IDENTITY POLITICS AS A HINDRANCE TO SCIENTIFIC TRUTH

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My book, *The Man Who Would Be Queen*, has provoked a furious reaction among a subgroup of transsexual women. I will discuss the science behind the transsexualism section of the book and detail the controversy that has occurred. I will also speculate about why these women are so angry. Identity politics is a serious threat to research on groups and individuals with important beliefs or self-presentational biases that conflict with scientific hypotheses.

SEX OFFENDERS WITH DEVELOPMENTAL DISABILITIES: UNDERSTANDING THE PROFILE

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Recent estimates suggest that people with developmental disabilities comprise approximately 4% of the United States prison population (Petersilia, 1997). While this may not appear to be a large fraction of prisoners, the percentage is growing, having more than doubled in the past ten years. This percentage is similar to the incidence of individuals with developmental disabilities in the general population, however studies indicate that the prison population is substantively different. Inmates with developmental disabilities typically have higher IQs as a group, 60 or higher (Conley, Luckasson, & Bouthilet, 1992), than individuals with developmental disabilities who are not imprisoned.

While the body of literature on offenders with developmental disabilities has continued to increase during the past two decades (Lindsay, 2002), research on sexual offenders with developmental disabilities remains in its infancy stage.

To gain a more comprehensive understanding of inmates with developmental disabilities who commit sex offenses, a demographic profile was constructed via secondary analyses of a database managed by the Oregon Department of Corrections. The subject population consists of approximately 125 individuals with an IQ score of either 80 or below who committed sexual offenses, as determined by assessments (four subscales of the WAIS-R) administered by case managers at intake or by personal histories consisting of psychological test scores from school and mental health facilities. Participants are at least 18 years of age and were remanded to prison within the last six years.

The analyses focused on such variables as age, sex, race, conviction(s), type of crime committed and length of sentence. Additional information, IQ scores, mental health diagnoses, description of alcohol and other drug problems, last educational grade completed, and participation in a correctional education intervention, were also analyzed.

This study attempts to fill some of the identified gaps in the literature on sexual offenders with developmental disabilities. Available literature is minimal and often fails to report assessment used to determine IQ, diagnosis of specific disability, and differences in prison populations with mandatory reporting laws. These topics will be addressed in the poster presentation, as well as a brief overview of various statewide prison programs, targeting sexual offenders with developmental disabilities.

SEXUAL RISK-TAKING IN MEN: THE RELEVANCE OF SEXUAL AROUSABILITY, INHIBITION, MOOD AND SENSATION SEEKING

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The relevance to sexual risk taking of sexual arousability and propensity for inhibition of sexual response (as measured by SIS/SES), the relation between negative mood and sexuality (as measured by MSQ), and sensation seeking, was studied in 589 gay and 879 heterosexual men.

In gay men, two patterns were observed. Risk related to unprotected anal intercourse was greater in men with low SIS2 (sexual inhibition due to threat of performance consequences). Number of casual sexual partners and frequency of cruising were higher in men who reported increased sexual interest in negative mood states (high MSQ).

In heterosexual men, indicators of sexual risk were more limited, but the findings were comparable to those from gay men. Low SIS2 was predictive of number of partners with whom no condoms were used and number of lifetime 'one night stands'. High MS-1 (i.e. increased sexual interest in states of depression, a sub-scale of the MSQ), was predictive of number of partners and number of lifetime 'one night stands'.

Disinhibition, a sub-scale of the Sensation Seeking Scales, was predictive of all indicators of sexual risk in gay men. In heterosexual men it was related to whether the man had been sexually active with a partner in past six months, and number of partners in the past year.

An unexpected finding was increased sexual risk taking in some gay men with high SIS1 (sexual inhibition due to threat of performance failure). In contrast, SIS1 scores were significantly higher in straight men who were sexually inactive in the past 6 months. This suggests an interesting and potentially important difference between gay and straight men in the impact and significance of erectile problems.

SEXUAL WELL BEING: A NATIONAL SURVEY OF 20-65 YEAR OLD WOMEN IN HETEROSEXUAL RELATIONSHIPS

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The results from this survey relating to sexual distress have recently been published (Bancroft, Loftus & Long, 2003). In this presentation we look at predictors of sexual well being and sexual attractiveness. The sample, selected by random digit dialing and adjusted by application of weights, involves 987 women, with age 20 to 65. Over-sampling of black women resulted in a 2:1 white:black ratio. Women were asked to evaluate their sexual relationship and also their 'own sexuality'. Predictors of a more positive sexual relationship included 'partner understanding how you feel during sex', attractiveness of partner, frequency of sexual activity and mental health. Predictors of more positive 'own sexuality' include 'own sexual attractiveness', 'partner understanding' partner's attractiveness, and whether white or black. In addition 'feeling emotionally close to your partner during sexual activity' was more important for white women, whereas 'feeling comfortable talking to your partner about sex' was more important for black women. The extent to which 'sexual well-being' in women is socioculturally determined will be discussed.

DO CHILDHOOD CROSS-GENDER BEHAVIOURS AND CROSS-SEX WISHES CAUSE DISTRESS? A RETROSPECTIVE PILOT STUDY OF SAMOAN FA'AFAFINE

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Relative to Western societies, gender-atypical behaviour in Independent Samoa is highly visible and tolerated in adult males. In this retrospective pilot study, gender-atypical males (fa'afafine) in Independent Samoa were interviewed regarding their experiences as children. The goal of this study was to evaluate the presence of primary versus secondary distress regarding childhood cross-gender behaviours and cross-sex wishes. A total of 20 fa'afafine (M age = 32) were interviewed. Questions focused on DSM-IV criteria for gender identity disorder in children, including whether participants recalled: (a) engaging in cross-gender behaviours; (b) discomfort with gender-typical behaviours; (c) stating cross-sex wishes (d) cross-sex identification; (e) discomfort with their biological sex; (f) experiencing distress about the above; and if so, (g) whether the distress was primary (related directly to the behaviour) or secondary (the result of parental disapproval).

The results of this study indicated that the fa'afafine recalled very little distress as a direct result of their cross-gender behaviours as children, but did recall secondary distress as a result of the censures placed on them by their parents. On the other hand, the majority of participants reported primary distress regarding engaging in gender-typical behaviours. Approximately half of the participants recalled stating the wish to be, or believing that they were girls. Very few recalled any primary distress about the former or the latter, although there was evidence of secondary distress related to both. One-third of participants recalled discomfort with their biological sex, in that they did not like their genitalia.

UNDERSTANDING CLIENTS' EXPERIENCES OF SEXUAL REORIENTATION THERAPY: IMPLICATIONS FOR COUNSELING AND RESEARCH

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Perspectives of 42 individuals were gathered between 1997 and 2001 through individual interviews, prospective journal writings, four focus-group discussions, and participant checks to understand their experiences with sexual reorientation therapy. In addition, 8 individuals were recruited to read the study's results or participate in a focus-group discussion to confirm the evolving model with their experiences with such therapy. These 50 perspectives ranged from celebration of to disgust with the interventions and paradigm of sexual reorientation therapy. Data were analyzed using constant comparison to develop a grounded theory (Glaser & Strauss, 1967).

A detailed model emerged that depicted the process participants experienced as they moved from feeling different and unacceptable while growing up to developing strategies that reconciled their distressful identities. The perceived benefits and harms of experiencing sexual reorientation therapy are detailed, including the factors necessary for the development of selfacceptance and a positive self-identity. Participants, even the heterosexually identified ones, reported no generalized heterosexual arousal and did not deny their tendency to be attracted erotically to their same sex. Changes were described as attitudinal shifts in what identity they could apply to themselves and what they could do within that identity. For example, heterosexually identified participants reported success because their homosexual behaviors decreased and they felt an increased belonging to their gender and were resolved in considering that all heterosexuals experience same-sex (emotional) needs. Participants who identified as lesbian, gay, or bisexual (LGB) reported that they expanded their perceptions of what it meant for them to "be gay" and now viewed same-sex relationships as fulfilling.

Research implications include not accepting self-reports of sexual reorientation at face value, given the demand characteristics inherent in this research and the oversimplification of understanding the multiple ways of experiencing sexuality. LGB-positive researchers will also need to include in sexual identity models those same-sex attracted individuals who choose to live in heterosexual relationships.

Results suggest that although elements of sexual reorientation therapy may be beneficial, its underpinnings have the potential for great harm. However, as participants indicated, all may not benefit initially from LGB-affirmative therapy.

Therefore, this study provides the foundation for a broader-based treatment plan to produce congruent solutions for same-sex attracted clients who present in conflict.

AN ANONYMOUS SURVEY OF SELF-IDENTIFIED BDSM PRACTITIONERS USING THE GHQ

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Introduction: Sexual sadism and sexual masochism are both defined in the DSM-IV as psychiatric disorders in which the associated fantasies, sexual urges, or behaviors cause clinically significant distress or interpersonal difficulties (APA, pp. 573-574). However, the majority of what is known about sexual sadism and masochism is derived from examination of men and women who have been arrested or who have sought psychiatric or psychological care. The DSM-IV explicitly directs that the diagnosis not be made if the sexual acts, urges or behaviors are "simulated" and presumably if they do not cause distress or interpersonal difficulties. The purpose of this study was to examine the degree of psychological and interpersonal distress in a sample of men and women who self identified as participating in relationships that involve sexual sadism and sexual masochism, who were not pre-selected from a population of individuals before the courts or seeking mental health care

Method: Data from a previously collected survey of men and women who self-identified as having current or prior relationships that featured dominance, submission, and service (BDSM) as major components were analyzed. The survey was independently conceived and conducted by one of the co-authors of this study (McGeorge). The study sample consisted of 1,320 people (448 men and 872 women) all of whom were recruited through their affiliations with BDSM social organizations from 2000-2001, and who consented to complete an anonymous, web-based survey. Included in the survey was the General Health Questionnaire (GHQ-12) (Goldberg, 1972). The GHQ-12 is a well standardized and valid screening instrument for measuring non-psychotic psychological distress that has been used in clinical and research contexts in a wide variety of populations since the early 1970's.

Results: Women were more likely than men to report being "always or usually submissive" (78.6% vs. 35.0% respectively, $\chi^2(1, n=1,267) = 234.5$, p=.0001). Women were also more likely than men to report bisexual orientation (51.9% vs. 20.6% respectively, $\chi^2(2, n=1,319) = 141$, p=.0001). While sexual practice of exclusively homosexual, bisexual, and exclusively heterosexual was not associated with GHQ outcome ($\chi^2(24, n=1,313) = 17.120$, p=.843), being female ($\chi^2(12, n=1,314) = 28.832$, p=.004) and being sexually submissive ($\chi^2(12, n=1,287) = 35.489$, p=0.0001) were factors associated with higher GHQ scores. Compared to average GHQ scores from other epidemiologic studies, the sample in this study had a lower (better) percentage of "caseness" scored than most. Using scoring criteria recommended by Goldberg et al (1997), this sample of SM practitioners had an overall caseness of 21.3%. Contrasting studies using the same measures and scoring criteria include unemployed primary care patients in Australia, with 50.9% caseness; general practice attenders in France, 46.9% caseness; general practice patients in London, 36% caseness (Cormino et al 2000; van Os et al 1999; Plummer 2000).

Conclusions: Female gender and submissive BDSM role orientation are associated with higher scores on the GHQ-12, suggesting higher levels of psychological distress for these sub-

groups. Sexual orientation (homosexual, bisexual, heterosexual) is not associated with differences in GHQ-12 outcome. When compared to other GHQ-12 studies in the literature, SM practitioners in this sample report generally lower levels of psychological distress. Data in this survey suggest that SM practitioners, as a group, do not have a higher incidence of psychological difficulties than other populations. These findings suggest that participation in sexual relationships that involve dominance and submission, conventionally referred to as sadomasochistic (SM) relationships, does not necessarily indicate a higher likelihood of psychological or interpersonal distress in samples recruited outside of criminal or mental health care settings.

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THE INFLUENCE OF GENDER ON SEXUAL RELATIONSHIPS: USE OF THE INTERNET TO REACH THE TRANSGENDER COMMUNITY FOR HIV PREVENTION RESEARCH

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Due to challenges with their gender identity, transgender individuals have a heightened awareness of how gender attributions and expectations affect sexual relationships and HIV risk behavior. Funded by the National Institute on Drug Abuse, this study uses the Internet to reach the U.S. transgender population to examine the influence of gender identity and role, social stigma, and internalized transphobia on sexual relationships and HIV risk.

Participants are recruited through banners on transgender community websites to complete an online survey and, if randomly selected, followed by an in-depth interview using a combination of asynchronous and synchronous online communication. Pilot testing consisted of two phases: (1) a national transgender advisory board (N=10) tested a prototype of the online instrument for usability, and (2) the feasibility of recruitment and data collection and the psychometric properties of the measures were tested online (N=84).

Usability testing called for improvements in 4 areas: (1) complexity of the enrollment process (consent, screening, registration), (2) clarity of directions within the study (item/scale instructions and overall user support), (3) simplification of language, and (4) length of survey. The online pilot test provided helpful lessons in sampling, data monitoring, and identification of invalid responses. Measures appeared to translate well from paper-and-pencil to online administration. The use of the Internet provided easy access to the transgender population, automated data collection was efficient, and while potential threats to data integrity exist, the availability of Internet-tracking data (e.g., timestamps, IP addresses) allowed for early identification and control of these threats.

Findings to date underscored the potential as well as the challenges of using the Internet to reach the transgender community for HIV prevention research. Understanding the gender-related factors that influence sexual relationships will benefit the development of interventions to reduce the HIV risk of transgender people as well as to address gender as a contextual risk factor among other populations.

EFFECTS OF BODY IMAGE ON CHOICE REACTION TIME AS AN ASSESSMENT OF SEXUAL INTEREST

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Wright and Adams (1994; 1999) developed a Choice Reaction Time measure to assess sexual interests in men and women. In both of their studies, as well as a recent study conducted in our lab (Gaither & Sellbom, 2003), men responded in accordance to their self-reported sexual interests (i.e., longer mean reaction times for trials in which when nude images of the preferred sex were the distractors compared to when the nonpreferred sex were distractors) much more consistently than did women, with two of the three studies finding that only half of the heterosexual women responded as expected. Placing these results in the framework of objectification theories (e.g., Fredrickson & Roberts, 1997), we hypothesized that images of nude women may be more distracting than images of nude men to women with body image concerns. Thus, the present study was designed to examine the relationship between body image and young women's CRT responses.

Two hundred and seventy-eight female college students completed a packet of questionnaires, which included demographics, body image (e.g., the Body Image Self-Consciousness Scale), and sexuality (e.g., the Sexual Sensation Seeking Scale) measures in small groups. Forty-two of these women (90% Caucasian; age range = 18 - 27, M = 19.93, SD = 2.14), participated individually in the CRT phase. The task in this phase involved identifying a small white square embedded in one of five locations (four corners and center) in an image (nude man, nude women, or blank screen) and pressing the corresponding key on a serial response box as quickly and accurately as possible. Consistent with previous studies, 21 (50%) of the women took longer to respond on male trials than female trials. We compared these women to the women who took longer on male trials on all of the total and subscale scores of the body image and sexuality measures using a series of ANOVAs. Results indicated no significant group differences on any of the body image measures, but a small number of differences in sexual measures. Results are discussed in terms of their implications for gender differences in sexual interest.

ASEXUALITY: PREVALENCE AND ASSOCIATED FACTORS IN NATIONAL PROBABILITY SAMPLE

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Asexuality, the state of having no sexual attraction to a partner of either gender, was investigated in a national probability sample of British residents ($\underline{N} > 18,000$). Approximately 1% (n = 195) of the sample indicated they were asexual. This rate is comparable to the rate of same-sex attraction in this sample. A number of factors were related to asexuality, including gender (i.e., more women than men), short stature, low education, low socioeconomic status, and poor health. Asexual women also had a later onset of menarche relative to sexual women. The results suggest that a number of pathways, both biological and psychosocial, contribute to the development of asexuality.

THE PREVALENCE OF MALE HOMOSEXUALITY: THE EFFECT OF FRATERNAL BIRTH ORDER AND VARIATIONS IN FAMILY SIZE

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The prevalence of male homosexuality may vary over time and across societies. One reason for this variation may be the joint effect of two factors: 1, variations in fertility rate or family size; and 2, the fraternal birth order effect, the finding that the odds of male homosexuality increases with each additional older brother. Because of these effects, the rate of male homosexuality may be relatively high (at least in terms of sexual attraction if not behavior) in societies that have a high fertility rate, but this rate has probably declined somewhat in some, particularly western, societies. As a result, estimates of the prevalence of male homosexuality may be inaccurate over time and across societies.

LAY DEFINITIONS OF STEADY AND COMMITTED RELATIONSHIPS: A COMPARISON ACROSS GENDER AND COUPLE TYPE

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BACKGROUND: Although the terms "steady relationship" (S) and "committed relationship" (C) are frequently used by researchers, they are not universally defined. Further, little is known about the way in which research participants define these terms. As part of a qualitative study of intimacy in couples involved in new relationships, we asked participants for their definition of these two terms and the characteristics associated with them.

METHODS: Participants were 137 couples (N=274) who reported being involved in a steady relationship (46 male:male, 46 female:female, 45 male:female). The sample ranged in age from 18-38 and was predominantly African-American or White. Partners completed separate but similar confidential interviews. Participant responses were thematically content coded in accordance with principles of grounded theory analyses.

RESULTS: All but two participants were able to provide a definition for each term. Common themes across both definitions included (1) *shared time themes* (S>C): being involved for a defined length of time, spending time together regularly; (2) *exclusivity themes*: dating or sexual monogamy (C>S); (3) *emotional intimacy themes*: friendship, deep caring, emotional connection, love; (4) *commitment themes* (C>S): commitment and investment in relationship, willingness to work through problems, making future plans together, exchanging symbolic commitments (e.g., moving in together); (5) *relationship building/maintenance themes*: having trust, respect, tolerance, support for one another; (6) *communication themes*: good, open; and (7) *shared values and background themes*.

Differences across gender and couple type were evident. (1) For both steady and committed relationship definitions, dating exclusivity themes were particularly evident among women in lesbian relationships, but rarely evident among men in gay relationships. Communication and trust-respect-tolerance themes were particularly evident among women in heterosexual relationships. Trust themes were infrequently mentioned by men in gay relationships. (2) For the *steady relationship definitions* only, shared value themes were commonly mentioned by people in heterosexual, but not gay or lesbian relationships. Relational satisfaction themes were twice as common among men in heterosexual relationships compared to other groups. (3) For the *committed relationship definitions* only, sexual exclusivity themes were most salient among men in gay relationships.

DISCUSSION: These findings offer insight into lay definitions of steady and committed relationships. Implications for research and applied work with couples will be presented.

PLANNED LESBIAN FAMILIES AND THEIR COUPLE RELATIONSHIP, EXPERIENCE OF PARENTHOOD, AND CHILD-REARING GOALS

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Background: The phenomenon of planned lesbian families (i.e. two-mother families in which the child was born to the lesbian relationship) is relatively new and little research has been conducted among those families. Lesbian mothers must cope with a negative public opinion, which might have negative effects on the quality of the relationship. As a consequence of the more negative public evaluation of same-sex families, compared to mixed-sex families, lesbian mothers are thought to experience child-rearing as extraordinarily difficult resulting in parenting stress. Because of the non-traditional family situation and minority situation, lesbian mothers might also find other aspects important in the development of their children. The overall aim of the present research was to expand what is known about lesbian planned families on couple relationship, experience of parenthood, and child- rearing goals. We examined whether planned lesbian mother families differ from heterosexual families on these aspects.

