

LEADING COMMENT

A brief review and discussion of sex differences in the specificity of sexual arousal

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“The notion must be abandoned that women are simply repressed men waiting to be liberated.”
Donald Symons, *The Evolution of Human Sexuality*

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Introduction

Sex differences in human sexuality are plentiful and include physical, psychological, and psychophysiological variations (Geary, 1998). Examples include masturbation frequency (Oliver & Hyde, 1993), sex drive (Baumeister *et al.*, 2001), habituation of sexual arousal to sexual stimuli (Laan & Everaerd, 1995a, b; O’Donohue & Geer, 1985), cognition (Geer & Bellard, 1996), self-reported arousal to sexual stimuli (Murnen & Stockton, 1997), and the concordance between genital and self-reported sexual arousal (Laan & Janssen, *in press*; Chivers *et al.*, 2005), to name just a few. These examples suggest considerable variability between the sexes in various aspects of sexuality. However, most traditional models of sexual response (APA, 1994), sexual dysfunction (Barlow, 1986), and sexual orientation (Bem, 1996) are not sex-specific and, as such, may not adequately explain observed differences in male and female sexuality. As Symons’ (1979) quote suggests, undifferentiated models of sexuality run the risk of biasing observations and interpretations of sexual phenomena as deficits, excesses, etcetera depending on what standard is adopted. Recently, however, there has been a paradigm shift in thinking about female and male sexuality, and sex-specific models are emerging, e.g., the recent recommendations for revising the definition of female sexual dysfunction (Basson *et al.*, 2003).

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The relationship between sexual preferences and sexual arousal is another example of an important sex difference in sexual psychophysiology. The observed sex difference in the correspondence between sexual arousal and sexual orientation, with discordance shown in women, is an example of a relative independence between physiological, psychological, and behavioural aspects of sexual arousal in women. This non-specificity effect likely has implications for understanding the development and expression of female sexual preferences, psychophysiological assessment of female sexual preferences, and clinical understanding of normative and disordered sexual functioning in women. With an emphasis on female sexuality, this paper will provide an overview of sex differences in the psychophysiology of sexual orientation, suggest alternative explanations for non-specificity of sexual arousal in women, and briefly discuss the implications of a non-specific and automatic sexual response system for women's sexuality.

Sexual arousal: Definition and measurement

Sexual arousal is an emotional state (Geer *et al.*, 1992) initiated by processing of external (e.g., visual, tactile) or internal (e.g., fantasy) sexual stimuli. Sexual arousal is comprised of interacting components including physiological changes, emotional expression, and motivated behaviour (Frijda, 1986). Similar to other emotions, sexual arousal possesses distinct antecedents (e.g., sexual stimuli) and patterns of expression (e.g., psychological, physical, behavioural) serving to regulate behaviours fundamental to sexual reproduction (Everaerd *et al.*, 2001). The experience of sexual arousal, or subjective sexual arousal, is an appraisal of the dynamic integration of psychological (e.g., cognition, emotion, perception) and both generalised and sex-specific physiological arousal responses.

Sexual arousal is induced in laboratory settings by exposure to internal (e.g., cognition) or external sources of sexual stimuli: these most commonly include sexual images or films depicting sexual acts, audiotapes describing sexual interactions, or sexual fantasy. Two aspects of sexual arousal, genital and subjective (self-reported) arousal, are the focus of most sexual arousal research. Self-reported sexual arousal is typically measured either after a sexual stimulus, or concurrent with a sexual stimulus using an apparatus, such as a lever, to quantify changes as a participant processes the stimulus. Self-reported sexual arousal is different from self-reported genital response; the former refers primarily to an emotional state of sexual arousal, whereas the latter is a subjective estimate of the extent of physiological responding.

For both women and men, genital sexual arousal refers to genital vasocongestion. Measurement of genital vasocongestion is most commonly done using a vaginal photoplethysmograph or a circumferential penile plethysmograph: the former measures increases in vasocongestion of the vaginal epithelium, and the latter measures changes in penile circumference as vasocongestion causes erection. Although genital vasocongestion is probably a physiologically identical process in women and men, the end results, vaginal lubrication and erection, are not. Vaginal lubrication is a product of genital vasocongestion; however, the relationship between magnitude of vaginal vasocongestion and quantity of lubrication is poorly understood. Measures of erection, however, directly assess the end-state of genital

vasocongestion in men. Although both measures have good psychometric properties (Janssen, 2002), carefully considering how subjective and genital sexual arousal are operationalised and measured for each sex is crucial when considering the significance of sex differences in sexual psychophysiology.

