of strategic pluralism in sociosexuality, as suggested by Gangestad and Simpson (2000), needs to be addressed in the context of plural alternatives within a single society. There is no a priori reason that one sociosexual orientation should be the single best adapted strategy for a given sociocultural context. On the contrary, particularly in large, complex societies, one might expect several successful alternative sociosexual strategies, probably with frequency dependent fitness payoffs.

Who's zooming who?

Nigel W. Bond

University of Western Sydney, Penrith South, NSW 1797 Australia.
n.bond@uws.edu.au

Abstract: Men and women report having significantly different numbers of sexual partners, which is impossible in a large sample. Schmitt's target article is no exception. This focuses discussion on the nature of the samples, their heterogeneity, and the locale they are drawn from. Further, we query how humans determine, for example, sex ratio, in the context of large numbers.

Schmitt and his many colleagues have provided us with an article that is rich both in terms of data and in the application of those data to test a number of theories. This is a monumental endeavour that will provide a source of debate for years to come. However, as with all monumental studies, there are weaknesses that need examination. I focus on the sampling and how it links into the claims made with respect to responses on the Sociosexual Orientation Inventory (SOI).

A number of authors, most notably Dorothy Eimon, have pointed out that there are often major discrepancies between the number of sexual partners claimed by men and women (Eimon 1994; Walsh 1993). The problem is, given the nature of sexual activity, these claims, although they may not be identical, should be relatively close. Despite this obvious fact, almost every study reports that men claim to have had more sexual partners than women. The present study is no exception. Men in every country claim that they have had or will have more sexual partners than do women. Of course, one would not expect these small samples to match up perfectly, but given that the sum must approach equality as the sample size increases, one would expect women in some countries to report that they have had or will have more partners than men.

Eimon makes the point that this difference might be the result of the relative difference in prostitution. There are more female prostitutes serving males than vice versa. However, her studies show quite clearly that this is not the case, and that the most likely explanation is that men are exaggerating and women are being coy. The truth lies somewhere in the middle.

This is important because it suggests that we need to look care-

fully at the samples that were employed to generate the data in the Schmitt article. To be fair, Schmitt notes some of these weaknesses. However, these weaknesses could have a profound effect on the outcomes that he observed and the conclusions he drew.

If Eimon is correct, then clearly men and women will not differ dramatically in terms of their mean number of sexual partners. There will be some variation, given the differences in sex ratio, as illustrated in Figure 1 of the target article, but these are small in comparison with the claims made. Unfortunately, the samples employed are unlikely to pick up outliers such as women who are working as prostitutes. Clearly, if women who are working as prostitutes make up the differences that are reported here and in other studies, and if such women are included in such studies, then we would expect to see considerable differences in the variability of reported sexual activity. Men are likely to be much more homogenous and women more heterogeneous in terms of number of sexual partners. What would be of interest is how these differences in variability are expressed as preferences. Do women who work as prostitutes have similar preferences to women who do not work as prostitutes, thereby preserving the differences in the SOI reported here?

We can take the issue of sampling one step further. The above focuses on differences between men and women. However, we should not assume that samples taken from different countries are necessarily homogenous, as is implied in the Schmitt article. Australia is a multicultural society that contains numerous religious and ethnic groupings, all of whom are likely to differ on the SOI. Therefore, it is important to know exactly where the sample was taken to determine the extent to which it is likely to be representative of the nation as a whole. Even large cities such as Sydney and Adelaide differ dramatically in their religious and ethnic makeup. What is true of Sydney would not necessarily be true of Adelaide and vice versa.

The locale of the sample raises the question of how people are able to gauge some of the posited causal factors that influence the SOI. For example, Schmitt notes that certain areas of the United States are likely to have significant imbalances in the number of men versus women because of likelihood that the former are incarcerated. It is easy to understand how such a local imbalance could affect behaviour. However, it is difficult to see how the marginal differences in sex ratio reflected in Figure 1 could affect behaviour. Schmitt and others assume that all men and all women will form a long-lasting partnership. Thus, like musical chairs, the absence of a partner will become obvious. This has never been the case, and it is certainly not the case at present, which leaves open the questions of how people know that there are differences in the number of men and women available as partners, and whether they alter their behaviour accordingly.

In summary, Schmitt has provided us with much food for thought. He provides us with answers to some questions and poses many more. Nevertheless, in examining the data produced, we must be mindful of the weaknesses inherent in the sampling. The jury must remain out until more evidence is provided.

Sex differences in the design features of socially contingent mating adaptations

David M. Buss

Department of Psychology, University of Texas, Austin, TX 78712.
dbuss@psy.utexas.edu www.davidbuss.com

Abstract: Schmitt's study provides strong support for sexual strategies theory (Buss & Schmitt 1993) – that men and women *both* have evolved a complex menu of mating strategies, selectively deployed depending on personal, social, and ecological contexts. It also simultaneously refutes social structural theories founded on the core premise that women and men are sexually monomorphic in their psychology of human mating. Further progress depends on identifying evolved psychological design features

sensitive to the costs and benefits of pursuing each strategy from the menu, which vary across mating milieus. These design features, like many well-documented mating adaptations, are likely to be highly sex-differentiated.