Method: A total of 100 lesbian two-mother families were compared with 100 heterosexual families having naturally conceived children. Lesbian mother families and heterosexual families were recruited with several methods, and both family types were matched on degree of urbanisation, age and gender of the target child, educational level of the parents, and duration of couple relationships. Data were collected by means of a questionnaire.

Results: Lesbian social mothers were more satisfied with their couple relationship than heterosexual fathers, and lesbian biological mothers were more satisfied with their partners as co- parent than heterosexual mothers. Lesbian parents are no less competent or more burdened with parenthood tasks than heterosexual parents. Nevertheless, lesbian social mothers feel more often than fathers that they must justify the quality of their parenthood. Both lesbian and heterosexual parents consider it important to develop qualities of independency in their child. On the other hand, lesbian mothers found it less important that their child develops qualities that are important in our society (e.g. ambitions or self-control), than heterosexual mothers and fathers.

Conclusion: Lesbian families and heterosexual families have much in common concerning the low degree of parental stress. However, lesbian mothers appear more satisfied about the couple relationship, appear less attuned to traditional childrearing goals and especially lesbian social mothers feel the need to justify the quality of their parenthood.

MOTOR PREPARATION AND SEXUAL ACTION: A PSYCHOPHYSIOLOGICAL PERSPECTIVE ON SEXUAL MOTIVATION

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We propose that current knowledge about emotion and motivation mechanisms argues against Helen Kaplan's assumption that desire and excitement are distinctive sexual response phases mediated by separate neurophysiological systems. Desire results from the conscious awareness of the sexually excited state of the body and the brain. One can wish to have sex for many reasons; the experience of sexual desire can only come about through sexual excitation. Sexual desire precedes sexual excitement in the current model of human sexual response (DSM-IV, 1994). According to Kaplan (1979), who introduced the sexual desire phase, desire and excitement are mediated by separate neurophysiological systems. She conceptualized sexual desire as a drive, comparable to hunger and thirst, influenced by sensors that signal changes in the internal environment of the body. However, there is little evidence for a homeostatic mechanism in human sexual motivation. Nevertheless, the essence of the concept of sexual drive remains in the dominant model of sexual response and in the DSM diagnosis of hyposexual desire that is based on that model.

According to incentive motivation theory (Bindra, 1968) sexual motivation is the result of the interaction between a sensitive sexual response system and sexually competent stimuli. In this view desire is the result of an emotional response to sexual stimuli. Emotion can be considered as an action system; in such a view emotion and motivation are interchangeable constructs (Frijda, 1986; Lang, 1993; LeDoux, 2000, Damasio, 2003). We will consider sexual arousal and desire in the light of current knowledge about neurobiological mechanisms of emotion and motivation. The interaction of the emotion and motivation circuits in the brain, and the role of dopamine in motivation will be discussed. The similarity of emotional and motivational state will be illustrated by our recent experimental studies on sexual arousal and action. In these studies Achilles tendon reflexes were used as a measure for motor preparation. It is shown that confrontation with a sexual stimulus generates sexual arousal and at the same time motor preparation for eventual approach to the incentive stimulus. In addition, we were able to show that in men, increased dopamine levels, induced with levodopa, mediate motor preparation elicited by sexual stimuli.

REPORTS OF CHILDHOOD SEXUAL ABUSE PERPETRATED BY FEMALES IN A SAMPLE OF MALE OFFENDERS

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Sex offenders are usually thought to be men who offend against women and children. Until fairly recently, child sexual abuse by females was believed to be very rare and considered less worthy of attention and study. Studies which have been conducted report conflicting results regarding the prevalence of female sexual offending. Surveys of victims of sexual abuse have reported rates of female perpetrators at between one to twenty-five percent (Rowan, Rowan & Langelier, 1990; Banning, 1989, Johnston & Shrier, 1987; O'Connor, 1987; Finkelhor & Russell, 1984, Condy, Templer, Brown, & Veaco, 1987). The number of female sexual offenders represents only two to five percent of convicted sexual offenders (Syed & Williams, 1996). There are conflicting reports in the literature concerning the prevalence of solo female offenders as opposed to females co-offending with males (Rowan et al., 1990; Kaplan & Green, 1995), the use of violence by female sex offenders, the severity/intrusiveness of the abuse perpetrated by females and the relationship of the victims to the female offenders. These inconsistencies are not surprising, given that such a small number of female sexual offenders is accused of or convicted of offenses. Studies examining offense characteristics of convicted female sexual offenders produce very different results compared to surveys of victims. In the Sexual Behaviours Clinic of the Royal Ottawa Hospital, accused female child molesters represent less than one percent of the total number of accused child molesters seen at the clinic. The data being presented is a survey of the male sexual offenders assessed in the Sexual Behaviours Clinic during the last 10 years.

In this study, we examined the self reports of childhood sexual abuse in a sample of 1,154 male sexual offenders. 332 (28.8%) reported having sexual contact with someone at least 16 years of age or older and more than four years older than they were, when they were less than 16 years of age. Eighty-three cases (25%) were excluded from further analysis because they lacked information regarding the gender of their abuser.

Of the remaining 249 subjects, 22.5% (n=56) reported being abused only by females, 53.4% (n=133) only by males and 24.1% (n=60) reported sexual abuse by both males and females.

Similarities and differences between the type of abuse perpetrated by females will be compared with that perpetrated by males.

The implications of these findings will be discussed.

SEXUAL DESIRE AND AROUSAL IN WOMEN: INTEGRATING QUALITATIVE AND QUANTITATIVE METHODS TO UNDERSTAND SIMILARITIES AND DIFFERENCES

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Questionnaire validation studies (Rosen et al., 2000) and large-scale population based surveys (Fugl-Meyer & Fugl-Meyer, 2002) indicate high rates of comorbidity between sexual desire and arousal difficulties in women. Clinical observations also challenge the historical acceptance of a linear sexual response progression from sexual desire to arousal. Instead, emerging models note that distinction between desire and arousal may be difficult for most women (Basson, 2001; 2002). It is possible, however, that traditional, quantitative methods of data acquisition do not capture subtle differences between desire and arousal. An integration of qualitative and quantitative techniques has been advocated to better understand sexual desire in adolescent girls (Tolman & Diamond, 2001; Tolman & Szalacha, 1999), and may be essential for capturing a desire-arousal distinction. To date, such a comprehensive approach in adult women has not been published, despite obvious therapeutic relevance to the treatment of sexual desire and arousal disorders.

The purpose of this pilot study was to examine the relationship between desire and arousal in women with (n = 10) and without (n = 10) acquired female sexual arousal disorder (FSAD). Women participated in a semi-structured interview during which they were encouraged to provide narrative experiences and descriptive data on sexual desire and arousal. They then completed standardized questionnaires on female sexual function. The following questions were addressed: (1) How do women describe their experience of sexual desire and arousal?, (2) Can desire and arousal be experienced independently? If so, how are they distinguished?, and (3) How does the experience of arousal, once accessed (for women without FSAD), or problematic (for women with FSAD) affect the experience of sexual desire?

Eight of 20 women reported uncertainty as to the difference in terminology between sexual desire and arousal, and asked the interviewer for clarification. Desire could be experienced in the absence of arousal for 14, and a different 14 women reported that arousal could be accessed without desire. There was no effect of diagnostic group on these findings. For five women, distinction between desire and arousal was not possible, whereas distinction, though significant overlap, between these constructs was found in the others. Women with FSAD were less able to experience desire and arousal independently, and most noted difficulties with sexual desire following the onset of their sexual arousal dysfunction. Quantitative analyses, however, showed significant group differences.

These pilot data suggest that quantitative methods may oversimplify the heterogeneity in women's desire and arousal, and integrative approaches are necessary for capturing the subtleties in women's experiences.

SEX WILL NEVER BE THE SAME

Bullough, V. L.

Kinsey built upon what other European and American researchers had done, but in his male volume he was much more critical of his predecessors than he was in the female volume. Though he mentioned many of the European researchers, several were conspicuous by their absence, and at times he seemed very moralistic, for example that Hirschfield was not an objective researchers because of his campaign for gay rights or the failure of Havelock Ellis to have face to face contact with his subjects. He had little positive to say about psychiatrists in general, although he imparted a more positive message in the female book. If bibliographical citations are any example, Kinsey explored much more widely in the social sciences in the female book than he did in the male, indicating that he himself acquired greater expertise over the years. Certainly the result in the female book was a more rounded treatment.

THE REPORTED VIQ–PIQ DIFFERENCES IN MALE SEX OFFENDERS ARE ARTIFACTS?

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Previous investigations have produced contradictory conclusions regarding whether male sex offenders demonstrate any characteristic differences in Verbal versus Performance IQs. The present investigation reanalyzed IQ data from 27 samples of sex offenders from 17 previous reports. Results indicated that the previously observed VIQ–PIQ scores followed a systematic pattern, with VIQ exceeding PIQ in more intelligent samples and PIQ exceeding VIQ in less intelligent samples. Reanalyses of WAIS-R standardization data indicated that this pattern also exists in the general population, with VIQ–PIQ differences more marked in men than women. The previously reported group differences in VIQ–PIQ scores thus appear to reflect psychometric properties of intelligence tests and normal sex differences rather than any neuropsychological characteristic of sex offenders.

GENDER IDENTITY AND SEX ROLE BEHAVIOUR IN 46 XY REASSIGNED CHILDREN WITH A DIAGNOSIS OF CLOACAL EXSTROPHY

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Cloacal exstrophy is a complex congenital malformation associated with a spectrum of severe physical genital abnormality. All other aspects of antenatal sexual differentiation and determination are unaffected. While there has been little systematic research, some reports have suggested that genetic males assigned a female sex of rearing present with psychosexual and psychological disturbance. This study considers gender identity and sex role behavior, together with an assessment of quality of life and emotional and behavioural adaptation, for children with a diagnosis of cloacal exstrophy or cloacal anomaly.

The study included two cohorts of children attending a tertiary hospital in England. Group I, children with a diagnosis of cloacal exstrophy, comprised six, 46,XY genetic males assigned a female sex of rearing (XY females), and 2 genetic females and 2 genetic males all with sex of rearing congruent with their genetic sex (mean age 11.6 yrs, range 6-17 yrs). Group II (comparison group) comprised 12 genetic females with a diagnosis of cloacal anomaly (mean age 10.7 yrs, range 6-16 yrs).

Gender identity was assessed with a standardized semi-structured interview based on the Gender Identity Interview for Children (Zucker et al. 1993) and the Draw a Person Test (DAPT) (Harris, 1963). Sex role behavior was assessed with the Pre-School Activities Inventory (PSAI; Golombok & Rust, 1993). Behavioural and emotional competencies and problems and quality of life were assessed respectively with The Child Behavior Checklist (CBCL) for ages 4-18 and the Youth Self-Report (YSR) for ages 11-18 (Achenbach, 1991 profile) and The Child Health Related Quality of Life (CQOL) scale (Graham et al. 1997).

The 46,XY females and their parents reported activity and toy preferences that were more boy stereotypical, compared with all other participants in the study. Gender identity was in line with sex of rearing for all children in the study.

The CBCL scores showed no significant differences between the two groups. However, in both groups, YSR mean scores across a number of the subscales, were significantly higher (<.05) than parental scores. The CQOL scale revealed no significant differences between the two groups or between parental and self-report scores. While self-report scores for both groups were substantially higher (>2 standard deviations) than normative data for "well" children, indicating a lower perception of quality of life, they were no different to normative data for children with 'chronic illness'.

The results support the proposition that antenatal sex hormones influence some aspects of sex-role behaviour, but that the development of gender identity is not determined by sex chromosomes or antenatal hormonal environment alone. These children with a diagnosis of cloacal exstrophy and cloacal anomaly did not present with significant psychological problems.

GENDER DIFFERENCES IN THE FACTOR STRUCTURE OF THE SEXUAL EXCITATION / INHIBITION SCALES (SIS/SES)

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The central assumption of the Dual Control model (Janssen & Bancroft, 1996) is that sexual response results from a balance between inhibitory and excitatory CNS mechanisms, which are hypothesized to be independent from one another, and to vary from person to person. In the majority of individuals, the inhibitory process presumably acts as an adaptive mechanism, and aids in avoidance of sexually risky or threatening situations. However, low propensities for sexual inhibition may encourage sexual risk-taking, whereas excessive inhibition may increase proneness to sexual dysfunctions.

Prior factor analysis of male data (Janssen, Vorst, Finn & Bancroft, 2002) on the Sexual Inhibition/Sexual Excitation Scales (SIS/SES) yielded one higher-level excitation factor and two higher-level inhibitory factors ("Inhibition due to Threat of Performance Failure," SIS1, and "Inhibition due to Threat of Performance Consequences", SIS2.) This study used a dataset of 2045 undergraduates (1067 females and 978 males) to explore the factor structure, reliability and validity of females' SIS/SES scores and examine gender differences in sexual excitation and inhibition.

Gender differences were found, with females scoring higher on the two inhibition factors and lower on the sexual excitation factor in comparison with males. The test-retest reliability and convergent and discriminant validity of females' SIS/SES scores were acceptable and similar to males. Exploratory and confirmatory factor analyses of women's SIS/SES scores provided moderate support for the three factor model of sexual response, but also suggested a potentially useful six factor structure in the SIS/SES data. All models explored appeared to fit male data somewhat better than females', suggesting that the current SIS/SES item pool may provide a moderately better account of male vs. female sexual arousal.

This study provides further evidence that sexual excitation and inhibition are independent constructs, and supports the utility of the Dual Control model in predicting and understanding individual variations in sexual response.

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CARIBBEAN LOVE AND SEX: ETHNOGRAPHIC STUDY OF REJECTION AND BETRAYAL IN HETEROSEXUAL RELATIONSHIPS IN PUERTO RICO

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Social construction of reality theory (Berger & Lockman, 1985) emphasizes the social and cultural elements prevalent in the construction of human experiences. Researchers relate this socio - cultural construct to the emotional and subjective interpretation of reality. Previous studies have documented the power of the Caribbean culture to organize the sexual/gender experience and the relationship between sexes/genders. This research paper presents an ethnographic study and content analyses of papers written by three groups of students from the psychology program of the University of Puerto Rico, including first-year BA students, fourthyear BA students, and graduate students. They were asked to write about their sexual and love history, including their feelings and emotions. Their responses are categorized according to: their gender, whether they were the rejecter or the rejected, their level of education and/or age, explicit cultural explanations and expectations; reasons, consequences, recovery and management of rejection. Three outstanding findings are:

- 1. Lack of research on sex and gender relationships between heterosexual couples and the emphasis on homosexual couples.
- 2. The impact of the cultural construction of gender relationships in Puerto Rico in the emotional experience of their sexual / love history, in particular, the *machismo* of men and the submission of women.
- 3. The relationship between the mother/father and child love/rejection (absent father or and mother figure) relationship and future relationships of the subjects, in terms of rejection/rejecter and recovery.

A more inclusive analysis is also presented in terms of romantic love as a social construct of the sexual/love relationship that promotes rejection and betrayal behaviors.

MEASURING SEXUAL DESIRE IN COUPLES UNDERGOING TREATMENT FOR HYPOGONADISM

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Hypogonadism, whether due to low testosterone levels or high prolactin levels in males, has a severe impact on a person's sexual desire. Medical treatment of hypogonadism can correct this condition and concomitantly increase the person's sexual desire levels. This study examined the sexual desire and sexual functioning of patients with hypogonadism and their partners to describe the impact of the treatment on their relationship. A key question was whether extant sexual desire measures (Hurlbert Index of Sexual Desire and Sexual Desire Inventory-2) reflect the clinically reported changes in desire as they occur. Another aspect of the study was to examine the impact of treatment on the sexual relationship of the couples involved. Preliminary findings show a highly significant change in all measures used for the men (n = 10) from baseline to time of high testosterone levels. Partner's measures show drops in each of the sexual desire measures, but rises in Female Sexual Function Index scores. These changes were not statistically significant, but the group examined is small to date (n = 6). Findings provide evidence for the convergent and discriminant validity of these measures and indicate that they can be utilized with male respondents.

BIRTH ORDER IN TRANSGENDERED MALES FROM POLYNESIA

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In previous research, a late birth order has been shown to be a characteristic of Western homosexual transsexual men (Blanchard & Sheridan, 1992; Blanchard, Zucker, Cohen-Kettenis, Gooren, & Bailey, 1996; Green, 2000). Other studies have shown that homosexual men are also late born and that their position in the sibline is accounted for predominantly by number of older brothers, not older sisters; thus, the pattern has been termed the *fraternal* birth order effect (for review, see Blanchard, 1997, 2001). Only one of the three foregoing studies of homosexual transsexual men examined fraternal and sororal birth order separately (Green, 2000) and found evidence for the fraternal birth order effect; the other two analyzed only global birth order.

To date, it is not clear if a late birth order is specific to Western transsexuals or might be a characteristic of non-Western transgendered males as well. To investigate this matter, we examined birth order in Polynesian transgendered males: the fa=afafine from Samoa and the fakaleiti from Tonga. According to Besnier (1994), both terms translate into English as Ain the fashion of a woman. According to Besnier (1994), both terms translate into English as Ain the fakaleiti share several characteristics with Western transsexuals of the homosexual subtype: childhood onset of cross-gender behavior (e.g., Poasa, 1992), early labeling by others in a pejorative manner, preference for feminine occupations in adulthood, absence of marriage, a self-identity distinct from a homosexual or gay sexual identity, and, in some cases, a desire for sex-change surgery (Heinemann, 2000; Poasa, 1992).

We studied 60 transgendered males from either Samoa (N = 38) or Tonga (N = 22) and age-matched them, on a case-by-case basis, to 60 control males. Across both groups, the mean age of the Samoan subjects was 29.6 years (SD = 8.1), and that of the Tongans was 32.4 years (SD = 7.5). For each subject, we recorded the number of older brothers, older sisters, younger brothers, and younger sisters. Average family size was large, in absolute terms, for subjects from both countries. The mean number of siblings for the Samoan subjects was 5.6 (SD = 3.0), and the mean number for the Tongans was 4.6 (SD = 3.1), not counting the proband.

We found that the transgendered males had significantly more older brothers (p < .005) and more older sisters (p < .0005), and significantly fewer younger sisters (p < .05), than the control males. There were no interaction effects between group (transgendered vs. control) and country (Samoa vs. Tonga).

Like their Western (homosexual) transsexual counterparts, our data showed that Polynesian transgendered males were significantly later born compared to control males. This finding confirms prior anecdotal observations reported by others (see Zucker & Blanchard, 2003) and is consistent with our previous study of 13 other fa=afafine (Poasa et al., 2003) for whom we did not have a control group. We did not, however, find that the late birth order of the transgendered Polynesian males was driven by an excess of older brothers. In fact, they had even more older sisters, relative to the control males, than they had older brothers. Thus, the present research differed from most previous investigations, which have indicated primarily a fraternal birth order effect. We consider possible explanations for this discrepancy. As well, we consider the implications of our data with regard to the possibility that there are common underlying mechanisms for transgenderism across diverse cultural groups.

SOCIOSEXUAL BEHAVIOR IN HEALTHY WOMEN: SIGNIFICANT EFFECTS OF REPRODUCTIVE STAGE AND COHABITING STATUS

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Sociosexual behavior of two groups of healthy women^{1,2} has recently been examined using daily behavioral calendars to gather prospectively baseline and experimental period data. The 2 studies tested the influence of synthesized pheromone fragrance additives on change in frequency of sexual intercourse, sleeping next to a romantic partner, petting/affection/kissing, masturbation, and formal prescheduled dates. Here, analysis of those baseline records (of women seeking to increase affectionate contact with men) reveals comparative decrements in postmenopausal women that are new to the literature.