Sexual interests: Definition and measurement

Sexual interest is exemplified by the greater occurrence of sexual thoughts, feelings, and behaviours involving the preferred person, object, or activity of interest. In general, most adults are sexually attracted to other adults, either opposite-sex or, less frequently, same-sex persons. Sexual orientation is the commonly used term to describe this sexual interest, and can be defined as the degree of sexual interest one feels for same- compared to opposite-sex persons. Sexual interests, or preferences, are expressed in sexual fantasy and behaviour (Sell, 1997), and these dimensions of sexual orientation are typically highly correlated among males. Sexual interests can also be described as varying by the preferred category of target (e.g., males or females, juveniles versus adults) or objects (e.g., humans versus materials) and by the preferred activity (e.g., consensual sexual intercourse, cross-dressing, exhibiting one's genitals; Freund *et al.*, 1997). This nosology of sexual interests describes the variety of normative and deviant sexual interests in males, but whether this model of sexual interests applies to women is unclear.

Recently, researchers studying sexual orientation have called attention to a difference in the quality of women's and men's sexual preferences, such that women's manifest as flexible, fluid, or less categorical (Baumeister, 2000). Sex differences in the distribution of sexual attractions (Bailey *et al.*, 2000), exclusivity of same- and opposite-sex sexual experience (Kinsey *et al.*, 1948, 1953; Laumann *et al.*, 1994; Rust, 1992), relationship between sexual attractions and sexual behaviours (Bailey *et al.*, 2000), and development and temporal stability of sexual identity (Bell *et al.*, 1981; Diamond, 2000a, b, 2003; Kinnish *et al.*, 2005; Savin-Williams & Diamond, 2000) suggests that, for women, there is greater variability among psychological and behavioural manifestations of sexual preferences. Development of sexual orientation also differs in that, for women, first same-sex sexual attractions often emerge from passionate friendships (Diamond, 2000a, b), whereas men cite sexual arousal to same- or opposite-sex persons as a more important source of information about sexual attractions during their sexual identity formulation (Bell *et al.*, 1981; Savin-Williams & Diamond, 2000). Also, research on the biological bases of sexual orientation suggests sexually dimorphic aetiologies of sexual orientation (Mustanski *et al.*, 2002). The absence of sexual orientation effects in female sexual psychophysiology is another example of non-specificity in female sexuality that may be related to the increased flexibility of female sexual interests compared to those of men.

Sexual arousal as an indicator of sexual interest

Sexual arousal in response to preferred categories of targets/objects is believed to be one indication of sexual attraction, at least for males. Sexual arousal response to an

image, object, or thought is an indicator of the erotic potential of that category of stimuli for that person. "Category specificity" refers to sexual arousal that is highly dependent on characteristics of sexual targets or sexual activities portrayed in a category of stimuli. Sexual stimuli that depict individuals or sexual targets corresponding with a person's observed sexual interests would be considered preferred, and stimuli depicting anything otherwise, non-preferred. If there is a strong association between sexual preferences and sexual arousal responses to different categories of sexual stimuli, inferences about someone's sexual interests and future sexual behaviour could be made by measuring sexual arousal responses. For studies examining the association between sexual orientation and sexual arousal responses, category-specificity refers to arousal that is highly dependent upon gender features of a sexual stimulus, and when using visual sexual stimuli, category-specificity manifests as differential responses to visual representations of males and females. A sexual preference for a certain category would be indicated by significantly greater sexual arousal to one category of sexual stimuli versus another.

Men

Men typically show a category-specific pattern of sexual arousal, i.e., their patterns of genital and self-reported sexual arousal in response to preferred and non-preferred sexual stimuli correspond to their stated or observed sexual interests. This has been shown to be true for men's sexual attractions to same- and opposite-sex adults (Barr & McConaghy, 1971; Chivers *et al.*, 2004; Chivers & Bailey, 2005; Freund, 1963; Freund *et al.*, 1973, 1974; Mavissakalian *et al.* 1975; Reiger *et al.*, 2005; Sakheim *et al.*, 1985; Tollison *et al.*, 1979), to physically immature persons, i.e., paedophilia (Blanchard *et al.*, 2001; Freund & Blanchard, 1989; Freund & Watson, 1991; Seto *et al.*, 2000), and to fetishistic objects, i.e., transvestic fetishism (Blanchard *et al.*, 1986). Similarly, incarcerated rapists and sexually coercive men from the community demonstrate relatively greater genital response to stimuli depicting sexual aggression (Bernat *et al.*, 1999; Lalumière & Quinsey, 1994; Lalumière *et al.*, 2003; Lohr *et al.*, 1997). Men's self-reported sexual arousal also demonstrates category-specificity: men typically do not report sexual arousal to non-preferred sexual stimuli (Chivers *et al.*, 2004; Mavissakalian *et al.*, 1975; Sakheim *et al.*, 1985; Steinman *et al.*, 1981).