According to the sexual strategies theory, both men and women possess an evolved menu of mating strategies, selectively activated by particular features of the personal, social, and ecological context (Buss & Schmitt 1993). Although both sexes possess short- and long-term strategies at a broad level of description, their mating psychologies contain many sex-linked design features that accompany each strategy. These include sex differences in mate preferences when pursuing each mating strategy, corresponding sex differences in tactics for attracting mates, and sex differences in the conditions that lead to the termination of mating relationships (Buss 2003). In the context of short-term mating, they include a greater desire for sexual variety by men than by women, indicated by well-documented design features such as the number of partners desired, the length of time elapsed before seeking sexual intercourse, the sexual overperception bias, a decrease in standards for consenting to sex with strangers, affective valence shifts promoting a hasty postcopulatory departure, and many others (Buss 2003; Haselton & Buss 2000). The sexual strategies theory also proposes that women will obtain reproductive benefits from pursuing short-term mating, such as immediate resources, better genes, and trading up, that differ from those obtained by men such as a direct increase in offspring number (e.g., Gangestad & Thornhill 1997b; Greiling & Buss 2000). As a consequence, the contexts in which women versus men actively pursue short-term mating are predicted to differ. In short, the sexual strategies theory proposes that men and women differ fundamentally in many design features of their evolved psychology of mating.

In sharp contrast, a core premise of social role and socialization theories of human mating such as the structural powerlessness hypothesis (Buss & Barnes 1986) and its later elaborations in social structural theories (Eagly & Wood 1999) is that men and women are fundamentally identical in their mating psychology, possessing no evolved sex-linked psychological design features. Rather, according to these theories, observed sex differences in mate preferences, desires, and strategies owe their existence to sex-linked socialization practices, the societal assignment of men and women to different roles, and societal factors that grant power to the sexes differentially. If the role assignments were reversed, for example, then these theories necessarily predict sexual reversals – that men more than women would value economic resources in a mate, that women more than men would place a premium on physical attractiveness and youth in mate selection, and that women would experience a greater desire for sexual variety than men. Furthermore, given the fundamental premise of social structural theories that male and female minds and brains are identical in the mating domain, containing no sex-linked psychological adaptations, the sexes should respond to the same personal, social, and ecological factors in the same ways.

The impressive study conducted by Schmitt and his colleagues adds to a growing body of empirical evidence that provides strong support for the sexual strategies theory and a resounding refutation of social structural theories and their variants. The universality of sex differences on the Sociosexual Orientation Inventory (SOI) across the 48 nations studied confirms a core prediction of the sexual strategies theory and its predecessors, anchored in Trivers' theory of parental investment and sexual selection. It supports the broad notion that men have an evolved mating psychology that differs dramatically from that of women, and the specific hypothesis about a profound sex difference in desire for sexual variety. The data simultaneously refute the notion that men and women are psychologically monomorphic in mating desire, falsifying current social structural theories (Eagly & Wood 1999) and their earlier conceptual forebears (Buss & Barnes 1986).

These findings, in conjunction with dozens of others (Buss 2003), lead to the unusual position of disavowing a hypothesis I

previously articulated and also disagreeing with Schmitt's implication that social structural theories are needed for a comprehensive conceptualization of human mating strategies. The structural powerlessness hypothesis (Buss & Barnes 1986) and subsequent social structural variants are fundamentally indefensible, because their core premise of male and female identity of underlying psychology was always theoretically problematic and is now known to be empirically false. The notion that sexual selection would fashion male and female bodies for different mating strategies while leaving male and female brains and minds identical contravenes everything that we now know about adaptation and natural selection. And although the modest cultural variation in the magnitude of sex differences in the SOI is theoretically important, I suggest that it is not adequately explained by nebulous theoretical constructs such as structural powerlessness, gender empowerment, patriarchy, or social structural roles (see Buss [1996a; 1996b] for more detailed conceptual critiques of these concepts).

Rather, I propose that the theoretical integration that Schmitt appropriately calls for will be found in part by identifying the specific evolved mating mechanisms that are responsive to the particular *costs* and *benefits* of pursuing short- and long-term mating strategies, which are almost certainly highly sex-differentiated in design (Greiling & Buss 2000). I propose, for example, that women have evolved mating mechanisms that are highly sensitive to the *reputational costs* of pursuing short-term mating in their local mating environment. In large Western urban cultures with high geographical mobility (surely a correlate of measures of "gender empowerment"), short-term mating can be pursued in relative anonymity, decreasing the reputational damage that women often accrue from pursuing a promiscuous mating strategy. In cultures more characterized by small-group living and little geographical mobility, anonymous sex is more difficult and the reputational damage that women acquire from short-term mating can severely handicap their long-term mate value. By identifying *when* women secure specific benefits from short-term mating, such as needed resources, better genes, or better mates while simultaneously avoiding the costs of short-term mating such as reputational damage and a decline in perceived long-term mate value, we will attain a deeper understanding of the cultural and subcultural variation in the selective pursuit of this strategy from the human menu.

In summary, Schmitt makes a large contribution by identifying the universality of sex differences in one important aspect of the psychology of human mating strategies, as well as by identifying cultural variation in expression from the menu of human mating strategies that is correlated with well-defined and theoretically cogent concepts such as sex ratio. His work simultaneously refutes the core premise of social structural theories, which are anchored in the premise of sexual monomorphism of evolved psychological design. The field of evolutionary psychology has identified a large menu of human mating strategies, including short-term, long-term, and mixed mating strategies, the pursuit of which is highly sensitive to context, as initially postulated by sexual strategies theory. Future theoretical and empirical work in the important domain of human mating will reside not with vague constructs such as gender empowerment or dubious notions about socially assigned roles to passive recipients. Scientific advances will come from identifying the specialized psychological design that determines which mating strategies from the universal menu will be deployed by each sex in particular contexts.