Subjects/Methods: 36 noncohabiting San Francisco women (Mean age=27) commuting to college¹ and 44 (32 noncohabiting) highly educated postmenopausal women in Boston² (Mean age=57). All wanted to increase the romance in their lives and provided ≥ 2 weeks of *daily* baseline records transmitted *weekly* to researchers.

Average weekly frequency at baseline of each sociosexual behavior recently shown to be affected by pheromones^{1,2} was compared between groups by T-tests.

Results: *Among single subjects*, the younger group recorded significantly more petting/affection/kissing (p<. 01), sexual intercourse (p<. 01), sleeping next to a romantic partner (p<. 02), and masturbation (p<.07), but no differences in frequency of formal dates. *Among postmenopausal subjects*, *cohabiting compared to single* women recorded more petting/affection/kissing (p<. 01), more sleeping next to a romantic partner (p<. 01), and fewer formal dates (p<. 02), but no difference in sexual intercourse. Masturbation is marginally lower (p<. 09) among postmenopausal cohabiting women compared to the postmenopausal non cohabiting women.

Conclusion: Postmenopausal single women seeking to increase affectionate contact with men experience significantly less petting/affection/kissing and sleeping next to a romantic partner than either reproductive aged single or cohabiting postmenopausal women. For postmenopausal women, of the 5 behaviors examined, only sexual intercourse frequency was independent of cohabiting status.

GENETIC AND ENVIRONMENTAL INFLUENCES ON THE FREQUENCY OF ORGASM IN WOMEN

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This study reports on genetic and environmental influences on the frequency of orgasm in women during sexual intercourse, during other sexual contact with a partner, and during masturbation. Twins participating in this study were drawn from the Australian National Health and Medical Research Council Twin Registry, and recruited from two phases of a large, partly longitudinal twin-family study. 3080 women responded to the anonymous self-report questionnaire, including 667 complete monozygotic (MZ) pairs and 377 complete dizygotic (DZ) same-sex pairs, 366 women from complete DZ opposite-sex pairs, and 626 women whose cotwins (male or female) did not participate. Significant twin correlations were found for both MZ and DZ twin pairs for all three items of interest. Age effects were corrected for, and found to be statistically significant for some items. Models incorporating additive genetic and shared and non-shared environmental influences provided the best fit for Items 1 and 3, while a model with additive and non-additive genetic influences along with non-shared environment fitted the data from Item 2. In each case, genetic influences were statistically significant, although the shared environmental effects or non-additive genetic effects could be removed from the model without a significant decrease in goodness-of-fit. Independent and common pathway models were also applied to the data and while an independent pathway AE model fits the data most parsimoniously, a common pathway model incorporating A, C, and E effects cannot be ruled out. Overall, genetic influences account for approximately 31% of the variance of frequency of orgasm during sexual intercourse, 37% of the variance of frequency of orgasm during sexual contact with a partner other than during intercourse, and 51% of the variance of frequency of orgasm during masturbation.

POLITICAL INFLUENCE ON FEDERAL FUNDING FOR SEXUALITY RESEARCH AND TRAINING

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I have recently experienced an attempt by 30 U.S. congresspersons to prevent funding of a training grant proposal that I submitted to NIH. I will briefly discuss the sequence of events, and then reflect on their significance. My experience suggests that a) such attempts are not new; on the other hand, b) those opposed to developing the science of sexuality are emboldened under the present Presidential administration, so c) we need to work harder and in a unified way to resist such efforts.

SEXUAL COMPULSIVITY AMONG HETEROSEXUAL COLLEGE STUDENTS

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Background: A growing body of literature suggests that an association exists between sexual compulsivity and participation in high-risk sexual behaviors, including after a positive HIV diagnosis has been made. As yet, sexual compulsivity has only been measured among individuals who have been classified as members of "high risk" groups for HIV infection or who are already HIV-positive. This study determined the validity and reliability of a measurement of sexual compulsivity in a population that has not yet been studied in the sexual addiction and compulsivity literature, specifically heterosexual college students.

Methods: During January 2002, a sample of 899 college students aged 18 years or older completed a questionnaire in introductory health science classes at a large, public university in the Midwestern United States. *The Sexual Compulsivity Scale* (Kalichman, et al., 1994), a tenitem Likert-type scale designed to tap into underlying sexually compulsive personality traits, was used for the purposes of data collection.

Statistical Analysis: Data from 876 self-identified heterosexual participants were analyzed. We examined reliability of the scale, relationships between sexual compulsivity and select demographic variables, and associations between sexual compulsivity and sexual risk behaviors through a variety of descriptive and inferential statistical techniques.

Results: Reliability for *The Sexual Compulsivity Scale* was determined to be high in the total sample of this study (alpha = .82) as well as for the sub-groups of male participants (alpha = .77) and female participants (alpha = .81). A significant difference was found between men and women in terms of levels of compulsivity; mean scores of compulsivity were higher for men than for women. Individuals who were more likely to be involved in multiple sexual relationships had higher levels of compulsivity than those involved in monogamous relationships. Individuals who reported a greater degree of involvement in masturbatory activities, various sexual interactions with partners, and sexual activities in public places also had higher levels of compulsivity. For both men and women, higher levels of compulsivity were associated with greater frequencies of unprotected oral, vaginal, and anal intercourse with greater numbers of sexual partners.

Conclusion: As in previous studies, *The Sexual Compulsivity Scale* had high reliability and validity in our sample of heterosexual college students. Gender and sexual relationship status were related to compulsivity. Significant relationships were found between higher levels of sexual compulsivity and select sexual behaviors. In addition, higher levels of compulsivity were associated with higher frequencies of risky sex. Future research on HIV/STD prevention and interventions for heterosexual college students in relation to sexual compulsivity should be explored.

REVISITING "SUCCESS": POST-TRIAL QUALITATIVE RESULTS FROM A GENDER-SPECIFIC HIV/STD PREVENTION INTERVENTION

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Overview and Aims: Project FIO (The Future Is Ours) was a three-arm (8-session intervention, 4-session intervention, assessment only) randomized controlled trial for 360 heterosexual women in a New York City family planning clinic that was successful in inducing long-term (one year post-intervention) reductions in unsafe sex. The eight- and four-session interventions were theoretically driven by gender-specific concerns and focused on women's safer sex negotiation skills in the context of sexual rights. We aimed to 1) examine the success or failure of interventions in participants' own words and 2) extend an understanding of how the selected theoretical model operated in the lives of study participants

Study Background and Method: At the one-year follow-up assessment all women were asked open-ended questions about changes in their lives since participating in project FIO and the impact, if any, of study participation in their lives. All assessments were audiotaped. For these analyses we randomly selected a sub-sample of 180 women (60 from each group), and transcribed responses to these impact questions. Texts were coded blindly by two independent raters, decision trails were documented, and inter-rater agreement was 86%.

Results: Women in the assessment-only group commonly reported that study participation increased a sense of susceptibility to STDs/HIV. By contrast, in the four and eight session intervention groups, women frequently reported not only increased susceptibility to STDs/HIV but also a shifting prioritization of safer sex coupled with narratives of behavioral change or enactment. Across all groups, empowerment themes that were characterized by sexual and bodily rights, a discourse of female pleasure, and themes of individual choice and control were underscored. Women reported shifts in assertiveness concerning condom use, a willingness to challenge definitions of feminine passivity during sexual encounters, and new forms of agency concerning the courage to leave partnerships that were not amenable to safer sex negotiations.

Implications and Conclusions: Qualitative impact analysis provides a complement to an analysis of quantitative outcomes, offering a unique opportunity to uncover what aspects of the intervention were particularly salient to women. Project FIO's emphasis on gendered bodily rights and sexual negotiations appeared to be highly salient to the women who participated in the study. Future researchers may consider building post-intervention qualitative impact analysis into standardized assessments in order to foster further insight into how theoretical models are operating in the lives of study participants. Such analyses may also aid an assessment of vital contextual issues important to safer sex negotiations within heterosexual relationships.

AUTONOMIC AROUSABILITY AND FEMALE SEXUAL FUNCTION

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The role of autonomic arousal in female sexual function is poorly understood. Studies show that experimentally-induced <u>states</u> of autonomic activation facilitate female sexual arousal (Meston & Gorzalka, 1995, 1996). Evidence suggests that <u>trait</u> autonomic arousability may also influence sexuality. For example, neuroticism, a personality factor associated with autonomic arousability, has been linked with sexually conservative attitudes and sexual difficulties in women (Meston & Trapnell, 1996). The present study examined whether trait measures of autonomic arousability predicted sexual function in women.

Participants were 129 sexually experienced college females, mean age 18.62 years (SD = .89). Autonomic arousability was assessed using the Arousal Predisposition Scale (Coren & Mah, 1993), a scale which correlates with physiological indices of autonomic arousability, and with the Neuroticism subscale of the Big Five Inventory (John, Donahue, & Kentle, 1991). Sexual function was measured using the desire, arousal, lubrication, oragasm, satisfaction, and pain subscales of the FSFI (Rosen et al., 2000), a validated measure of sexual function.

Correlations were calculated between autonomic arousability, neuroticism, and FSFI variables. Autonomic arousability was associated with neuroticism (r = .48, p < .01) and sexual desire (r = .22, p < .01), and desire correlated with neuroticism (r = .17, p < .05). Arousability did not significantly correlate with other sexual variables. Hierarchical regression analyses further examined the relationship between desire, arousability, and neuroticism. The best fitting model (F(2,125) = 3.22, p < .05) that accounted for the greatest variation in levels of desire included neuroticism ($_{=}-.62$, t = -1.53, p = .13), autonomic arousability ($_{=}-.44$, t = -1.24, p = .22) and the interaction between autonomic arousability and neuroticism ($_{=}1.14$, t = 1.81, p = .07). When the interaction between arousability and neuroticism was entered in the first step of analyses, it accounted for variance in desire independent of arousability or neuroticism alone.

Results suggest that the relationship between autonomic arousability and neuroticism best predicted levels of desire. This indicates that sexual drive may be predicted by trait arousability. Autonomic arousability did not correlate with sexual arousal, which suggests that sexual arousal is not influenced by trait arousability. This study yields a novel finding that warrants further investigation among women with clinically diagnosed Hypoactive Sexual Desire Disorder.

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SEX ROLES IN A SAMPLE OF SELF-IDENTIFIED BSDM PRACTITIONERS

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Introduction: Virtually everything that is known about sexual sadism and sexual masochism is based on observations of a select sample of men who have come to clinical attention due to the commission of sex crimes or by psychiatric referral. Since most sex crimes are committed by men and since most psychiatric referrals due to concerns about sadomasochistic interests involve men, very little is known about women with these sexual interests. While the DSM-IV lists "sexual sadism" and "sexual masochism" there is a growing recognition of the existence of a many variations including sexual interest in consensual "bondage", "domination", "submission", "sadism", and "masochism" (BDSM). Clearly, if there is any hope of advancing knowledge about BDSM, investigators will need to look beyond prison cells and psychiatric institutes. The purpose of this study is to report of new findings from a web based survey of self-identified BDSM practitioners with particular emphasis on comparisons between men unselected for criminal behavior of psychopathology and the even more rarely reported group consisting of women with BDSM interests or behaviors not previously selected for criminal or psychiatric problems. The results of this study should be considered as extensions of results reported from an earlier, more limited survey (Fedoroff et al, 2000). They are independent of a completely separate and independent web based survey also reported at this meeting (Bienvenu et al. 2003).

Method: Data were derived from a previously collected anonymous, web-based survey of men and women who self-identified as practitioners of some aspect of the "BDSM scene". This study sample consisted of 1,872 people (822 men and 1,050 women) who voluntarily completed an anonymous 50 page questionnaire, posted on the web with links to a number of established BDSM web sites, all accessible free of charge through internet connections. Data were analyzed to explore similarities and differences between men and women on a pre-selected number of variables. Reported p values are derived from Chi square analysis of all groups.

Results: Significantly more men than women identified themselves as Kinsey 0 on the homosexual orientation scale (exclusively sexually interested in the opposite sex) (men: 48.5% vs women: 22.9%, p<0.001). Applying an analogous 7-point scale for sexual roles independent of sexual orientation, women were found to be significantly more likely to positively endorse the following questions: "never sexually sadistic" (men:16% vs. women: 30%; p<0.001) and "never sexually dominant" (men: 8.6% vs. women: 22.7%; p<0.001). In contrast, men were significantly more likely to positively endorse the following questions: "never sexually masochistic" (men: 19% vs. women: 8.1%; p<0.001), "never sexually aggressive" (men: 5.4% vs. women: 3.9%; p<0.001), "never sexually passive" (men: 7.4% vs. women: 4.6%; p<0.05) and "never sexually submissive" (men: 14.2% vs. women 3.4%; p<0.001). The anomalous finding of more men claiming to never be sexually aggressive was further explored by analyzing the effect of sexual orientation. Men who rated themselves as Kinsey 0 (exclusively attracted only to opposite sex) rated themselves as significantly more aggressive than men who rated themselves as Kinsev 6 (exclusively attracted to the same sex) (p < 0.05). In contrast, exclusively heterosexual (Kinsey 0) women rated themselves as significantly less aggressive than exclusively lesbian women (Kinsey 6) (p<0.005).

Conclusions: Conclusions from this study are limited by the fact that the survey was anonymous. However, they support other studies that indicate men are more likely than women to report exclusive heterosexual interests. In addition, men in this study were found to be more likely to endorse interest in "assertive " sex roles including "sexual sadism" and "sexual

dominance". An anomalous finding was the claim by significantly more men than women that they are never "sexually aggressive". This finding appeared to be mediated by sexual orientation. These findings highlight a need to further explore the characteristics of men and women with non-criminal unconventional sexual interests with particular attention to the roles of gender identity and sexual orientation.

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THE RELATION BETWEEN SELF-REPORTED AND PHYSIOLOGICAL MEASURES OF SEXUAL AROUSAL IN WOMEN

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Physiological studies on sexual arousal in women commonly report discordance between self-report measures and measures derived using vaginal photoplethysmography (vaginal blood volume, vaginal pulse amplitude) (Meston & Heiman, 1998). A potential explanation for this desynchrony could relate to the limited nature of subjective data used in correlational analyses of sexual arousal. Studies usually obtain retrospective ratings of sexual arousal by averaging several Likert scale questions. In contrast, physiological sexual arousal is recorded several times per second during exposure to erotic stimuli and later averaged across hundreds of data points. Studies which have implemented continuous measures of sexual arousal failed to detect a significant relationship between subjective and physiological arousal (i.e., Wincze, et al., 1980). However, it is feasible that the statistical tools used (i.e., correlational coefficients, ANOVA) lacked sufficient power to detect significant associations. The present study uses hierarchical linear modeling (HLM) to analyze the relationship between physiological and self-reported sexual arousal due to the fact that HLM is sensitive to individual differences (Bryk & Raudenbush, 1992).

Participants (n=40) viewed a film sequence (non-erotic, erotic) while continuous measures of self-reported sexual arousal and vaginal pulse amplitude (VPA) were recorded. Continuous measures of self-reported sexual arousal were collected with an arousal lever developed by the Female Sexual Psychophysiology Laboratory at The University of Texas at Austin. This device consisted of a Microsoft Intellimouse mounted on a wooden lever containing a scale calibrated from -2 (sexually turned off) to 7 (extremely sexually aroused).

All women showed a strong within-subject relationship between VPA and continuous self-reported sexual arousal (=54.93, t=7.66, p<0.001). A subsequent analysis was performed with sexually functional women (n=13) and women diagnosed with Female Sexual Arousal Disorder (FSAD, n=11) based on DSM-IV-TR criteria. Women with FSAD evidenced a significantly weaker relationship between self-reported sexual arousal and VPA than controls (=-58.77, t=-2.69, p<0.05).

By utilizing an analysis sensitive to individual differences, this study suggests physiological sexual arousal significantly predicts self-reported sexual arousal. In addition, levels of physiological sexual arousal were less accurate at predicting self-reported sexual arousal in FSAD women compared to controls. As hypothesized, individual differences were significant, suggesting the relationship between physiological and self-reported sexual arousal may be more readily detected using continuous measurements of self-reported sexual arousal rather than discrete measurements and by using more powerful analyses to interpret the data.

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THE BRAIN CHEMISTRY OF ROMANTIC ATTRACTION AND ITS POSITIVE EFFECT ON SEXUAL MOTIVATION

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Romantic love is a cross-cultural universal. It has been hypothesized that this biopsychological phenomenon is a developed form of a mammalian mating drive that evolved in tandem with two other primary neural systems: the sex drive and adult male/female attchment; together these neural systems orchestrate mating and reproduction. The sex drive evolved to stimulate sexual motivation with any suitable conspecific; romantic attraction evolved to pursue preferred mates, thereby conserving courtship time and energy; the brain circuitry for adult male/female attachment evolved to enable mates to remain together long enough to complete species specific parental duties. I and my colleagues (Dr. Art Aron, Dr. Lucy Brown and others) studied 17 people who reported being intensely "in love," using functional magnetic resonance imaging. Group activation occurred in several brain regions, including the ventral tegmental area (R), the caudate nucleus (R>L) and the medial prefrontal cortex. The localization of activity was distinct from that of sexual arousal. This paper discusses the psychological properties and neural circuitry of romantic love to illustrate that this phenomenon is most likely associated with elevated levels of central dopamine. It illustrates that elevated levels of central dopamine generally have a positive effect on testosterone. I conclude that the chemistry of romantic attraction generally elevates sexual motivation.

THE PSYCHOSEXUAL EFFECTS OF TOTAL AND SUBTOTAL HYSTERECTOMY

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Every year more than 600,000 women in North America decide to undergo a hysterectomy, making this the second most frequent major surgery among reproductive-aged women (Bernhard, 1992; Carlson et al., 1994). While cancer accounts for one tenth of all hysterectomies performed, the majority of patients undergoing hysterectomy suffer from benign gynecological conditions that often cause chronic pelvic pain and pain during intercourse. The effectiveness of hysterectomy for relieving these symptoms, however, has not been evaluated until recently (Rhodes et al., 1999). Moreover, little attention has been paid to the effects of hysterectomy on psychosocial functioning. Among the most ignored effects are sexual outcomes, which have significant theoretical implications for understanding the role of the uterus and cervix in the experience of female sexual arousal and orgasm.

In our study hysterectomy patients are randomly assigned to either total (in which uterus and cervix are removed) or subtotal hysterectomy (in which the cervix is intact), both conducted through laparoscopy. Our study aims to document psychosocial, sexual, and pain outcomes of hysterectomy by comparing 4 groups of women: patients undergoing subtotal hysterectomy (n = 32), total hysterectomy (n = 32), other forms of gynecological surgeries (n = 32) and healthy women undergoing no surgery (n = 32). Healthy women will provide a baseline of psychosexual functioning without any pathology and surgery, whereas the surgical control group will control for the effects of abdominal/pelvic surgery through laparoscopy. A prospective design is used: hysterectomy and other patients are being assessed 2-3 weeks before (Time 1) and 6-7 months after their surgeries (Time 2).

Our study evaluates the effectiveness of hysterectomy for alleviating pelvic pain and dyspareunia in a standardized way for the first time. In addition, the project is the first prospective study to investigate how general psychological well-being, in particular mood and body image, could be affected by uterine pathology and hysterectomy. Furthermore, the study also marks the first time that sexual functioning and orgasmic functioning in particular are assessed with a standardized questionnaire (Mah & Binik, 2002). Finally, the study will help to resolve a recent controversy whether subtotal hysterectomy has any advantage over total hysterectomy (Tharkar et al., 2002).