There is also evidence that sexual arousal to preferred sexual stimuli is related to sexual behaviour in men. Strong correlations between relative sexual arousal to male and female sexual stimuli and indices of same- and opposite-sex sexual behaviour indicate that sexual arousal patterns in the laboratory are positively related to past sexual behaviour (Chivers, 2003). In research designed to allow for voluntary sexual behaviour while viewing sexual stimuli, men were much more likely to engage in self-stimulation while viewing preferred versus non-preferred sexual stimuli, and reported greater sexual arousal to preferred sexual stimuli (Schmidt, 1975). Among sex offenders, genital arousal patterns have also been shown to predict future sexual behaviour. For example, among identified sex offenders against children, category-specific patterns of genital responses to sexual images of children predict future sexual behaviour with children (Hanson & Bussière, 1998). Together, these data show that

in the laboratory, genital and subjective sexual arousal in men is greatest to preferred sexual stimuli, and that sexual arousal patterns in the laboratory are related to past, concurrent, and future sexual behaviours.

Women

The relationship between women's sexual interests and sexual arousal patterns is less straightforward than men's. Women's subjective sexual arousal responses could be described as relatively category-specific. Studies reporting significant differences in mean levels of response to preferred and non-preferred sexual stimuli suggest specificity (e.g., Blackford *et al.*, 1996; Chivers *et al.*, 2004; Schmidt, 1975; Steinman *et al.*, 1981; Wincze & Qualls, 1984); however, this comparison does not take into account absolute levels of response, only relative response. Women, on average, report increased sexual arousal to both preferred and non-preferred sexual stimuli (Schmidt, 1975; Chivers *et al.*, 2004; Laan *et al.*, 1996), which suggests that cognitive and affective responses to sexual stimuli are not dependent upon sexual stimuli depicting a preferred sexual interest. Exposure to preferred and non-preferred sexual stimuli results in similar rates of masturbation and partnered sexual behaviours among women, in contrast to men (Schmidt, 1975). This suggests that among women, the motivation for engaging in sexual behaviour is also less dependent upon exposure to preferred sexual stimuli.

Physiologically, women's sexual arousal is best described as non-specific. Women demonstrate substantial increases in genital response to both preferred and non-preferred sexual stimuli, and these responses are not significantly greater for preferred stimuli (Chivers *et al.*, 2004; Laan *et al.*, 1996; Steinman *et al.*, 1981; Wilson & Lawson, 1978; Wincze & Qualls, 1984). Women's genital arousal responses are weakly related to their sexual preferences; although a woman might report psychological (attraction, thoughts, self-reported sexual arousal) and behavioural preferences for women, men, or both, her genital responses are not higher to sexual images of her preferred sex. Another way of conceptualising this effect is that women's genital responses are non-specific with respect to the sexual features that can trigger genital responses (Chivers & Bailey, 2005).

This perspective on non-specificity of sexual responding raises the question of how a sexual feature is defined: what cues in a sexual stimulus define it as sexual, and as belonging to a category of preferred sexual stimuli? Some have suggested that sexual cues are intrinsic sexual meanings that are automatically processed and generate genital vasocongestion before higher processing of sexual stimuli (Van Lunsen & Laan, 2005). Research showing that visual sexual stimuli produce higher genital response than purely cognitive stimuli (Both *et al.*, 2005), and showing that sexually explicit visual stimuli, e.g., frank visual depictions of sexual organs and acts, generates higher genital responses than sexually suggestive stimuli (Heiman, 1977), indicates that sexual cues also include visual sexual features, in addition to sexual meanings.