DAILY SEXUAL INTEREST, FEELING IN LOVE, COITUS AND CONDOM USE AMONG ADOLESCENT WOMEN

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Several writers point out the inadequacies of current models of women's sexual desire including lack of developmental data (Basson, 2002; Tolman, 2002). We sought to describe variation in adolescent women's sexual interest and feeling 'in love' and associations with coitus and condom use on specific days.

Participants were 171 women ages 14 – 17 enrolled from primary care adolescent clinics. Coital experience was not an entry criterion. Data were collected from diaries completed daily for 12 weeks. Each participant contributed up to five 12-week diary periods over a 27-month study period. Information reported each day included coitus (no/yes) and condom use (no/yes) if coitus occurred. Sexual interest and feeling 'in love' was assessed by two items asking participants to report how much of the current day they felt sexual and felt in love. Response options were "none" "some" "about half" "most" and "all day."

Diaries represented a total of 34,279 days with 34,048 days of data on sexual interest (0.7% missing), 34,047 days with data on feeling in love (0.7% missing) and 33,923 days with data on coitus (1% missing). About 27% of participants reported no coital activity during the diary periods. No sexual interest was reported for 75% of days and no feelings of in love for 52% of days. Sexual interest "all day" was reported for 6% of days and in love "all day" was reported for 26% of days. Coitus was reported for 2,759 days (8.1% of days). Coitus occurred on 1.8% of days without sexual interest, but on 36% of days when sexual interest was reported "all day." Condoms were used for about 31% of coital events associated with days without sexual interest and about 20% of coital events associated with sexual interest "all day." Only 1.7% of days characterized as neither sexual interest or in love were associated with coitus while 44% of days characterized as sexual and in love "all day" were associated with coitus. Condoms were used for 31% of coital events associated with neither sexual or in love but only 19% of coital events associated with feeling both sexual and in love "all day."

Coitus among these adolescent women is relatively rare in the absence of sexual interest and feeling in love. Condom use decreases as sexual interest and feeling in love increases. These data suggest the importance of understanding of adolescent women's sexual motivations and interest, especially within contexts of specific romantic/sexual relationships.

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CAN WE PREDICT WHICH COLLEGE STUDENTS WILL EXPERIENCE NEGATIVE AFFECT WHEN VIEWING NUDE IMAGES IN THE LAB?

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Researchers have reported a number of differences between college student volunteers and nonvolunteers for sexual interest studies. If these personality and sexuality-related characteristics play a causal role in making the decision to participate, it might be expected that these variables would also contribute to individual differences in emotional responses to sexual stimuli during these studies. Thus, the present paper examines whether personality and sexuality-related characteristics could predict which participants would experience a preponderance of negative affect while being exposed to nude images during a lab-based study. Data come from 126 female and 88 male college students (age range = 18 - 31, M = 18.91, SD =1.66) who completed a variety of measures during a screening phase and then participated in a Choice Reaction Time (CRT) study that used nude images from *Playboy* and *Playgirl* magazines as stimuli. At the beginning, middle, and end of the CRT study, participants completed a Semantic Differential Scale that included a Positive Feelings scale (seven adjectives thought to reflect positive feelings such as *comfortable* and *happy*) and a Negative Feelings scale (eleven adjectives reflecting negative feelings such as distressed and upset). Internal consistencies ranged from .85 to .90 for Positive Feelings and .77 to .89 for Negative Feelings. Participants whose Negative Feelings mean exceeded their Positive Feelings mean were classified as experiencing negative affect separately at each time point (n = 14 for Time 1, n = 21 for Time 2, and n = 21 for Time 3). Separate forward conditional logistic regressions using demographic items and scale scores from the measures completed during the screening phase as predictors correctly classified 0%, 29%, and 19% of the participants who experienced negative affect at each of the time points. Neuroticism (The Neuroticism Scale from the Big Five Inventory; John, Donahue, & Kentle, 1991) was the only significant predictor in all three equations, while sexual sensation seeking, social desirability, previous exposure to erotica, and conscientiousness were each significant predictors in two of the equations. Results are discussed in terms of their potential impact on the internal validity of sexual interest research studies and implications for sexual interest research recruitment strategies.

PREDICTING SEXUAL RISK-TAKING AMONG HETEROSEXUAL COLLEGE STUDENTS USING A SINGLE ITEM FROM THE SEXUAL SENSATION SEEKING SCALE

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The Sexual Sensation Seeking Scale (SSSS: Kalichman & Rompa, 1995) was developed to measure individual differences in the propensity or need to seek out novel and risky sexual stimulation. Researchers have consistently reported that SSSS scores are significantly positively correlated with sexual risk-taking among men who engage in same-sex behavior. In research using mixed-sex samples, researchers have also consistently found men to score significantly higher than women, leading some researchers to question whether this is actually a measure of male mating strategies. In a larger study designed to investigate the psychometric properties of the SSSS within a sample of 546 college students, Gaither and Sellbom (in press) found stronger correlations between SSSS total scores and risky sexual behaviors for women than men. In a series of exploratory analyses, we found that among nonmarried students, item 3 on the SSSS (item 3: "I enjoy the sensation of intercourse without a condom") was more strongly correlated with number of unprotected intercourse experiences during the past three months than was the SSSS total score [r(450) = .38 vs. r(453) = .23, respectively]. Therefore, in the present paper, we examined the sensitivity (range = .65 to .95), specificity (corresponding range = .85 to .44), and correct classification rate (corresponding range = 77% to 64%) of this item when it is used to predict ever engaging in unprotected intercourse during the past three months, with cut points for high risk set at 4 (Strongly Agree), 3, and 2. When we re-examined the data separately for men and women, we found very similar rates. We also examined the predictive ability of total scores using cut points from 20 to 30 and found that they were lower than those for the single item. Therefore, these analyses suggest that this single item may be a good screening item to add to other surveys for researchers or practitioners who wish to identify young college students who are likely to have engaged in unprotected intercourse recently.

IMPLICIT ATTITUDES IN SEXUALITY: GENDER DIFFERENCES

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The Implicit Association Test (IAT) developed by Greenwald, McGhee, and Schwartz (1998) was used to investigate possible gender differences in implicit attitudes toward sexuality. Women report more negative explicit attitudes toward sexuality (Oliver 7 Hyde, 1993.) In this study we examined the role of gender in implicit attitudes. As conceptualized by Greenwald et al, "Implicit attitudes are manifest as actions or judgments that are under control of automatically activated evaluation, without the performer's awareness of that causation" (p.1464). Two studies were conducted using the IAT to investigate possible gender differences in implicit attitudes toward sexuality. Our analysis combined the data from two studies. Our independent variables were Participant Gender, Social Acceptability of Sexual Words (High or Low), and Order of Associated Evaluations in the IAT (Switching from positive to negative evaluations or the reverse.) In the first study, with 83 participants, the sexual words used were rated as being relatively socially acceptable. In the second study, with 163 participants, the sexual words used were rated as less socially acceptable. All participants completed the Implicit Association Test (IAT) to index implicit attitudes and the Sexual Opinion Survey (SOS) (Fisher, Byrne, White, and Kelley; 1988) to index explicit attitudes towards sexuality. Results revealed a significant (p <.027) Order x Gender interaction revealing that women had more negative implicit attitudes toward sexuality than did men. There also was a significant Order x Acceptability interaction (p< .018). That finding indicated that implicit attitudes were more strongly revealed when the sexual words used in the IAT were more socially unacceptable. As anticipated, there was no significant correlation between explicit and implicit attitudes indicating that implicit and explicit attitudes are independent. These data argue that at both automatic and controlled levels of attitudes, women harbor more negative feelings toward sex than do men.

THE EFFECTS OF ACUTE ALCOHOL INTOXICATION AND SEXUAL AROUSAL SET ON PHYSIOLOGICAL AND SELF-REPORTED SEXUAL RESPONDING IN MEN

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Early laboratory experiments established that alcohol suppresses men's genital arousal and that this effect increases with dosage. However, this suppression effect remains incongruous with other sexuality findings in which an association between alcohol and disinhibited sexual outcomes has been found. In a critical reappraisal of alcohol's suppressant effect on men's arousal, we suggested that this apparent incongruity may be an artifactual result of methodological limitations in early studies, namely reliance on within-subject designs or repeated presentations of the same erotic material (George, Norris, & Schacht, 2003). In other words, perhaps alcohol's physiological effects on sexual responding are not at odds with behavioral outcomes because alcohol actually does not suppress genital arousal. The purpose of the current study was to evaluate this possibility by correcting some of the previous methodological problems and by investigating alcohol's effect under differing sexual arousal instructional sets. METHOD: Forty unattached male social drinkers between the ages of 21 and 35 years old were recruited from a large urban population. Approximately 50% of the participants were students, and the majority was European-American. Participants were assigned to a condition in a 2 x 2 factorial design in which the independent variables were beverage content (alcohol, control) and arousal instructions (maximize or inhibit arousal). Alcohol participants received a bolus dose intended to raise blood alcohol level to .08 gm %; yoked control participants received only juice. Participants viewed a 3-minute neutral film clip, followed by two three-minute erotic film clips while physiological measures of arousal were continuously measured using mercury strain gauges. Self-reported sexual arousal was measured at baseline and following the erotic films via a 7-point Likert scale. RESULTS: There were two key findings. First, a main effect of arousal instructions was found for both physiological and self-report measures of sexual arousal. Men instructed to maximize their arousal exhibited and reported more genital arousal than counterparts instructed to inhibit arousal. Second, contrary to early studies, a high dose of alcohol had no effect on physiological genital response. Alcohol, however, did lead to lower reports of self-reported arousal, though non-significantly. DISCUSSION: These findings pose a challenge for the established view that alcohol suppresses men's genital arousal. They are consistent with the argument that earlier findings may have been in part an artifact of methodological limitations. Furthermore, regardless of alcohol intoxication, men were able to exert volitional control over their genital response. Interestingly for a male sample, findings from physiological and self-report measures were not parallel. Implications for alcohol's effects on other sexual measures and outcomes are discussed.

A QUALITATIVE STUDY OF FACTORS AFFECTING WOMEN'S SEXUAL AROUSAL: TOWARDS A NEW QUESTIONNAIRE

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This qualitative study was the first stage of a project to develop a questionnaire to assess a woman's tendency to respond with sexual inhibition (SI) and/or sexual excitation (SE) to a variety of stimuli. Nine focus groups, involving 80 women, were used to explore the concepts of SI and SE and how best to assess these dimensions in ways most relevant to women. Women described a wide range of physical (genital and non-genital) as well as cognitive, emotional, and behavioral, cues to arousal. The relationship between sexual interest and sexual arousal was complex; sexual interest was reported as sometimes preceding arousal, but at other times following it. Our data on the factors that women perceive as "enhancers" and "inhibitors" of sexual arousal support the ideas put forward by The Working Group for a New View of Women's Sexual Problems (2001). Inhibition often arises from relational and cultural factors (such as anxiety or shame about one's body, concerns about reputation etc.), as well as physical and psychological problems. Themes related to inhibition that may be of particular relevance to women included fear of unwanted pregnancy, feeling "used" by a sexual partner, lack of reciprocity in sexual interactions, and partners' unacceptance of one's sexual response or sexual past.

These data served as the basis for the development of a questionnaire – the Sexual Inhibition Sexual Excitation Scales for Women (SISE–W). Examples of how focus group themes were used to generate items for the questionnaire will be provided. The SISE–W is currently being validated and will be used to further explore the dual control model and its relationships to sexual dysfunction and high-risk behaviors in women.

POLITICS AND SEXUALITY RESEARCH

Hatfield, E., University of Hawaii

Throughout history, cultural, political, and religious authorities have recognized that passionate love and sexual desire may well be a threat to the established social, political, and religious order, and to their own power! No surprise, then, that Radical Fundamentalists (people appalled by,godless, modernism, be they Christian, Jews, Muslims, Hindus . . .) have attempted to turn back the tide of history and wipe out the intellectual freedom brought about by Renaissance, the Protestant Reformation, the Scientific Revolution, the Enlightenment, and the Industrial Revolution. In that there is nothing new. When caught up in such prejudiced attacks, sex researchers may suffer, but at least we can gain a measure of consolation by remembering that history is on our side, that these fanatic attacks are like the last bright, blinding flash of a light bulb just before it burns itself out.

Recently, however, new groups have joined the Know-Nothings. Radical political groups, filled with fervor, have begun to use TV and the Web to denounce sex researchers, post fake, scientific, reports (think of, say, Haiti, where adherents of Vodoun (voodoo) post false information about AIDS;) where companies attack sex researchers, reputations and invent phony data from non-existent studies, and so forth. At this moment, whether attacks come from the Religious Fundamentalists or the most crass of politicians and capitalists, for sex researchers, times are hard.

In this presentation, I will review: (1) my own experiences with such political attacks (in the Proxmire affair); (2) discuss a few more recent attacks on sex researchers; and (3) offer a few suggestions as to how to deal with such devastating attacks.

PASSIONATE LOVE AND SEXUAL DESIRE: HISTORICAL AND CROSS-CULTURAL AND PERSPECTIVES

Hatfield, E., University of Hawaii

For more than 4,000 years, poets and storytellers have sung of the delights and sufferings of love and lust. In this meeting, we will review what scholars and researchers have discovered about the nature of passionate love and sexual desire.

Anthropologists and evolutionary psychologists have tended to assume that passionate love is a cultural universal. Cross-cultural researchers, historians, and social psychologists, on the other hand, have emphasized the stunning diversity in the way passionate love and sexual desire have been viewed and experienced. Culture, ethnicity and (above all) the rules passed down by political and religious authorities have been found to have a profound impact on the way people think about and act out love and sex. Marriage for love and sex for pleasure have always been deeply threatening to political and religious leaders who have feared and still fear the individualistic implications of permissive approaches to romance and passion. Individualism and personal choice have always been seen as the enemies of order and authority; such freedom has nearly always been deemed heretical, sinful, dangerous, and an invitation to chaos, selfishness, and anarchy. The fight over the rules governing love, marriage, divorce, and sex stands as one of history's central and most powerful themes.

Today, however, in the era of MTV, home video, widespread travel, global capitalism, and the World Wide Web, many of these traditional cross-cultural differences may be rapidly disappearing. Authority may be giving way nearly everywhere to increased freedom, particularly in the personal realm, in the world of passion. Is the erosion of traditional authority and strict personal rules really happening-and if so what does that portend for our personal and societal futures?

GENDER GAPS IN THE NUMBER OF SEXUAL PARTNERS AND MARITAL FIDELITY

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Gender differences in the number of sexual partners, having had parallel (extramarital) sexual relations and attitudes toward marital fidelity are examined in different age and social groups in four cultural areas around the Baltic Sea: in Sweden, Finland, Estonia and St. Petersburg. It was assumed that gender differences are smaller in the younger and higher status groups, and in the Western areas.

The data consist of representative surveys of adult populations in Sweden in 1996, Finland in 1992 and 1999, Estonia 2000, and St. Petersburg 1992. In each area, from 1 031 to 2 810 persons were interviewed or filled a questionnaire. The data was analysed by linear regression analysis, in which age group/educational and occupational status were controlled when examining the impact of gender.

In all areas, men had significantly more sexual partners than women did. The gender gap in the number of sexual partners during lifetime was smaller in the youngest age group (18-34 years), than among people in their middle (35-54) and older (55-74) age groups. In the youngest group, the gender difference was smallest in Sweden, next came Finland, and then Estonia and St. Petersburg. In the middle and older age groups, regional differences in the size of the gender gap were small. About the same pattern was found in regard to having had parallel relations. Accepting marital infidelity by a husband and a wife was not related to gender in Sweden and Finland. In Estonia and St. Petersburg, men accepted male infidelity more often than women did, especially in the young and middle age groups. In the lower status groups in Estonia, but not in St. Petersburg, gender differences in accepting male infidelity were larger than in the higher status groups.

In St. Petersburg (but not elsewhere), women permitted the infidelity of a wife more often than that of a husband. This was true in all age groups and in the middle and higher social status groups, but not in the lowest status group. Upper status Russian women seem to resent the prevailing sexual double standards (men having more sexual freedom than women) by stressing the sexual freedom of their own gender.

THE EFFECTS OF ACUTE ALCOHOL INTOXICATION AND SEXUAL AROUSAL SET ON PHYSIOLOGICAL AND SELF-REPORTED SEXUAL RESPONDING IN WOMEN

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In spite of the fact that alcohol problems are common in women, and that alcohol use may impact a woman's safety in sexual contexts, little experimental research has been conducted to investigate the effects of alcohol intoxication on women's sexual responding. The experimental research to date has found that alcohol is related to decreased physiological (genital) sexual arousal but, in contrast, results in increased self-reported arousal. Nonexperimental studies have found a link between alcohol and disinhibited sexual outcomes in women. The precise role of physiological and psychological effects of alcohol on women's sexual response and behavior has yet to be elucidated. The purpose of the current study was to begin to understand and clarify alcohol's effect on sexual arousal in women. We examined selfreport and physiological measures of sexual responding in a controlled laboratory setting, and compared two different sexual arousal instructional sets: one to maximize and one to inhibit sexual arousal. METHOD: Thirty-seven female social drinkers between the ages of 21 and 35 years old, and currently not in committed relationships were recruited from a large urban population. Approximately 50% of the participants were students, and the majority was European-American. Participants were assigned to a condition in a 2 x 2 factorial design in which the independent variables were beverage content (alcohol, control) and arousal instructions (maximize or suppress arousal). Alcohol participants received a bolus dose intended to raise blood alcohol level to .08 gm %; yoked control participants received only juice. Participants viewed a 3-minute neutral film clip, followed by two 3-minute erotic film clips while physiological arousal was continuously monitored using a vaginal photoplethysmograph. We measured self-reported sexual arousal with a 7-point Likert scale, and the physiological measure was vaginal pulse amplitude (VPA). RESULTS: A main effect of arousal instructions was found for VPA but not for self-reported sexual arousal. Women instructed to maximize their arousal demonstrated significantly greater vaginal response than women instructed to inhibit their sexual arousal. There was no difference between the maximize and inhibit conditions on the subjective sexual arousal measure. In addition, a high dose of alcohol had no direct effect on physiological or self-reported genital response, though there was a trend for instructional set to interact with alcohol condition on self-reported arousal. DISCUSSION: The present data are preliminary and may be modified, as the sample size is 60% complete. The data thus far suggest that a high dose of alcohol did not have an effect on genital measures of sexual arousal during an erotic film, or on self-report measures of arousal in response to the erotic material. The genital differences between the instructions to maximize arousal vs. suppress arousal were expected to be impaired by alcohol intake but this was not the case. Those dosed with alcohol were as able to enhance as to inhibit genital sexual response as those drinking fruit juice. The implications of these emerging results on sexual arousal and related measures are explored.

REASSESSING SEXUAL DESIRE IN WOMEN: MEASUREMENT AND MEANING ACROSS SEXUAL FUNCTION DOMAINS

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Several recent developments have contributed to a new focus on the meaning and measurement of sexual desire in women. One is the acknowledged concordance between women's sexual desire and sexual arousal. Another is the intense interest in clinical trial measurement development. And a third is the fact that hypoactive sexual desire has come to be regarded as a serious confounding factor interfering with the treatment efficacy of sildenafil citrate (Viagra[™]) in women's sexual dysfunction. These issues have raised questions about the conceptualization of sexual functioning/response. The extent to which desire, arousal, and orgasm are discrete or continuous may provide windows into new categories that clarify what women experience. The present paper will explore data from three methodologies to discuss women's experience of sexual desire and to weigh in on the theoretical frameworks for conceptualizing desire and classifying desire problems.

First two validated questionnaires measuring women's sexual function are compared for their concordance on desire, sexual arousal, orgasm, enjoyment and satisfaction domains. On these questionnaires, the desire subscale is most highly correlated with the arousal subscale (r=.76, .63) and least correlated with the orgasm subscale (r=.54, .48). Second, a psychophysiological study of women's response to sexually explicit videotapes while administered methyl testosterone is examined from the perspective of correlations between self reported desire, physical arousal, mental arousal, desire to be close to someone, as well as objective measurement of vaginal vasocongestion. In this context, self reports of desire and arousal are similarly correlated with vaginal pulse amplitude (r=.46, .47). Third, a qualitative study of women's adult and adolescent narratives of sexual desire is examined from the perspective of the proportion of physical vs. other features of the specific desire experiences. Of particular interest is the high proportion (77%) of references to physical features of desire in adolescent narrative vs. recent adult narratives (46%). In addition, recent but not adolescent narratives, tended to differentiate women with sexual arousal problems from women with no sexual problems. These findings are discussed in terms of contributing to theoretical frameworks underlying women's sexual desire and desire problems.

NATIONAL SEXUALITY RESOURCE CENTER: GENERATING DIALOGUES BETWEEN THE ACADEMY, COMMUNITY BASED ORGANIZATIONS, AND THE PUBLIC

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The National Sexuality Resource Center (NSRC), a Ford Foundation project and based at San Francisco State University, was officially launched in February 2003. This poster provides an overview of NSRC, focusing on the Center's website and on-line magazine, *American Sexuality*. The poster also introduces *Sexuality Research and Social Practice*, the peer-reviewed on-line journal of NSRC, on-line working/discussion groups, and other resources such as academic and organizational directories, a handbook of sexuality research training opportunities and a dynamic "in the news" section of the website where news stories concerned with sexuality are posted bi-weekly.

The mission of NSRC is to link researchers, academics, policy-makers, advocates and the public in new dialogues concerning sexual health, sexuality education, and sexual rights in the United States. Science has historically been hostile to sexuality study until late, and while efforts such as the SSRC Sexuality Research Fellowship Program have been highly successful, and academic programs around the country have been effective, much work remains to be done in order to connect academics with the public and ensure that urgent policy needs are met.

NSRC's position is that the American public is tired of seeing sexuality used as a political football; we are convinced that the U.S. public is in search of evidence-based information and tools that they can use to educate themselves and their families. Our mission is to make many of these resources available on our national web site. Our assessment of public opinion and reports from the field suggest that academics also require more tools to empower and link them together in order to create an effective voice at the national level and meet the challenge of research and policy gaps. NSRC focuses on praxis as well as research.

The NSRC was created to foster dialogues through the web site, on-line working groups, and in face-to-face venues such as conferences and panels. The on-line magazine, *American Sexuality*, features research-based articles written by academics for the general public on sexual health, education and rights. All of these venues are free, easily accessible to a global audience, and without commercial support. In contrast to many sites on the Internet, The NSRC does not sensationalize sexuality.

This poster illustrates the initial phase of the NSRC, emphasizing the need to make academic knowledge available for public consumption, and to engage with public demand for evidence-based knowledge about sexuality health, education, and rights.

VARIABILITY OF SEX-RELATED BEHAVIOR IN INDIVIDUALS WITH INTERSEX SYNDROMES AND IN HEALTHY MALE AND FEMALE CONTROLS

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Experimental research in animals, including rodents and non-human primates, indicates that levels of androgens present during early development have profound and permanent influences on the mammalian brain and on behaviors that show sex differences. For instance, treating pregnant rhesus monkeys with androgen produces female offspring who show increased male-typical juvenile play behavior and increased male-typical sexual behavior in adulthood. Similarly, removing androgen from genetic male animals during early development reduces subsequent male-typical behavior.

Some human intersex conditions involve hormonal abnormalities similar to the manipulations that have been conducted experimentally in other species, and it is possible that these hormonal abnormalities produce permanent changes in sex-typical behavior. In addition, normal variability in androgen prenatally could relate to normal variability in sex-typed behavior postnatally in humans. In this presentation, I compare behavioral outcomes across different intersex syndromes, as well as in normal males and females, to evaluate the importance of hormones, versus other factors, such as the sex chromosomes and the sex of rearing, in determining sex-related behaviors. In addition, looking across the range of sex-typed behaviors in normals and in intersex individuals is relevant to understanding the consistency of hormonal influence across behavioral domains. Comparisons across syndromes, as well as across behaviors, are enabled, because I have used similar behavioral measures in studies of normals and of individuals with different intersex conditions, and because I have used a range of behavioral measures.

The comparisons suggest that the prenatal hormone environment is more important than the sex chromosomes in determining human sex-related behavior. In addition, for at least some behaviors, the prenatal hormone environment appears to be more influential than the sex chromosomes and the sex of rearing combined. For example, both XX and XY individuals exposed to low levels of androgens prenatally, and reared as females, typically show femaletypical behavior. However, both XX and XY individuals exposed to high levels of androgens prenatally show relatively high levels of at least some male-typical behaviors, regardless of the sex of rearing. In addition, hormones appear to influence some behaviors more dramatically than others. For instance, childhood play behavior appears to relate more closely to the early hormone environment than does sexual orientation, core gender identity (the basic sense of self as male or female), or cognitive abilities that show sex differences.

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WOMEN'S SEXUAL DESIRE IN DUAL-EARNER COUPLES: IS DINS MYTH OR REALITY?

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Recent popular media publicity about DINS (Dual Income No Sex) marriages implies that sex occurs less frequently in dual-earner couples than it does in husband-only-earner families, and that women's sexual desire is harmed by employment. This paper examines scientific data relevant to this hypothesis. Data from the longitudinal Wisconsin Maternity Leave & Health Project (WMLH) come from a sample not recruited for sex research and therefore more representative than almost all other similar studies. Data from this sample at 12 months postpartum indicated no significant differences in desire between homemakers, women employed part time, and women employed full time. Re-analysis of data from the national NHSLS sample similarly indicated no differences between homemakers and women employed part time and full time in sexual desire. In the WMLH data set, fatigue was a strong predictor of desire, but homemakers reported as much fatigue as employed women do. I conclude that DINS is a media fiction that must be countered with scientific data, and I reflect on the nature of women's sexual desire in marriage.

SEXUAL BETRAYAL: MEN AND WOMEN'S RESPONSE FROM AROUND THE WORLD

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Anthropologists have not systematically examined extramarital affairs. Our cross-cultural study found that within every culture men and women actively resort to mate-guarding tactics to control their mate's extramarital behavior. A person's level of interest and involvement does not change with a culture's notion of descent, level of social complexity, or the degree to which a culture is normatively permissive or restrictive in sexual matters. In effect, sexual propriety is the presumed right of both sexes. Our findings are consistent with both the sexual jealousy and the pair bond hypotheses, which hold that every marriage or love relationship is organized around a presumption of sexual propriety.

KEY WORDS: Extramarital Affair, Pair Bond, Sexual Jealousy, Human Universal

THE RELATIONSHIP BETWEEN NEGATIVE MOOD AND SEXUALITY IN HETEROSEXUAL WOMEN

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Although negative mood is generally assumed to have negative effects on sexuality, little research has systematically examined this assumption and what has been done has focused almost exclusively on men. Two recent studies (Bancroft, Janssen, Strong, Carnes, Vukadinovic, & Long, 2003; Bancroft, Janssen, Strong, & Vukadinovic, 2003) found considerable individual variability in how negative mood affects sexual interest and response in gay and straight men. Although the majority of respondents indicated that negative mood either had negative or no effects on their sexuality, a substantial minority reported an increase in sexual interest and response. There are a number of reasons to expect that the relationship between negative mood and sexuality as well as its determinants will be different in women. For example, women show higher rates of depression than men, and many women experience menstrual cycle and pregnancy-related fluctuations in mood.

The primary aim of this study was to investigate the relationship between negative mood and sexuality in a nonclinical sample of women and to explore potential predictors of this relationship, such as age, propensity for anxiety (STAI) and depression (ZDPR), and sexual inhibition and excitation proneness (SIS/SES). A secondary aim was to compare this female sample with a nonclinical sample of heterosexual men. The sample consisted of 663 women (Mean age = 18.9 years, SD = 1.21) and 399 men (Mean age = 19.6 years, SD = 1.85). Questionnaires included the SIS/SES scales, STAI and ZDPR, and the MSQ, a self-report measure of how mood (depression and anxiety/stress) typically affects sexual interest and behavior.

As predicted, women were less likely to report an increase in sexual interest and and/or response during negative mood states than men. Variability within the male and female groups was comparable. In addition, women scored lower on sexual excitation (SES), and higher on sexual inhibition (SIS1/SIS2), trait anxiety (STAI) and depression proneness (ZDPR). Regression analyses indicated that sexual excitation proneness (SES) was the best predictor of the relationship between mood and sexuality in women, though sexual inhibition due to the fear of negative consequences (SIS2) also contributed.

Recent research has suggested that sexual activity may be used to regulate mood and this has been linked to sexual risk-taking and 'compulsive' sexual behavior in men. This pattern, of increased sexual responsiveness in negative mood states, was also found in a substantial minority of the women in this study and thus merits further study. We are in the process of developing a more comprehensive version of the MSQ. In addition, new research is planned that will employ daily diary and psychophysiological approaches to further address the relationship between mood and sexuality in men and women.

A PARENT-REPORT GENDER IDENTITY QUESTIONNAIRE FOR CHILDREN

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This study reports on the psychometric properties of a parent-report Gender Identity Questionnaire, originally developed by Elizabeth and Green (1984), designed to aid in the assessment of children with potential problems in their gender identity development. A 16-item questionnaire that covered aspects of the core phenomenology of gender identity disorder (GID) was completed by parents of gender-referred children (N = 325) and controls (siblings, clinicreferred, and non-referred) (N = 504), who ranged in age from 2.5-12 yrs (mean age, 7.6 yrs). Factor-analysis indicated that a one-factor solution, containing 14 of the 16 items with factor loadings \geq .30, best fit the data, accounting for 43.7% of the variance. The gender-referred children had a significantly more deviant total score than did the controls, with a large effect size of 3.70. The GIQ total score had negligible age effects, indicating that the questionnaire has utility for assessing change over time. Discriminant function analysis showed that 85.2% of the gender-referred children and 95.2% of the controls were correctly classified. The gender-referred children who met the complete DSM criteria for GID had a significantly more deviant total score than did the children who were subthreshold for GID although the latter group had a mean score that was closer to the threshold cases than to the controls. With a specificity rate set at 95% for the controls, the sensitivity rate for the probands was 86.8%. It is concluded that this parentreport gender identity questionnaire has excellent psychometric properties and can serve as a useful screening device for front-line clinicians, for whom more extensive, expensive, and timeconsuming assessment procedures may be precluded.

SEXUAL ACTIVITY AND IMMUNE FUNCTIONS IN HUMANS: IS SEX HEALTHY?

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From an evolutionary viewpoint, sexually transmitted diseases present a threat to survival and sexual reproduction (Hopkins et al., 2001; Klein et al., 2002). However, only a few animal studies have so far investigated the effects of sexual behaviour on immune functions. In male hamsters, splenic natural killer (NK) cell activity and a primary antibody response were found to be suppressed shortly after mating (Kress et al., 1989; Ostrowski et al., 1989). In contrast, it was demonstrated that brain mast cells significantly increased in male mice after mating (Yang et al., 1999) and promiscuous behaviour was shown to increase blood leukocyte numbers in primates (Nunn et al., 2000). Although these studies have shown altered immune function after extended periods of sexual behaviour, little is known regarding the effects of acute sexual activity on immune functions in animals (McKean and Nunney, 2001). Furthermore, to date there is a complete lack of data regarding the regulation of immune functions by sexual stimulation in humans.

Therefore, we investigated the effects of masturbation-induced orgasm on lymphocyte distribution and cytokine production in healthy males. In a cross-over design, 11 volunteers completed an experimental condition in which subjects were asked to masturbate until orgasm, as well as a control condition without sexual activity. Blood was drawn continuously for determination of endocrine parameters. Leukocyte and lymphocyte subsets were analysed via flow cytometry and the production of LPS-induced interleukin (IL)-6 and tumor necrosis factor (TNF)- α was measured before, and then 5 and 45 min after orgasm. Results confirmed transient increases in adrenaline and prolactin plasma concentrations. Sexual arousal and orgasm increased the absolute number of leukocytes, in particular natural killer (NK)-cells (CD3-CD16+CD56+) in peripheral blood. In contrast, T-cell (CD3+) and B-cell (CD3-CD20+) subpopulations as well as IL-6 and TNF- α production remained unaffected by sexual activity.

In summary, the data demonstrate that sexual activity and orgasm induces transient increases in the circulation of lymphocyte subpopulations, in particular NK cell numbers in man. Analogous to a fight/flight response, these findings may represent a reproductive reflex that activates components of the innate immune system during sexual activity. However, the relationship between the frequency of sexual activity and long-term effects on the immune system in humans remains to be investigated.

CLITORAL HEMODYNAMICS OF SEXUAL AROUSAL

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Theoretically, the clitoris is the anatomical homologue of the penis. This suggests that blood flow would serve a similar function in both organs. Our previous work (Khalifé, Binik, Cohen & Amsel, 2000) documented that clitoral blood flow can be reliably assessed through color Doppler ultrasonography in women who are not sexually aroused. Recent studies (Bechara, Bertolino, Casabe, et al., 2003; Lavoisier, Aloui, Schmidt, & Watrelot, 1995) have demonstrated a marked increase in blood flow to the clitoris during induced sexual arousal. The specificity of clitoral blood flow as a measure of sexual arousal was evaluated using color Doppler ultrasonography in a sample of 63 healthy pre-menopausal women between 18 and 45 years of age (m = 25.78 years). The women were randomly assigned to view a neutral film followed by either another neutral (n = 20), or humorous (n = 22) or sexually arousing film (n = 20)21). Peak systolic velocity (PSV), S/D ratio, lowest diastolic flow, resistance and pulsatility indices were taken before and after each film using a 13 mhz linear probe. Subjective measures of sexual arousal, humor and pleasantness, and relaxation were also taken after each film. Manipulation checks demonstrated that the films had the desired subjective effects. A univariate analysis of variance demonstrated a main effect for film viewed F(2, 62) = 4.11, p =.02. Post hoc (Tukey HSD) comparisons (p < .05) revealed that PSV for women in the sexually arousing condition (m = 10.36 cm/sec., SD = 5.17) was significantly greater than PSV for the women in the neutral condition (m = 6.32 cm/sec., SD = 2.86). Women watching the humorous clip obtained intermediate PSV (m = 9.36 cm/sec., SD = 8.05) but were not significantly different from either of the other conditions. The other measures of blood flow obtained did not significantly differentiate the groups. Blood flow to the clitoris is a promising measure of sexual arousal. A remotely controlled ultrasound probe providing continuous assessment of blood flow is necessary however, as there is much variability in discrete measurement. This variability may be the result of several factors, not the least of which includes the presence of a technician placing a probe on the woman's clitoris. A remotely controlled probe would provide for useful clinical and research measures that could be utilized for the diagnosis of female sexual arousal disorder and for the testing of treatments for this problem.

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UNDERSTANDING INDIVIDUAL DIFFERENCES IN MALE PROPENSITY TO RAPE

Lalumière, M.

A major challenge for understanding rape is determining why some males are more likely than others to engage in sexually coercive behavior. Recent research on forced copulation in non-human species and rape in humans has revealed several interesting facts. In this lecture I will first examine forced copulation in non-human species and propose five broad contexts that explain why some males of a species, but not other males, engage in forced copulation. Second, I will review the most important individual differences associated with rape in *Homo sapiens*. Many individual differences that were generally thought to be important have turned out not to be (e.g., major psychopathology), others that were ignored for many years have turned out to be quite important (e.g., antisociality), and others have turned out to be important but in the unexpected direction (e.g., access to sexual partners). I will discuss the implications of these findings for theory development.

MEASURING SEXUAL AROUSAL IN POSTOPERATIVE MALE-TO-FEMALE TRANSSEXUALS USING VAGINAL PHOTOPLETHYSMOGRAPHY

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Human males typically display significantly different physiological responses to male vs. female sexual stimuli (category-specific sexual arousal), whereas human females typically do not. We used vaginal photoplethysmography to examine patterns of sexual arousal in 11 male-tofemale (MtF) transsexuals following sex reassignment surgery (SRS), and in 72 natal females. Subjective arousal was measured with a continuous response lever. Video clips depicting sexual activity between 2 males, 2 females, or 1 male and 1 female were used as erotic stimuli. All transsexual participants displayed category-specific sexual arousal. Five homosexual transsexual participants (attracted exclusively to males before sex reassignment) showed greater genital and subjective responses to male than to female stimuli, while 6 nonhomosexual transsexual participants showed the opposite pattern. Vaginal pulse amplitude was lower in transsexual participants than in natal females. The mean correlation between genital and subjective responses was high in nonhomosexual transsexuals, but was significantly lower in homosexual transsexuals and in natal females. One transsexual participant who reported a change in sexual orientation following sex reassignment displayed genital and subjective responses consistent with her prereassignment sexual orientation. We conclude that male-to-female transsexuals display maletypical category-specific sexual arousal following SRS, and that vaginal photoplethysmography is a promising methodology for studying patterns of sexual arousal in postoperative transsexuals.

SEXUALITY BEFORE AND AFTER MALE-TO-FEMALE SEX REASSIGNMENT SURGERY

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There is limited information concerning sexual orientation and sexual behaviors in maleto-female (MtF) transsexuals before and after sex reassignment surgery (SRS) This paper presents self-report data from a mailed survey of 232 MtF SRS patients concerning their sexuality before and after SRS. All survey participants had undergone SRS during the years 1994-2000 with the same surgeon, and all were at least one year postoperative.

The mean age of participants at time of SRS was 44 years (range, 18-70 years) and their mean age at time of survey completion was 47 years. Before SRS, 54% of participants had been exclusively or almost exclusively attracted to females; after SRS this figure declined to 25%. Before SRS, 9% of participants had been exclusively or almost exclusively attracted to males; after SRS this figure rose to 34%. The median number of sexual partners before SRS was 6; the median number of sexual partners after SRS was 1. After SRS, 32% of participants reported having had no sexual partners in the previous 12 months. At the time of survey completion, 45% of participants reported hundreds of episodes or more of sexual arousal to dressing in women's clothing or to the thought or image of themselves as women (*autogynephilia*) before SRS; after SRS only 3% so reported. Orgasm was experienced at least occasionally after SRS by 85% of participants, and 55% reported that they sometimes ejaculated with orgasm.

Most participants were sexually attracted to females before SRS, but many reported that their pattern of sexual attraction changed after SRS. Because sexual orientation is thought to be established early in life and to be virtually unchangeable in adulthood, the reported changes may reflect an erotic interest in the validation provided by male partners rather than a genuine change in somatotypic preference. The number of pre-SRS sexual partners participants reported conformed closely to male data from the National Health and Social Life Survey. The percentage of participants reporting no sexual partners in last 12 months following SRS was high relative to population norms, suggesting a significant degree of isolation after SRS. Most participants reported being orgasmic after SRS, but these reports should be interpreted cautiously in light of the relatively low reported frequency of ejaculation with orgasm.

TOWARD IMPROVED INTERPRETATION AND THEORY BUILDING OF AFRICAN AMERICAN MALE SEXUALITIES

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This paper examined five challenges to clear understanding of African American male sexualities: improper assumptions of heterogeneity; an underemphasis on developmental change, the contexts and the meanings of sexual behaviors; and a lack of compelling theoretical grounding for African American sexualities. Critical elements for effective theorizing and research about African American sexualities (i.e. multiple levels of analysis, examination of phenomenological meaning of sexuality, measurement of dynamic/developmental change) were outlined and candidate theories within sexual science (social exchange theories, symbolic interactionism, sexual scripting theory) were analyzed in light of these elements. It is suggested that a re-orientation of sex research about African American men using these elements will result in improved understanding of African American sexualities in multiple contexts.