Given that men's arousal responses are category-specific, one might expect visual sexual features to be those that unambiguously identify individuals or objects as belonging to a preferred sexual category. For example, visual features that indicate a

preferred sex would include primary and secondary sexual characteristics (e.g., penis, full breasts, body shape). For women, however, the sexual features that activate genital responses do not seem to exclusively reflect preferred sex (Chivers *et al.*, 2004; Laan *et al.*, 1996). Vaginal vasocongestion may be provoked by exposure to non-specific sexual features, i.e., any sexual content or meaning, whether or not the categories of sexual targets or sexual activities presented are preferred.

To test this hypothesis, we examined women's and men's genital and subjective sexual arousal responses to stimuli that depict sexual activity, and therefore have a sexual meaning, but do not include plausible sexual targets (human actors). We created a non-human sexual stimulus portraying female and male bonobos engaging in face-to-face penile–vaginal intercourse, and measured women's and men's arousal responses to this and to human sexual stimuli (gay, lesbian, and heterosexual couples engaged in oral and penetrative sex; Chivers & Bailey, in press). Women showed a significant increase in genital arousal to a non-human sexual stimulus, but did not report being sexually aroused by this stimulus. This means the sexual cues in the film were sufficient to activate an automatic genital response, but not a psychological experience of sexual arousal. Women also showed a non-specific pattern of genital arousal to human sexual stimuli, replicating the effects reported by Laan *et al.* (1996) and by Chivers *et al.* (2004). Men showed neither genital nor subjective arousal to the non-human sexual stimulus, and showed a category-specific pattern of genital and subjective arousal to the human stimuli. These results suggest that women's genital responses can be elicited by processing of very general sexual stimuli.

Alternative explanations for non-specificity of female sexual response

One challenge to the female non-specificity finding could be that non-specificity is common to both sexes and that category-specific responding in males is the result of conscious or unconscious inhibition of sexual arousal responses to non-preferred sexual stimuli. (The term “unconscious” is used throughout this article to describe cognitive processes occurring below the threshold of awareness.) Research on conscious genital response manipulation suggests men are able to reduce, but not increase, their responses to non-preferred sexual stimuli (Adams *et al.*, 1992). If men were engaging in conscious inhibition of arousal responses, then increasing arousal to non-preferred sexual stimuli should be possible by stopping their inhibition efforts. Men do demonstrate significant genital responses to erotically intense non-preferred sexual stimuli (e.g., films of sexual activity), but these are typically much lower than to preferred stimuli (Chivers, 2003; Chivers & Bailey, in press). Perhaps, in men, genital arousal to non-preferred stimuli is the remainder from efforts to suppress genital responses.

Another possibility is that sexual meaning alone is able to generate a modest arousal response in men, but this response is much greater when coupled with features of a preferred sexual category. This seems unlikely, however, because men did not show any increase in genital response to nonhuman sexual stimuli (Chivers & Bailey, in press); therefore general sexual features or sexual meaning alone may not be sufficient to generate an arousal response in men. Also, visual sexual features of a

preferred sexual partner are not required for genital response in men as men can show genital responses to non-preferred human sexual stimuli (Chivers, 2003; Chivers & Bailey, in press).

On the other hand, inhibition of unwanted sexual responses may occur at an unconscious level in males, where appraisals of sexual stimuli are automatic (Janssen *et al.*, 2000). Based on data showing no gender effects in a psychophysiological measure of early affective processing, Both *et al.* (2003) proposed that there are no sex differences in automatic processing of sexual stimuli; instead, sex differences emerge in appraisal of sexual stimuli and regulation of sexual responses, which are processes involving conscious processing (Spiering *et al.*, 2004). Further inquiry into the cognitive and affective systems that govern processing of sexual stimuli is needed to clarify the nature of response specificity in both women and men.

A second threat to the validity of a non-specificity hypothesis, in relation to women, is volunteer bias. Women who participate in sexual arousal studies are typically not representative (e.g., Morokoff, 1986; Wolchik *et al.*, 1983, 1985). Compared to non-volunteers, volunteers for sexual research report more sexual experience, more liberal sexual attitudes, and more sexual interest in sexually explicit materials (e.g., Wolchik *et al.*, 1985). Volunteers for sexual psychophysiology research, likely an even more rarefied sample of women, report greater masturbatory and non-coital experience (i.e., oral sex), less sexual inhibition, and report more experience with erotic materials (Morokoff, 1985; Wolchik *et al.*, 1983), than non-volunteers. Morokoff (1985) has also demonstrated that more sexually inhibited women experience a higher vaginal response to erotic materials than less inhibited women. Perhaps non-specific responses are common only to those women who are willing to participate in sexual arousal studies, i.e., women with greater sexual experience. In an indirect test of ascertainment bias effects, Chivers *et al.* (2004) showed that non-specific genital arousal responses are not related to variables that distinguish participants from women who choose not to participate in sexual arousal research.

A final alternative explanation for the lack of specificity in women's genital arousal is methodological: vaginal photoplethysmography cannot detect a category-specific pattern of response whereas penile plethysmography can. Although women's genital sexual arousal can be reliably measured, research supporting its construct validity is less abundant than for male phallogometric measures (Janssen, 2002). Chivers *et al.* (2004) examined the specificity of genital response among transsexual women with varying sexual interests in males and females and demonstrated that, using vaginal photoplethysmography, it is possible to detect a category-specific pattern of sexual arousal in transsexual women. Not only does this study validate the interpretation of natal women's arousal pattern as non-specificity, but it also suggests that sex, and not gender, is more strongly related to a categorical response pattern in biological males.

Implications of non-specific and automatic genital response in women

A remarkable and rarely assessed aspect of female genital arousal is the almost instantaneous increase of genital response when a sexual stimulus begins. The latency

of visible increases in vaginal pulse amplitude, the psychophysiological measure of vaginal vasocongestion, to sexual stimuli is remarkably short, typically showing a marked increase in amplitude just seconds after the onset of a sexual stimulus (Laan & Janssen, in press). The swiftness of this response suggests sexual cues are unconsciously processed and appraised, initiating a physiological response that is “automatic” (Van Lunsen & Laan, 2004). As Van Lunsen and Laan speculated, visual sexual features may be among a class of evolutionarily-relevant, biologically-prepared stimuli (cf. Seligman, 1971) that automatically initiate sexual responding (Geer *et al.*, 1992). For women, reflexive and automatic genital vasocongestion in response to visual sexual features may be a protective mechanism (Laan, 1994), preparing the genitals for sexual activity via lubrication, facilitating penetration, and reducing the likelihood of genital injury or infection during sexual activity. This may explain why vaginal lubrication and, for some, orgasm during unwanted sexual activity is sometimes reported by women who have been sexually assaulted (Levin & van Berlo, 2004). Also, women show increased genital response to depictions of sexual coercion in the laboratory (Both *et al.*, 2003; Laan *et al.*, 1995; Stock, 1983). That women experience a physical genital response to unwanted sex and depictions of sexual coercion is suggestive that women’s vasocongestion response is automatically initiated by exposure to sexual stimuli, whether preferred, or wanted, or not. A woman who has experienced genital vasocongestion and physical response during a sexual assault may be comforted to reinterpret her physical sexual response as her body protecting itself.

A non-specific versus categorical sexual arousal response to sexual stimuli may have implications for understanding sex differences in sexual orientation. Non-specificity of sexual arousal is another example of female sexual flexibility, consistent with Baumeister’s (2000) conception of the malleability of female sexuality, relative to that of males. Non-specific sexual arousal may facilitate greater fluidity of female sexual preferences by not limiting sexual responses. For example, some women participating in the feminist movement chose to identify as lesbian as a political statement (Blumstein & Schwartz, 1977). What is most striking about this is that women felt they had a choice. Men are far more likely to state that they had always known they were gay and never felt that their sexual orientation was a voluntary choice (Whisman, 1996). That women can make such a choice implies that there is a sex difference in both the ability of culture and politics to mould female sexual expression (Baumeister & Twenge, 2002) and sexual motivation (Baumeister *et al.*, 2001).

A sexual system where sexual arousal can be generated by a wide variety of sexual stimuli, both preferred and non-preferred, may have implications for the expression of less typical sexual preferences as well. Clinical sexology has long documented the over-representation of males presenting with atypical sexual preferences (Hunter & Mathews, 1997). Epidemiological studies of paraphilia-like interests among females support the observation in the clinical literature of a sex difference in the rates of deviant sexual interests, with more males reporting sexual arousal to wearing the clothing of the opposite sex (2.8 % vs. 0.4%; Långström & Zucker, 2005), sexual arousal to exposing their genitals (4.3% vs. 2.1%), and sexual arousal to spying on

others' sexual behaviour and becoming sexually aroused by this (13% vs. 4%) (Långström & Seto, in press). The exceptionally low rate of paraphilic sexual interests among women suggests that "errors" in female sexual preferences are less likely than in men. Or perhaps, because physical sexual arousal is non-specific and is somewhat independent of psychological processes, women's sexual deviations will manifest as problems that look very different from those of men. The definition of paraphilia is about having categorical sexual arousal and sexual preference for something. For women, this definition may not even apply. Instead, women's sexual behaviour may be more governed by romantic and affectional processes (Diamond, 2004) than directional sexual attractions and sexual arousal. Deviations in women's sexuality may therefore manifest as dysregulation of romantic/affectional attachment, as in primary erotomania (Brüne, 2001, 2003).