DO MASCULINITY AND FEMININITY HAVE DIFFERENT MEANINGS FOR MEN AND WOMEN AND FOR HETEROSEXUAL AND HOMOSEXUAL INDIVIDUALS?

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Previous research has shown strong heterosexual-homosexual differences in sex-typed interests (e.g., occupational preferences) and in self-ascribed masculinity-femininity (MF), but weak and inconsistent differences in instrumentality (i.e., dominance) and expressiveness (i.e., nurturance). The current research examined the degree to which measures of sex-typed interests, instrumentality, and expressiveness predict the self-ascribed MF of heterosexual men, gay men, heterosexual women, and lesbian women. Self-ascribed MF refers here to measures of individuals' conscious, self-reported levels of masculinity and feminity (sample items: "How masculine is your personality?" "How feminine is your personality?"). In three studies, regression analyses were used to examine how well measures of sex-typed occupational preferences, instrumentality, and expressiveness predict participants' self-ascribed MF.

Study 1 assessed 351 heterosexual men, 461 gay men, 707 heterosexual women, and 472 lesbian women. Results are summarized below by standardized regression equations (where SELF-MF = self-ascribed MF, OCC = sex-typed occupational preferences, I = instrumentality, and E = expressiveness; significant beta weights are marked by asterisks).

For heterosexual men:	SELF-MF = $.17*$ OCC + $.26*$ I + 07 E
For gay men:	SELF-MF = $.39*$ OCC + $.08$ I + $.06$ E
For heterosexual women:	SELF-MF = $.22*$ OCC + $.11*$ I + $25*$ E
For lesbian women:	SELF-MF = $.42*$ OCC + $.07$ I + $10*$ E

The pattern of results revealed by Study 1 shows that sex-typed interests tend to predict the self-ascribed MF of gay men and lesbians better than they predict the self-ascribed MF of heterosexual men and women. Instrumentality tends to predict the self-ascribed MF of heterosexual men better than it predicts the self-ascribed MF of other groups. Finally, expressiveness tends to predict the self-ascribed MF of women, particularly heterosexual women, better than it predicts the self-ascribed MF of men.

Studies 2 and 3, which assessed independent samples of heterosexual and homosexual men and women, tended to corroborate the results of Study 1. Various explanations for these results are offered. For example, the current data provide some evidence that gay men and lesbian women show higher variability in their sex-typed interests than heterosexual men and women do, and this may partly explain why variations in sex-typed interests better predict the self-ascribed MF of gay men and lesbian women. Also, because homosexual individuals do differ substantially, on average, from same-sex heterosexual individuals in their sex-typed interests as a salient indicator of masculinity and femininity.

DOPAMINE AND NOREPINEPHRINE RESPONSE TO FILM-INDUCED SEXUALLY AROUSAL IN SEXUALLY FUNCTIONAL AND SEXUALLY DYSFUNCTIONAL WOMEN

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To date, there have been no studies that have directly assessed dopamine (DA) activity and sexual responding in humans and studies investigating the role of norepinephrine (NE) in sexual response have produced inconsistent results. Evidence from neurochemical studies in animals indicate that DA is released in anticipation of feeding, in anticipation of a sexual encounter, and in anticipation of access to alcohol. It is feasible that DA may be linked to reward associated with sexual encounters in humans. Specifically, individuals with clinically low levels of sexual desire and arousal may simply find sex less rewarding. The present study was designed to assess whether DA and/or NE responses to sexual stimulation differ between women with clinically diagnosed Hypoactive Sexual Desire Disorder (HSDD) and Female Sexual Arousal Disorder (FSAD) versus controls.

Participants in this study included 21 women (9 with sexual dysfunction, 12 healthy controls). Blood samples were obtained before and during an erotic film and assayed for DA, homovanilic acid (HVA) (a metabolite of central dopamine), and NE.

2 (Group: sexually dysfunctionals vs. controls) X 2 (Time: pre-film vs. post-film) ANOVAs were conducted to investigate the effects of sexual arousal on HVA and NE levels. Results revealed a significant decrease in HVA from pre-film to post-film samples, <u>F</u> (1, 20) = 5.98, p = .02. There were no significant interactions. Sexual arousal did not have a significant effect on NE levels. Women with sexual dysfunction had overall higher levels of NE than healthy controls, <u>F</u>(1, 20) = 7.75, p = .01.

Using high-performance liquid chromatography (HPLC) with electrochemical detection, dopamine levels less than 10 pg/ml were unable to be detected. Sixteen of our samples had dopamine levels less than 10 pg/ml, thus we collapsed our between-subject data into a single group and ran a paired-sample t-test on the remaining 8 samples. Dopamine levels decreased, but were not significantly different from pre-film to post-film.

The findings suggest potential differences between sexually functional and sexually dysfunctional women in NE, but no DA responses during sexual arousal.

THE EFFECTS OF FALSE PHYSIOLOGICAL FEEDBACK ON SEXUAL AROUSAL IN SEXUALLY FUNCTIONAL AND DYSFUNCTIONAL WOMEN

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The relationship between expectancies and sexual arousal response has previously been investigated through the administration of false physiological feedback. Palace (1995) and Sipski, et al. (2000) reported that false positive physiological feedback significantly increased sexual arousal in women with sexual dysfunction, whereas Delizonna, et al (2001) found that false negative feedback had no effect on women without sexual dysfunction. The present study extends prior research in this area by examining the effects of both false positive and false negative feedback on sexual arousal in sexually functional and sexually dysfunctional women using a within-subject repeated measures design.

Thirty-two women (15 with sexual dysfunction, 17 healthy controls) were included in this study. Physiological sexual arousal (vaginal photoplethysmograph), self-reported sexual arousal and affect were measured during four film sequences of neutral and erotic film clips. Prior to viewing the films, women were presented with either false positive or false negative physiological (i.e., plethysmograph response print-outs) feedback in two counterbalanced sessions scheduled approximately 1 to 2 days apart.

Results indicated that positive feedback significantly increased subjective levels of sexual arousal, $\underline{F}(1, 29) = 14.87$, $\underline{p} = .001$. A significant interaction between positive feedback and group (controls vs. sexually dysfunctionals) was found, $\underline{F}(1, 29) = 4.60$, $\underline{p} = .04$ indicating that sexually functional women evidenced increased physiological sexual arousal following positive feedback, whereas sexually dysfunctional women evidenced decreased physiological sexual arousal following positive feedback. Following positive feedback, participants reported an increase in positive affect, $\underline{F}(1, 29)=6.15$, $\underline{p} = .02$, and a decrease in negative affect, $\underline{F}(1, 29) = 8.57$, $\underline{p} = .01$. Counter to our predictions however, these effects of positive feedback did not differ for healthy controls and women with sexual dysfunction. False negative feedback had no significant effect on subjective or physiological levels of sexual arousal in either sexually functional women.

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HEALTH AND HEALTH CARE AMONG HIV-POSITIVE MALE-TO-FEMALE TRANSGENDERS

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Background: Research indicates high rates of HIV prevalence and incidence among MTF transgenders. Even though many MTFs report experiencing health care discrimination, little is known about how they manage living with HIV. Although all HIV-positive individuals may experience stigma, the objective of this study is to examine if the stigma of transcending gender roles further compounds the stigma of having HIV.

Questions: How do HIV-positive MTFs differ from non-transgender HIV-positive persons with regards to 1) background characteristics, 2) health status, and 3) utilization of services? What factors may help explain any discrepancies?

Methods: In total, 3819 HIV-positive individuals from four cities (San Francisco, Los Angeles, New York, and Milwaukee) participated in a screening and baseline assessment for a clinical trial. We compared two HIV-positive groups: MTF transgender (n = 59) and non-transgender (n = 300). The comparison group was randomly selected and representative of the non-transgender HIV-positive sample.

Statistical Analysis: Chi-square and t-tests were used to compare the background characteristics, health status, and health access of the two groups. Multivariate logistic regression was utilized to account for discrepancies in health access.

Results: There were a number of differences between the MTFs and non-transgenders: MTFs were more likely to be younger, African American, to have served time in jail, to be currently living in a welfare home or shelter, and to have been recruited from San Francisco or Los Angeles. MTFs were also more likely to drink alcohol on a daily basis and to have used intravenous drugs in the past year.

Despite differences in background characteristics there were no differences between MTFs and non-transgenders in terms of health status. The two groups had similar CD4 counts, detectable viral loads (self-report), number of AIDS-related symptoms and symptom impact, as well as scores on the Beck Depression Inventory and the State-Trait Anxiety Inventory.

There were no differences between MTFs and non-transgenders in terms of the mean number of visits to a health care provider in the past three months. However, fewer MTFs (59%) than non-transgenders (74%) reported currently taking HAART (OR = .51, p = .02), despite the fact that they were recruited from the same venues.

To understand the discrepancy in HAART utilization, a number of factors were examined. Demographic factors such as site of recruitment, current living situation, and intravenous drug use help to account for the disparity in HAART use.

DOPAMINE REGULATION OF FEMALE SEXUAL BEHAVIOR: PLEASURE, NOT PROCREATION

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Reproductive success in rodent species depends not simply on the delivery of sperm to the female, but also on a specific pattern of vaginal stimulation that differs among species. The pattern of intromissive contacts, which is controlled to differing degrees by both the male and the female during copulation, must be optimized for an individual mating to result in offspring. This scheme implies that the goal of reproductive behavior is pregnancy and birth of offspring. There are two logical consequences of this belief, the first being that animals such as rats, mice and hamsters can connect the events of mating with the birth of their pups. The second is that male and female rodents are sensitive to a timing pattern of reproductive contacts that is optimal for successful implantation and carrying the fetuses to term. It seems unlikely that animal species other than humans (or perhaps the great apes) have the cognitive capacity to make such links, yet they do in fact optimize copulatory behavior ensuring successful reproduction. Therefore, the question remains, how do animals regulate copulation in this manner?

In the case of female sexual behavior, we are proposing a model that has several key components. The first is that vaginal stimulation has rewarding consequences and that female animals alter the pattern of vaginal contacts to maximize receiving this pattern of stimulation. Second is that the rewarding effects of vaginal stimulation is mediated through activation of dopamine pathways in the brain. Finally, the same pattern of vaginal stimulation that is rewarding is also optimal for triggering neuroendocrine reflexes necessary for implantation and pregnancy.

THE EFFECTS OF HYSTERECTOMY ON SUBJECTIVE AND PHYSIOLOGICAL SEXUAL AROUSAL

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Hysterectomy is the most common nonpregnancy-related surgery performed among American women. It has been suggested that hysterectomy might affect the autonomic nerve supply to the genitals and, consequently, impact physiological sexual function. To date, information on the effects of hysterectomy on sexual function is based primarily on self-report measures. Less is known about its effects on the physiological sexual response.

In a series of studies conducted in non-hysterectomized women, Meston and Gorzalka (1995; 1996a; 1996b) found that exercise significantly enhanced vaginal pulse amplitude (VPA) responses to erotic films. These findings are congruent with a body of literature indicating an important role of autonomic arousal in the female sexual physiological arousal response (for review, see Guiliano, Rampin, & Allard, 2002). If hysterectomy disrupts genital autonomic innervation, differences in sexual responding between women who have and have not undergone hysterectomy would be expected to emerge under conditions of heightened autonomic arousal.

The present study examined subjective and physiological sexual arousal in women with a history of uterine fibroids who had (n = 15) or had not (n = 17) undergone hysterectomy. The women participated in two experimental sessions in which self-report and physiological (VPA) sexual responses were recorded during an erotic film presentation. In one of the sessions, the women exercised on a treadmill for 20 minutes at 70% of their maximum heart rate prior to viewing the erotic films. Exercise significantly increased VPA responses in hysterectomized women. This finding does not support the hypothesis that physiological sexual arousal is impaired with hysterectomy surgery as a result of severed autonomic input. However, given that exercise causes changes in a number of central and peripheral systems, these findings do not definitively indicate that autonomic pathways remain intact following hysterectomy.

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THE EFFECTS OF STATE AND TRAIT SELF-FOCUSED ATTENTION ON SEXUAL AROUSAL IN SEXUALLY FUNCTIONAL AND DYSFUNCTIONAL WOMEN

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Following the publication of Duval and Wicklund's (1972) landmark book on selfawareness, research on the behavioral impact of directing one's attention either inwardly toward the self (private self-focus) or outwardly toward the environment (public self-focus) increased dramatically. The behavioral consequences of self-focused attention have been studied from both a state (self-awareness) and dispositional trait (self-consciousness) perspective. The construct of self-focused attention has been applied to further the understanding of a variety of clinically relevant syndromes (for review, see Ingram, 1990), and has been associated with sexual function since Masters and Johnson's (1970) introduction of the constructs "spectatoring" and "sensate focus."

The present study represents the first empirical investigation of the effects of experimentally induced self-awareness on self-report and physiological sexual responses in women, and the first investigation of the relation between trait self-consciousness and sexual function in women. Sixteen sexually functional women and 16 women diagnosed with Female Sexual Arousal Disorder participated in two counterbalanced sessions during which self-report measures of sexual function and physiological sexual responses to erotic films were recorded. In the Self-focus condition, self-focused attention was induced by positioning a piece of 50% reflective glass in front of the television screen in a manner that did not interfere with clear viewing of the films, but allowed participants to see the reflected images of their faces and shoulders while viewing the films. In the No Self-focus condition, a piece of non-reflective glass was positioned directly in front of the television screen in a manner which did not interfere with full viewing of the television screen.

Self-focused attention significantly decreased vaginal pulse amplitude (VPA) responses to erotic films among sexually functional but not dysfunctional women. Although levels of selfreported sexual arousal were not significantly different between experimental and control conditions, the correlation between subjective and physiological sexual responses was lower in the Self-focus than No Self-focus condition. Trait private self-consciousness was positively related to measures of sexual desire, orgasm, satisfaction, contentment, and compatibility. Public self-consciousness was positively associated with reports of sexual pain. These findings provide preliminary evidence for a role of both state and trait self-consciousness in female sexual function.

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GENDER-RELATED BEHAVIOR OF 46,XX WOMEN WITH CONGENITAL ADRENAL HYPERPLASIA (CAH) IN RELATION TO MOLECULAR GENOTYPE

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Prenatal-onset or classical CAH is the most common form of intersexuality in 46, XX individuals and is associated with varying degrees of masculinization of genitalia, brain, and behavior. Postnatal-onset or non-classical CAH in 46,XX is associated with various symptoms of somatic virilization, but not with masculinization of the genitalia at birth and usually also not with behavioral masculinization (Meyer-Bahlburg et al., in press). Most cases of either form of CAH are due to deficiency of the enzyme, 21-hydroxylase (21-OH), which results from a recessive autosomal gene defect. The respective gene is located in the HLA region of chromosome 6. Abnormalities occur in the form of deletions of the entire gene or of specific point mutations and other variations, which result in variable deficiencies of 21-OH production and, secondarily, of cortisol and androsterone synthesis on the one hand and overproduction of adrenal androgens on the other, although correlations between molecular genotype and endocrine phenotype are less than perfect. Adrenal androgens, in turn, after peripheral conversion into testosterone and dihydrotestoterone, can cause variable masculinization of the genitalia during fetal life and clitoral hyperplasia postnatally.

Recently, several studies have been performed to correlate molecular 21-OH genotype with behavioral phenotype in terms of masculinization of gender-related behavior. In Sweden, Nordenström et al. (2002) grouped the molecular genotypes by associated disease severity into four categories (including non-classical or late-onset CAH) and demonstrated correlations of these categories with observed sex-typed toy play in 39 girls with CAH between 1 and 10 years of age. In the U.K., Hall et al. (2003) similarly categorized 24 girls with CAH aged 3-12 years and found correlations with a masculinity score derived from two detailed parent-administered questionnaires assessing the gender-role behavior of their children.

The present study of adult women with CAH in the U.S. included a total of 61 women with classical CAH and 82 with the non-classical form. Categorization by molecular genotype analogous to the two studies in children again showed an association of molecular genotype with three measures of gender-related behavior based on patient-completed questionnaires and interviews, namely, the Recalled Childhood Gender Scale - Revised (Zucker et al., 2000), the Masculinity scale of the Career Questionnaire (Berenbaum et al., 1999), and the Sexual Orientation Scale - Lifetime of the Sexual Behavior Assessment Schedule - Adult (Meyer-Bahlburg & Ehrhardt, 1983). The results are compatible with a dose-response relationship between prenatal androgens and behavioral masculinization.

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DEMOGRAPHIC, PERSONALITY, AND SEXUALITY PREDICTORS OF CONDOM USE AMONG HETEROSEXUAL COLLEGE STUDENTS: A MULTIVARIATE ANALYSIS

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Research continues to support the finding that college students, as known risk-takers, are at an increased risk for contracting STD's, including HIV (e.g., Arnold, Fletcher, & Farrow, 2000; Sheer & Cline, 1994). The current study focused on furthering the knowledge base in this area by examining demographic, personality, sexual trait, and sexual behavior variables as potential predictors of condom use. The data analyzed in the current study were taken from a larger study of 546 Ball State University students (Gaither & Sellbom, in press), which was designed to assess the psychometric characteristics of the Sexual Sensation Seeking Scale (SSSS: Kalichman & Rompa, 1995). The current analyses used data from 200 female and 74 male (M =19.32, SD = 1.94) students who met the following criteria: not married, heterosexual, and have engaged in vaginal or anal intercourse at least one time during the previous three months. Dependent variables were grouped as Demographics (e.g., age, number of college semesters completed), Personality Traits [e.g., Big Five Inventory (BFI: John, Donahue, & Kentle, 1991) factor scores], Sexual Traits [e.g., SSSS total score; Sexual Inhibition Scale / Sexual Excitation Scale (SIS/SES: Bancroft & Janssen, 1996) scale scores], or Sexual Behaviors (e.g., number of lifetime one-night stands, number of intercourse partners during the past three months). Based upon their responses to items on a sexual history questionnaire, participants were classified as *never* (n = 84), sometimes (n = 105), or always (n = 85) condom users. Comparing the groups using four separate MANOVAs (one for each type of dependent variable), we found significant omnibus effects for demographics F(2, 267) = 2.55, p < .05; sexual traits, F(2, 271) = 2.38. p < .05.05; and sexual behavior, F(2,268) = 6.53, p < .001; but no effect for personality traits. Follow up univariate ANOVAs and post-hoc Tukey tests revealed that the *always* group reported less sexual permissiveness across several measures, while the sometimes group had completed significantly fewer semesters of college and had more partners than both of the other groups. Implications for STD prevention for this at-risk population are discussed.

A GENOME SCAN OF MALE SEXUAL ORIENTATION

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Human male sexual orientation is a complex and variable trait. Although the majority of males are sexually attracted to females, a significant minority (approximately 2-6%) of males report predominant sexual attraction to males. Twin studies have consistently shown that a significant portion of this variability is due to genetic influences (see Mustanski, Chivers, & Bailey, 2002 for review). Previous molecular genetic studies focused on the X-chromosome because of evidence for maternal transmission of male homosexuality in some pedigrees. Although no specific genes have been identified, linkage studies did detect a relationship between male sexual orientation and DNA markers on Xq28 in a selected subset of families (Hamer et al., 1993; Hu et al., 1995; Rice et al., 1999; Hamer et al., 1999).