Non-specificity of women's sexual responses is another example of what seems to be a truism for female sexual arousal: physiology and psychology need not correspond. Studies examining the effects of pharmacological agents designed to augment women's sexual arousal have generally concluded that these are effective in that they increase genital vasocongestion, but do not significantly increase subjective arousal (Laan *et al.*, 2001, 2002; Meston & Heiman, 1998; Meston & Worcel, 2002). Similarly, women with sexual arousal disorder do not show significantly lower genital response compared to women without sexual arousal problems (Morokoff & Heiman, 1980), but report lower sexual arousal to sexual stimuli in the laboratory. Newer models of female sexual dysfunction consider the disconnection between psychological and physiological arousal, and emphasise the roles of psychological, relational, and contextual factors in the development and maintenance of sexual arousal disorder in women (Basson *et al.*, 2003).

If women's genital sexual arousal is not category-specific, examining arousal patterns to preferred and non-preferred sexual stimuli is highly unlikely to be a means of objectively assessing female sexual interests. Recall that non-specificity is observed for arousal responses to preferred categories of sexual targets or objects. Whether women also show non-specific sexual arousal responses to sexual stimuli depicting preferred and non-preferred sexual *activities*, however, is unknown. Women do show significantly greater genital responses to stimuli depicting consensual versus non-consensual sexual activity (Both *et al.*, 2003; Laan *et al.*, 1995; Stock, 1983), suggesting category-specificity for sexual activities in women. The stimuli used in these studies were not ideal to test this hypothesis, however, in that they contained differing amounts of sexual explicitness, so it is unclear whether this difference is related to preferences for consenting sexual activity or to the number of explicit sexual cues in the films. Whether women reporting particular sexual activity preferences, such as for sadism or masochism, show category-specific patterns of sexual arousal to stimuli of preferred and non-preferred sexual activities remains to be determined.

Concluding remarks

Throughout this article, I have referred to the difference in sexual arousal as a "sex difference" and not a gender difference. The latter term would be appropriate if

category-specificity applied only to biological males living in a male gender role, and this is not the case. Category-specific sexual arousal has been observed in post-operative male-to-female transsexuals, i.e., biological males who identify as female and have surgically constructed vaginas (Lawrence *et al.*, 2005). If non-specificity were more strongly related to a female gender role, then individuals identifying as female, whether biologically male or not, should show this sexual arousal pattern. Instead, biological males continue to show a category-specific pattern of sexual response, regardless of their gender identity.

It is essential to note that this sex difference, non-specificity of sexual arousal in women, is limited to the affective and physiological responses to processing of visual sexual stimuli. Neuroscientists studying brain activation during processing of visual sexual stimuli show that males demonstrate greater activation in brain regions associated with emotional arousal and reward than females, suggesting visual sexual stimuli may possess a higher incentive value for men (Hamann *et al.*, 2004). It is therefore conceivable that different effects may be obtained for other modalities of sexual stimuli, such as tactile or auditory. For example, perhaps males' responses to non-preferred sexual stimuli can be enhanced by tactile stimulation, suggesting specificity can be overridden by competing sensory input.

The non-specificity of the female sexual arousal response is among the many sex differences suggesting female and male sexuality are not opposite sides of the same coin. Researchers aiming to develop more parsimonious models of sexuality should consider the possibility that women and men may not even be using the same currency when it comes to sex; the functional roles of sexuality may be so different for females and males that extrapolating from one to the other makes no sense (Baumeister & Vohs, 2004). As noted by Lloyd (2004), male perspectives on female sexuality have led some researchers to propose androcentric hypotheses about the function of female orgasm when there is limited data supporting these views. Future models of female sexuality might demonstrate greater validity if founded on empirical findings rather than political beliefs about sex and gender differences or equality. Just as women are not sexually repressed men in need of liberation, men are not oversexed women in need of chastening.

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