The purpose of this study was to extend previous molecular genetic research on male sexual orientation by conducting a genome scan on all 22 autosomes as well as to run new markers on the X-chromosome. Unlike previous studies (Hamer et al., 1993; Hu et al., 1995), families were not excluded if they showed evidence of nonmaternal transmission. The sample for this study included 137 families with 2 gay brothers and 9 families with 3 gay brothers. Primers from the ABI PRISM Linkage Mapping Set v.2.5 were selected with a 10cM resolution. Nonparametric Affected Sib-Pair analysis was performed using ASPEX version 2.4. Herein we report results using the SIB_PHASE analysis algorithm, which is a multipoint analysis that utilizes allele frequency information as a substitute for parental genotype information when parental genotypes are unavailable.

Several interesting linkage results emerged from these analyses. First, there was significant linkage (lod score = 3.45) to a region on the long arm of chromosome 7 (7q36), with equal contributions from maternal and paternal transmission. Second, there was linkage (lod score = 1.81) to a region on the long arm of chromosome 10 (10q25). This region increased the likelihood of homosexual orientation only when inherited from the mother, confirming previous pedigree observations of maternal inheritance and suggesting that this sexual behavior may be epigenetically influenced by an imprinting mechanism. In regards to the previously reported linkages to the Xq28 region, analyses on the full sample failed to produce significant linkage. When the sample was restricted by excluding those families showing evidence of nonmaternal transmission the lod score increased to 2, suggesting evidence of genetic heterogeneity.

PREVALENCE AND FACTORS ASSOCIATED WITH ERECTILE IMPAIRMENT AMONG HIV POSITIVE GAY MEN AT A SWEDISH HIV CLINIC

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Objective: To determine the prevalence of and risk factors associated with erectile impairment among HIV positive gay men at Gay Men's Health Clinic in Stockholm, Sweden.

Methods: An anonymous cross-sectional self-administrated questionnaire was distributed to 171 patients at the Gay Men's Health Clinic. Adult patients who had been seropositive for at least 6 months, and who were able to read, understand and fill in the questionnaire independently were approached by clinic nurses and asked to participate in the study. The self-administrated questionnaire contained questions about sexual functioning measured by the International Index of Erectile Dysfunction (a higher score indicates a better sexual functioning) and self-reported physical and psychological symptoms. A second questionnaire was completed by a physician including questions on medical history, current and previous antiretroviral treatment and laboratory results. The answers from the patient were blinded for the physician.

Results: Data from 145 gay men were available (response rate 84%). The mean age was 43 years (age range 26 – 69 years) and 60% reported having a steady partner. Mean time since HIV diagnosis was 10.7 years. 6 patients (4%) had a CD4+ count of less than 200 cells/mm3, 58 (40%) between 200 and 500 cells/mm3, and 81 (56%) more than 500 cells/mm3. Nearly two thirds were currently on antiretroviral therapies (ART), 23% had never been on any HIV medication and 17% were currently on structured treatment interruption. The overall mean of erectile impairment was 15.01 (SD=7.85) on a total of 30, indicating an intermediate erectile impairment. Almost one third (29%) scored in the range of severe erectile impairment. Patients on ART, who were older, who reported peripheral neuropathy, psychological symptoms, and lower sexual desire had a lower score on erectile ability. Regression analysis indicated that sexual desire, age, and psychological symptoms were the best predictors of erectile impairment, accounting for 45% of the variance. The best predictors of sexual desire were being on ART, peripheral neuropathy, and psychological symptoms, accounting for 16% of variance.

Conclusion: Although ART was associated with lower score on erectile ability in univariate analysis, it was ruled out in multivariate analysis in which sexual desire, age, and psychological symptoms were the best predictors.

AT FIRST BLUSH: EMOTIONS ASSOCIATED WITH EARLY ADOLESCENT GIRLS' FIRST SEXUAL EXPERIENCES

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Recent theoretical efforts demonstrate that emotional reactions may diverge from cognitive assessments of risk (Loewenstein et al., 2001). As part of a larger investigation of romantic and sexual development among early adolescent girls, the current study addressed girls' anticipated and recalled emotions related to sexual experience over a one-year period, as well as their cognitive appraisals of future sexual experiences. Girls were recruited from community sites and agencies around New York City. The sample at baseline comprised 180 girls; 162 (90%) were assessed at follow-up. Girls were12-14 years at baseline. Most (61%) were Latina or African-American (33%). All girls resided in impoverished neighborhoods of New York City. Girls completed a battery of psychometrically sound measures tested extensively on this population. This interview included a measure of anticipated and recalled emotions associated with first sexual intercourse experience. Analyses compared anticipated emotions associated with intercourse (for girls with no reported sexual intercourse experience) to recalled emotions associated with intercourse (for sexually experienced girls). We then tested the predictive ability of anticipated emotions and cognitive appraisals of future sexual experience (i.e., perceived readiness, perceived likelihood, intentions) in predicting future sexual experience. Adolescent girls anticipated more negative emotions associated with intercourse than were actually recalled among those with sexual intercourse experience. Although intercourse was not a common experience in this young sample, the emotions that they experienced at first intercourse were almost exclusively positive. For example, they reported feeling lucky (88%), confident (88%), attractive (100%), secure (88%), pleased (87%), and generally positive about themselves (94%). Interestingly, they also reported feeling nervous (100%), but the majority of sexually experienced girls reported no other negative emotions. As expected, girls who anticipated more positive emotions at first sexual intercourse were more likely than girls who anticipated less positive (or more negative) emotions to transition to sexual experience over the one-year period. Of particular interest, anticipated emotional outcomes proved more useful in predicting early adolescent girls' participation in some type of sexual activity (i.e., involving at least genital contact) than were cognitive appraisals, including perceived likelihood and reported intentions to engage in sex. These findings demonstrate that a fuller understanding of adolescent girls' sexual outcomes must incorporate reports of associated emotional experiences. Interventions aimed at promoting healthy sexual outcomes must recognize that adolescents' sexual experiences are typically more positive than negative, and that stated intentions or personal predictions of future sexual experience might be unrelated to future experiences.

ANDROGENS AND TEMPERAMENT: ROUGH-AND-TUMBLE PLAY AND AGGRESSIVE BEHAVIOR IN GIRLS WITH CONGENITAL ADRENAL HYPERPLASIA (CAH)

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A role for prenatal androgens in the development of certain sex dimorphic behaviors in children has been well established. Researchers have consistently demonstrated that girls with CAH, who developed prenatally in an environment of excess androgen, display masculinized behavior. For example, when compared to unaffected girls, girls with CAH are more likely to be labeled by themselves and others as tomboys, to play with boys' toys and to choose boys as playmates (Alexander, 2003; Berenbaum & Hines, 1992; Ehrhardt & Baker, 1967; Maccoby & Jacklin, 1987). However, studies of other behaviors that show sex differences of similar magnitudes to that of toy choice and playmate preference have not reported similar effects of prenatal androgens. Rough-and-tumble and aggressive play show significant and consistent sex differences in normal children, but studies that have included levels of prenatal androgens as a variable, as with CAH females, have been few and yield inconsistent results. For example, in an observation study, Hines and Kaufman (1994) found no difference between girls with CAH and normal girls in rough-and-tumble play. By contrast, Dittman et al., (1990a) found that girls with CAH were reported by themselves and their mothers to show higher than average levels of rough, active, outdoor play. The purpose of the current study was to further investigate the relationship between prenatal androgen and rough-and-tumble and aggressive play. These behaviors were assessed using self-report and parent-report measures in 3- to 10-year-old children with CAH (38 girls and 29 boys) and their unaffected siblings (25 girls and 21 boys). Children were interviewed using the Preschool Playmate and Playstyles Structured Interview, and parents completed the Child Activity Level Questionnaire. The hypotheses were: (1) compared to unaffected girls, unaffected boys will report that they prefer more rough-and-tumble play and will be rated by their parents as more aggressive; and (2) compared to unaffected girls, girls with CAH will report that they prefer more rough-and-tumble play and will be reported by their parents to be more aggressive. The expected sex differences were found. Unaffected boys reported that they prefer more rough-and-tumble play than unaffected girls and were reported by their parents to be more aggressive. In addition, girls with CAH reported that they prefer more rough-and-tumble play and were rated by their parents as more aggressive. We conclude from these data that rough-and-tumble play and aggressive behavior in children are affected by prenatal hormones. Discrepancies in previous research are discussed.

THE ROLE OF ATTENTION AND AFFECTIVE RESPONSE TO SEXUAL CUES IN THE EXPERIENCE OF SEXUAL DESIRE AND SEXUAL AROUSAL

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Using startle response modulation and a dot detection task, this pilot study evaluated early affective and attention mechanisms in sexual desire. Consistent with Barlow's model of sexual functioning, we predicted that individuals with higher levels of sexual desire would display (1) a more strongly attenuated startle response to sexual pictures as compared to nonsexual pictures, and (2) slower dot detection of targets following neutral pictures when a sexual picture was present.

Dot detection and startle tasks were counterbalanced and presented to 11 women and 16 men. Four picture classes were presented in the startle task: sexual, nonsexual pleasant, neutral, and unpleasant.

Eyeblink amplitude differed according to picture class (F[3,24]=8.09, G-G<.001). Further analysis indicated that only the difference between sexual and neutral pictures was significant (F[1,25]=14.6, G-G<.001). A main effect of picture pair in the dot detection task (F[1,25]=5.486, G-G<.05) indicated an increased reaction time to probed, nonsexual stimuli when a sexual stimulus was present, suggesting that sexual pictures captured more attention that nonsexual pictures. 'Solitary sexual desire' (measured by the Sexual Desire Inventory) correlated with difference scores indicating greater attention to the sexual slides in those with higher desire (r = .50, p<.01). No significant correlations were found between startle responses and the SDI. In conclusion, these preliminary findings suggest that levels of sexual desire may be related to early attention, but not emotional, processing of sexual cues.

LAY DEFINITIONS OF A MONOGAMOUS SEXUAL RELATIONSHIP: A COMPARISON ACROSS GENDER AND COUPLE TYPE

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Background: HIV prevention messages often promote abstinence from sexual intercourse except in the context of a mutually monogamous relationship (e.g., Surgeon General's Report, 2001). However, research suggests that "sexual monogamy" is not always understood by recipients of these public health messages. Further, there is no clear definition of what constitutes a violation of a monogamous sexual relationship. As part of a qualitative study of intimacy in couples involved in new relationships, we asked participants for their definition of a monogamous sexual relations that would violate their definition.

Methods: Participants were 137 couples (N=274) who reported being involved in a steady relationship (46 male:male, 46 female:female, 45 male:female). The sample ranged in age from 18-38 and was predominantly African-American or White. Partners completed separate but similar confidential interviews. Participant responses were thematically content coded in accordance with principles of grounded theory analyses.

Results: (1) About 20% of the sample initially did not understand the term "monogamous sexual relationship," a finding that was particularly evident among men in heterosexual relationships (>40%). In contrast, only about 10% of men in gay relationships did not understand this term. (2) The dominant theme that emerged in participants' definitions was *sexual exclusivity* (nearly 80% of definitions): not cheating, not having sex with others. (3) The most common violation of monogamy was sexual contact of any type with another person (>80% of respondents), including kissing, penetrative intercourse, non-penetrative sexual behavior (e.g., masturbation, genital contact). (4) Other violations of monogamy that emerged included flirting, dating non-partners, violating trust or agreements about boundaries.

The salience of various monogamy violations differed across gender and couple type. (1) Sexual exclusivity themes were most common among men in gay relationships; least common among men in heterosexual relationships. (2) Men in gay relationships were most likely to mention any type of sexual behavior and most likely to specifically mention oral or anal intercourse. Men in heterosexual relationships were least likely to mention sexual behavior as a violation and rarely mentioned non-penetrative sexual behavior. Women, regardless of couple type, indicated that kissing was a violation more often than men. However, they were also more likely to explicitly state that this behavior was not a violation. (3) Trust and boundary violation themes were more common among women.

Discussion: These findings offer insight into lay interpretations of monogamy. Implications for public health promotion will be presented.

EXAMINATION OF SEXUALLY-RELEVANT LANGUAGE IN WOMEN WITH AND WITHOUT A HISTORY OF CHILDHOOD SEXUAL ABUSE

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Recently researchers have found significant connections between psychological diagnosis (e.g. depression) and both form and content of writing samples (Stone & Pennnebaker, in press). For example, greater improvement in health outcomes after writing about traumatic experiences is characterized by a greater variety of pronouns than writing not associated to health improvement (Campbell & Pennebaker, 2003). To date, no study has investigated the connection between language and the way sexuality is perceived and expressed.

In this study, we examined both content words (e.g. house) and form words (e.g. between) in the language used by sexually abused (SA) women and non-sexually abused (NSA) women. Three essays were analyzed: an original erotic-story provided by the experimenter, an accurate rewrite of the original story, and a creative story based on an ambiguous picture depicting a couple. The essays were analyzed with Latent Semantic Analysis, which compares similarities between an essay dyad (original/rewrite, picture/original, or rewrite/picture) on content words or form words. Based on studies of memory impairments as aftermath of SA we hypothesized SA women would show lower similarity coefficients in content for the rewrite/original story dyad. Also, based on studies that show survivors are more preoccupied with sexual matters, we expected SA women to have higher similarity coefficients for content in the erotic/picture story dyad.

The SA (n=33) and NSA women (n=47) did not differ in levels of sexual arousal, desire or negative affect experienced while reading the erotic-story. Similarity coefficients of essays dyads were regressed on SA and affect reported after reading the original erotic-story.

<u>Content words</u>: The regression that best explained variance in similarity coefficients between original/rewrite story included negative affect (_=-.366), SA (_=-.446), and the interaction between the two (_=.701). Also, the regression that better explained variance in similarity coefficients in the original/picture story dyad include negative affect (_=-.201), SA (_=-.048), and the interaction (=-.309).

Form words: A negative association (r=-.366, p<.005) characterized the relationship between negative affect and the strength of the similarity of form in the original/picture story dyad.

Negative affect impacted women's ability to reproduce form and content of erotic material. The higher the negative affect, the lower the similarity between the rewritten story and the original erotic story. When SA women reported negative affect, their ability to reproduce content of erotic material was significantly hindered. Paradoxically, when SA women did not experience negative affect, their ability to reproduce content was higher than NSA women. These results have clinical implications for developing cognitive therapies for the treatment of sexual dysfunctions secondary to CSA.

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THE EFFECT OF AUTONOMIC ACTIVATION ON SEXUAL AROUSAL IN WOMEN WITH A HISTORY OF CHILDHOOD SEXUAL ABUSE

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This study explored the potential role of a physiological component to the sexual dysfunctions experienced by childhood sexual abuse (CSA) survivors. Studies on the biology of trauma indicate that survivors have higher baseline sympathetic nervous system (SNS) activity and lower cortisol levels than controls (Southwick et al., 1999). Epidemiological studies on CSA report that survivors tend to develop sexual arousal disorders independent from the presence of PTSD. Research on the role of the SNS in female sexual physiological response suggests an optimal level of activity for the facilitation of physiological arousal (Meston & Gorzalka, 1995). It is feasible that heightened SNS arousal during sexual activity may raise the level of SNS activity of women with a history of CSA beyond the optimal level that facilitates physiological sexual arousal. It was predicted that, contrary to findings noted in sexually functional women (Meston & Gorzalka, 1995), women with CSA would experience decreased sexual arousal with heightened SNS activity. Explanatory analyses examined whether this would differ as a function of PTSD symptoms.

Women with a history of CSA (n=26) with and without PTSD attended two sessions during which they were exposed to a non-sexual/sexual video sequence. In one session they ran on a treadmill designed to increase SNS activity. During the videos data was collected on heart rate; physiological sexual arousal (vaginal pulse amplitude, VPA); and continuous subjective levels of sexual arousal. Trauma characteristics, PTSD symptoms, and sexual functioning were assessed during the study. A hierarchical linear model analysis was used to analyze individual regressions of the relationships between VPA, subjective sexual arousal, exercise condition, and PTSD.

As hypothesized, the exercise did not significantly increase VPA response to erotic videos (=-0.027, *t*=-0.47, *p*=0.634). The relationship between subjective and physiological sexual arousal was significantly weaker for PTSD compared to non-PTSD women (=-0.206, *t*=-3.050, *p*<0.005). Women with PTSD showed a trend towards decreases in their levels of subjective sexual arousal after exercise (=-0.1664, *t*=-2.011, *p*=0.061).

Women with a history of CSA showed no increase in physiological sexual arousal after heightened SNS activity, which contrasts findings in sexually functioning women. Additionally, women with PTSD showed a weaker relationship between physiological and psychological sexual arousal than asymptomatic women, indicating a possible body-mind desynchrony which has also been reported in narrative reports of trauma survivors (Briston, 2002).

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WHY DO SOME MEN SOUND GAY? THE RELATIONSHIP BETWEEN SPEECH AND CHILDHOOD GENDER NONCONFORMITY

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There is a widespread belief that some men's sexual orientation can be judged on the basis of their voice (i.e. that some men "sound gay"). Previous studies, although relying on small samples, have found that listeners can indeed detect male sexual orientation at above chance levels based on short excerpts of speech (Gaudio, 1994; Linville, 1998). One currently untested explanation proposed by these studies is that gay sounding speech arises as a social marker of membership in the gay male community. This seems unlikely for several reasons: first, a sizable percentage of gay men do not sound gay; second, gay sounding speech appears to emerge *before* self-awareness/identification of sexual orientation); and finally, the social costs to gay sounding speech (i.e. stigmatization, disdain for feminine partners) would seem to outweigh the benefits, at least for most gay men.

The purposes of the present study were to replicate the finding of speech differences between gay and heterosexual men using a larger sample and to test the social origins hypothesis of gay sounding speech against an alternate hypothesis, that gay men adopt female-typical speech patterns early in life. Gay and heterosexual male participants read an excerpt from a play that served as the voice sample. They also completed a questionnaire regarding recalled childhood gender nonconformity and, for gay men only, an "outness" inventory that assessed the degree to which they openly self-identified as gay. A second group of participants then listened to the voice samples and rated the speakers on how "gay" they sounded. Presumably, if gay sounding speech emerges as a social indicator of being a gay male, it should correlate with outness. Alternately, if gay sounding speech emerges in childhood because prehomosexual boys copy and adopt certain speech patterns more typical of females, then it should correlate with childhood gender nonconformity.

The results indicate that the speech differences between gay and heterosexual men are indeed large in effect size, replicating the findings of previous studies. Furthermore, for gay men, gay sounding speech was not related to outness but was correlated with childhood gender nonconformity. The results are consistent with the hypothesis that gay sounding speech emerges in childhood, much like an accent. However, it is also possible that there is a more direct neural mechanism that causes both childhood gender nonconformity and gay sounding speech.

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WHAT MAKES THEM BUTCH OR FEMME? SEX ATYPICALITY AND ATTRACTIVENESS OF GAY MEN AND LESBIANS.

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Most homosexual people are attracted to sex-typical partners as opposed to sex-atypical partners. However, it is unclear which specific sex-atypical traits gay people consider unattractive. Anecdotes suggest that sex-atypical mannerisms, speech, and appearance are all important determinants of attractiveness among gay men, if a man is considered as a potential mate. The same traits seem to be less important if a man is considered as a friend. Lesbians might be more affected by sex-atypical appearance of a potential partner. In two studies (n = 102, and n = 119, respectively, equally split by sex and sexual orientation) we analyzed that gay men and lesbians differ, on average, from same sex heterosexual people in both their mannerisms and speech patterns. Furthermore, lesbians and heterosexual women differ in their appearance. A further, initial analysis of the second study examined the effects of sex-atypicality on a man's attractiveness. For both gay and heterosexual men sex atypical mannerisms and speech patterns had a significant negative impact on their attractiveness whereas the same traits did not affect whether people would like to be friends with these men.

Psychosexual development and sexual experience in adult females with congenital adrenal hyperplasia: Preliminary findings in a Danish follow-up study.

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Introduction: Prenatal exposure to steroid hormones during critical periods affects sexual differentiation of brain and behavior permanently in humans as well as in non-human animals. In particular, androgens and their metabolites have been found to influence reproductive and non-reproductive behavior. In humans, the prenatal hormone hypothesis has been studied in individuals with congenital adrenal hyperplasia (CAH), an autosomal recessive disease causing excess androgen production commencing early in fetal life. Consequently, many CAH females are born with some degree of virilized genitals that are often surgically corrected during development. Compared to control samples, women with CAH generally report delayed attainment of psychosexual milestones, reduced sexual activity, and increased rates of non-heterosexual orientation.

Method: 23 CAH women with 21-hydroxylase deficiency participated in a Danish follow-up study of adult intersex females. Information on sexuality was derived from a structured interview. Responses to items on sexual development and sexual behavior were evaluated by comparing to those of an age-appropriate group of 200 non-clinical females.

Results: In comparison to the non-clinical women, females with CAH reported overall later commencement of sexual activity, which was significant for age at first intercourse and at first steady relationship. CAH women also reported less sexual experience and activity, particularly revealed in significantly reduced lifetime number of steady relationships, lower frequency of intercourse within the last year, and fewer patients being in a steady relationship at the time of the interview. In addition, significantly more CAH females reported non-heterosexual experience and orientation. For masturbation, responses did not differ from the non-clinical females. **Discussion:** Adding to existing reports of sexuality in women with CAH, the current findings support indications of altered sexual behavior in this group of females. This is revealed in delayed and decreased sexual activity with a partner as well as higher incidence of homo- or bisexuality. Whereas the preliminary findings for sexual orientation appear to agree with the prenatal hormone hypothesis, further analyses are needed to clarify to what degree hormonal, medical, and psychosocial aspects account for the data presented here.

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SEXUAL RESPONSE IN MEN WITH INHIBITED EJACULATION

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Inhibited ejaculation (IE) is a poorly understood male sexual dysfunction having both somatic and psychological etiologies. This study investigated sexual response in 25 IE men with no probable somatic cause. Using a standard psychophysiological assessment procedure, these men were compared with sexually-functional and other dysfunctional groups on two measures of sexual response: erectile response and self-reported sexual arousal. Within the sample of IE men, sexual response was investigated as a function of both diagnostic classification and relationship factors. Differences occurred between IE men and the other groups on erectile response and self-reported sexual arousal during psychosexual stimulation in the lab, with IE men reporting lowest levels of sexual arousal. Within the IE group, diagnostic classifications and relationship variables were also related to self-reported sexual arousal. These findings suggest that inhibited arousal may be fairly common among IE men having no apparent somatic etiology, and further, that several specific relationship factors may provide potential strategies for enhancing arousal in these men.

WOMEN'S EXPERIENCES OF ERRORS AND PROBLEMS WHEN USING MALE CONDOMS

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Consistent and correct condom use is a primary strategy recommended for preventing sexually transmitted infections (STIs) as well as pregnancy. Male condoms have often been viewed as male controlled and relatively little is known about women's experiences putting condoms on their male partners. Many studies have assessed consistency of condom use, but only a few have assessed condom use errors and problems as reported by women and these did so in a limited fashion. Data will be presented for women who completed detailed questionnaires assessing condom use for the past 3 months, with particular attention to errors and problems when using male condoms that could compromise the efficacy of condoms for prevention of unwanted pregnancy or (STIs). Participants were college women at least 18 years old who had oral, vaginal, or anal sex with a man at least once in the previous 3 months.

The first study, involving 533 women, assessed consistency of condom use, how often women put condoms on their male partners, and differences among the following three groups: 1) women who applied condoms on their male partners (appliers), 19.1% of the sample; 2) those who used condoms but did not apply them (non-appliers), 41.3%; and 3) those who reported no condom use (non-users), 39.6%. Those who applied condoms did so an average of 59.7% of the times they used condoms.

A second study examined the condom use errors and problems reported by the appliers. 28% reported breakage, slippage or both. 25% reported that their partners lost erections in association with condom use. Five hypotheses were tested; that women reporting fewer overall errors in condom use would be: 1) more likely to report ever being instructed about correct condom use, 2) primarily reliant on condoms as a method of contraception, 3) less likely to report condom breakage or slippage, 4) less likely to report that their partners had condom-associated erectile problems, and 5) more likely to report consistent use of condoms. Hypotheses 1-4 were confirmed. Sizeable proportions of the sample reported a lack of availability of condoms or lubricants when they were desired and a number of technical errors related to condom use.

These findings highlight the importance of educating women as well as men about correct condom use, in addition to promoting consistent condom use. Directions for future research on the topics will be discussed.

SEXUAL ORIENTATION AND GENDER: STEREOTYPES AND BEYOND

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The relationship between gender and sexual orientation has been theorized and explored for over a hundred years. After discussing definitions of sexual orientation and gender, and the problems they pose for studying this relationship, I will review ways in which this research has been done and discuss some of the outcomes of these studies, predominantly focusing on male homosexuality. Particular attention will be paid to the first major empirical study, carried out by Terman and Miles in the 1930s. They were the first to develop a scale to measure masculinity and femininity, conceived as a bipolar phenomenon. This study sheds specific light on the question whether, in terms of gender, homosexual people are a specific kind of people. Subsequent research, predominantly using the Bern Sex-Role Inventory and the Personal Attributes Questionnaire, looked at masculinity and femininity as two separate dimensions, conceptualizing the relationships between sexual orientation and gender in terms of androgyny. More recent work stresses on the one hand, the multidimensionality of both masculinity and femininity, while Lippa's bipolar Genderdiagnosticity approach, on the other hand, seems to be able to completely distinguish between homosexual and heterosexual people. Most studies limit themselves to determining the relationship of homosexuality to masculinity and femininity. A new perspective on the relationship between sexual orientation and gender will be presented, which goes beyond this approach by asking additional and more complex questions. This new approach has important consequences for mental health and quality of life issues.

FIRST SAME-SEX ATTRACTIONS AMONG YOUNG SEXUAL MINORITIES

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A review of 50 years of empirical studies assessing the age of same-sex attractions among lesbian, gay, and bisexual individuals is presented, with a critique of methods and populations sampled. Overall, there is a clear trend for the average age of first same-sex attractions to decrease over time, from mid-adolescence (late gonadarche) to late childhood (adrenarche); for greater cross-sexual orientation attractions among girls; for earlier same-sex attractions among boys; and for earlier same-sex than different-sex attractions for gay- and lesbian-identified children, but not for bisexual-identified children of both sexes. These trends are contrasted with the limited data available on heterosexuals. Missing from the literature, however, is how these attractions change over time, what motivates the attractions, what are the contexts in which they occur, the significance of the attractions, and how these vary by sexual orientation and gender. To address several of these shortcomings, an in-depth interview of 164 young adults is reported. The most common memory of same-sex young women (41%) was of a crush or infatuation with another female; of young men, sexual thoughts, dreams, or arousal (33%). Less common and with no sex differences were fascination with same-sex others, sexual behavior, admiration of the physical beauty of women/men, and desire to touch a female/male. These motivating factors varied depending on the age when they were first recalled. For example, young women recalled more fascination and infatuations during early childhood but sexual curiosity and behavior during early adolescence. Needed are similar data on heterosexual women.

SEXUAL ATTRIBUTIONAL STYLE IN MEN WITH AND WITHOUT ERECTILE DISORDER: EVIDENCE FROM A SEX-SPECIFIC ATTRIBUTIONAL STYLE MEASURE

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According to Barlow's (1986) model of sexual functioning, sexually functional and dysfunctional men differ in their cognitive and affective responses to sexual situations in terms of affect, locus of control, and expectancy. Men without sexual dysfunction have been found to possess a 'resistance to a dysfunctional mentality' seen in men with sexual dysfunction (e.g. Abrahamson et al., 1985). This 'dysfunctional mentality' is characterized by the maintenance of negative expectancies regarding sexual performance situations, and presumably, a pessimistic explanatory style regarding sexual events. To specifically investigate the expectancies and explanatory style of men with erectile disorder regarding sexual versus nonsexual situations, the Attributional Style Questionnaire (ASQ; Peterson et al., 1982) was modified by embedding 8 hypothetical sexual events (4 positive, 4 negative) among the original 12 events in the ASQ to create the Sex-ASQ. The perceived cause of each event is then rated along the three attributional dimensions of internality, stability, and globality, as well as level of importance. A previous study (Weisberg et al., 1998) found that scores on the negative sexual event scale of the Sex-ASQ were found to differentiate between men with and without erectile disorder. The purpose of the present study was to further investigate the attributional styles of men with and without sexual dysfunction regarding both positive and negative sexual and general events, and to examine the preliminary psychometric properties of the Sex-ASQ.

The Sex-ASQ was completed by 21 men (mean age = 35.2 years) with a primary DSM-IV diagnosis of Male Erectile Disorder (MED) and 32 male control participants (mean age = 31.7 years) as part of a larger study. A subset of 23 men completed the Sex-ASQ on a second occasion, two weeks later for the purpose of evaluating test-retest reliability. As predicted, men with erectile disorder made more internal, stable, and global causal attributions for negative sexual events than men without sexual dysfunction, but they did not differ in attributional style for positive sexual events. Men with MED also rated the importance of negative sexual events higher than men without sexual dysfunction. Also as hypothesized, men with erectile disorder did not differ significantly from men without sexual dysfunction in their causal attributions for general events, indicating that both groups exhibited optimistic attributional styles in general. The psychometrics of the Sex-ASQ were found to be satisfactory, with the negative sexual event scales demonstrating higher reliability and internal consistency than the positive sexual events scales.

ANDROGYNY IN INDIAN CULTURE: PSYCHOANALYTIC IMPLICATIONS

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This article is an inquiry into the concept of androgyny as seen from traditional Indian Hindu perspective, with exclusive focus on androgyny in males who are accustomed to viewing androgyny as a positive trait, not pathological, in contrast to Westerners who are more likely to view it as abnormal. Hindu males conceive of it as a combination of male and female character traits, adding up to perfection, unlike the Western conception which views it as a freakish abnormal combination of sexual organs. Androgyny is frequently depicted in Indian art and observable in everyday behavior. The author investigates possible causes for the different attitude in Indian culture in marriage patterns and intra-familial relationships.

The author sees a special mother-son relationship as rooted in women's adaptation to the traditional Hindu marriage system. Young girls grow up expecting to relinquish membership in their own families, at a relatively young age, to henceforth belong to the family of their husbands, whom they will not have come to know before the wedding day. Sometimes the young people become fond of one another. Sometimes the relationship is unfulfilling. Often the young woman, who comes under the authority of her mother-in-law is treated like a servant, until she bears a child, especially a male. Only then is she respected and has a full a place in the family. The young bride's emotional needs for closeness are often centered on the male child that has bestowed status and respect in the new family. She now has the chance for an emotionally mutual relationship with her son. When her son marries, he does not leave the household as she had to, but he remains in her house and brings his bride to live with her. She is now free to love. An exceptionally strong bond is traditional between mothers and sons.

Sons of such mothers often have difficult struggles when confronted with the less protective and more demanding male world at the age of 5 or 6. They work hard to achieve a masculine identity; their Hindu religion demands that they produce children and preserve the family continuity. They also hold on to highly pleasurable aspects of an earlier feminine identification with mother. The culture approves of this adaptation, unlike some Western cultures, which expect a total identification with one gender or the other. Indian culture permits a healthy combination of the two and is not expected to result in "abnormal sexual behavior" as anticipated in some Western cultures. Early marriage is of course mandated, and homosexuality is abhorred, for fear that a family might remain childless. However, after children have been produced, sexual variations are likely to be quietly tolerated, especially if carried out discreetly.

Indian men seem able to carry simultaneous masculine and feminine identifications without fear of this being pathological or that it will lead automatically to homosexuality. Psychotherapists have noted a remarkable degree of fluidity in Indians' dreams (as well as in the cultural mythology), involving changes in their own gender, that do not seem to upset the dreamer. These changes are likely to be viewed as ways of expressing love toward parents or loved persons, of both sexes.

SOCIOSEXUALITY ACROSS 48 NATIONS: A CROSS-CULTURAL STUDY OF SEX, GENDER EQUITY, AND THE REPRODUCTIVE ECOLOGY OF HUMAN MATING STRATEGIES

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As part of the International Sexuality Description Project (Schmitt et al., 2003), the Sociosexual Orientation Inventory (SOI) was translated from English into 25 additional languages and administered to a total sample of 14,059 people across 48 nations. Responses to the SOI were used to evaluate several theories concerning the systematic distribution of sociosexuality across cultures. Both operational sex ratios and reproductively demanding environments were related in evolutionary-predicted ways to national levels of sociosexuality. Sex differences in sociosexuality were found to be cross-culturally universal, confirming several evolutionary theories of human mating. Finally, sex differences in sociosexuality were significantly larger when reproductive environments were demanding, and appeared attenuated-though never eliminated--in cultures with more political and economic gender equality.

BEHIND THE MASK OF THE MATTACHINE: SEXUALITY AS THE HIDDEN NARRATIVE OF THE GAY MALE MOVEMENT IN AMERICA

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The Mattachini, of medieval Italy, were fools or court jesters who stood up in the midst of political oppression and persecution and dared to speak the truth in the interests of the common folk. Thus, when a handful of gay men (led by the intellectually-inclined, Harry Hay, and the grassroots organizer, Churck Rowland) with a history of communist sympathies and labor activism organized in the early 1950s, it was their idea to organize the homosexual within/against the context of McCarthyism and suburban heterodoxy.

As the Mattachine was transformed from a secretive guild-like foundation to a membership society (led by the religiously-inclined, conciliatory Ken Burns and the loutish professional journalist, Harold Call,), it aimed at empowering the homosexual and transforming professional attitudes about homosexuality through conferences, newsletters, a journal, social services, book publishing, group therapy sessions, lectureships, public meetings. In the process, it lost is political radicalism; slowly it embraced sexual liberation. Beginning in the early 1960s, however, Call and his related publications moved toward greater emphasis on the sexual, challenging book censorship, and government intrusion in male-male erotica in the courts. From operating *Dorian Book Quarterly*, Grand Prix Photo Arts, Adonis Bookstore, and CineMattachine to *United States of America vs. Lloyd Spinar and Conrad Germain*, and relationships with H. Lynn Womack (Guild Press), Bob Mizer (Athletic Model Guild), Clark Polak (Janus, *Drum*) and Wardell Pomeroy of the Institute for Sex Research, Call was a pivotal in bridging Logos with Eros in the movement for homosexual rights.

Although the general history of the Mattachine Society was chronicled a generation ago (D'Emillio, 1983), the sexual and sexualized has neither been documented by historians nor embraced by gay rights activists. The canonical narrative of the gay movement in America (that began with formation of the Society for Human Rights in 1924) is one of strategic and philosophical struggles rooted in geographic rivalries. Personal squabbles, competing egos, sexual intrigues, and petty jealousies, however, played major roles in these strategic and philosophical struggles. Yet, the role of the phallus and phallocentric thinking has seldom informed scholars' understanding of gay history. Dionysian desire sets uncomfortably with passion for respectability; Logos does not embrace Eros. We march for equal rights, not the right to fuck. This Jekyl and Hyde-like persona is evident in the treatment of sexual expression and desire by writers of homosexual history, culture, and biography. Profiles of gay leaders are often granite erections in a sanitized history devoid of psychosexual insight.

In my new book, *Behind the Mask of Mattachine* (Sears, forthcoming), I argue that libidinal energy fueled thepre-Stonewall homosexual emancipation movement (both in the U.S. and Germany). Specifically, I offer three propositions about the gay rights movement:

- 1. Stonewall was both cause and effect. Primary interest on its effects has clouded its causes that were rooted in the sexual struggles of *men* (the role of women was marginal and tangential to the homophile movement). Without sexual desire, psychological repression, and institutional oppression creating a dysfunctional infrastructure there would have been no Stonewall;
- 2. The behind-the-scenes politics of the pre-Stonewall gay movement were driven as much (or more) by jealousy, distrust, settling of scores, and carnal desire as it was by differences in philosophies, strategies, or tactics;

3. Across three generations of homosexual organizers (i.e., , Magnus Hirschfeld & Benedikt Friedländer; Henry Gerger & Manuel boyFrank; Harry Hay and Hal Call), the struggle within the homosexual movement was divided not only between liberationists and assimilationists but between those who embraced sexuality *and* connected it to social change (homosexual/queer freedom fighters) vis-à-vis those who cloaked Eros in respectability pursuing sexual reform and restraint devoid of sexual critique and celebration (homophile/gay rights advocates).

References:

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FROM THE WORLD RESEARCH NETWORK ON THE SEXUALITY OF WOMEN & GIRLS TO THE CAMPAIGN FOR A NEW VIEW OF WOMEN'S SEXUAL PROBLEMS: THE VICISSITUDES OF FEMINIST SEXOLOGY

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A World Research Network for the Sexuality of Women and Girls (WRNSWG) was begun in August, 1991 after the 10th World Congress (WAS) for Sexology in Amsterdam by Leonore Tiefer, Gayle Beck, and Ellen Laan. It grew out of a decade of casual and then more formal meetings of a "Feminist Forum" at IASR that dealt primarily with issues of underrepresentation of women in IASR membership, leadership, and program. At its peak, WRNSWG had 75 members. It produced a newsletter for several years and held five small research conferences (Provincetown, 1995, Amsterdam, 1996, New Orleans, 1997, Valencia, 1997, and New York, 1999). The conferences featured poster sessions and research discussions on issues of theory, methodology, funding, and publication.

Beginning in 1999, the rise of a new urology-based female sexual medicine posed new challenges, and in 2000, a new multidisciplinary group was formed to take a public role in responding to and shaping developments in women's sexual medicine. The Campaign for a New View of Women's Sexual Problems has held its own 140-attendees conference (2002), produced a book (2002) and a teaching manual (2003), maintained an educational website (http://www.fsd-alert.org), sponsored and organized professional conference presentations (at conferences in sexology, women's studies, women's health, women's policy, sociology, psychology, and science and technology studies), published several papers, and interacted with the health and science media. It has a mailing list of several hundred, including over 100 endorsers of its primary "new view" document.

The aim of this poster is to promote reflection on the vicissitudes of feminism in sexology. Memorabilia from WRNSWG and publications and documents of the New View Campaign will be on view.

WHEN DO WOMEN WANT? ELUCIDATING DEVELOPMENTAL DIMENSIONS OF SEXUAL DESIRE

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While adolescence is a time when female sexual behavior has been subjected to intensive scrutiny by researchers from numerous disciplines, the world of sex research has had notably little to say, especially about the normative development of sexual desire among women. My consumption of research on adult women's sexual desire is infused with my focus on female adolescents' experiences of sexuality in general and desire in particular, using survey and phenomenological interview methods. In this presentation, I will connect some dots that have begun to emerge for me through this lens. Linking the recent emphasis on "desire disorders" among adult women (and their possible pervasiveness) with female adolescent sexual experiences, I will elucidate potential developmental pathways from girls' negotiations of "dilemmas of desire" in adolescence to what may be unidentified continuations of such dilemmas in adulthood (aka sexual dysfunction). The social contexts of the development of female sexuality will be an anchor of this presentation, concluding with a consideration of how different dimensions of desire may be studied from a developmental perspective employing various, even contradictory, theories and methods.

SEX, LIES, AND BETRAYAL: EMOTIONAL REACTIONS TO SEXUAL REJECTION—AN EVOLUTIONARY VIEW

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Some evolutionary theorists posit that the strong feelings surrounding heterosexual relationships evolved to promote pair-bonding and guard against strategic interference. Because the minimal parental investment for females is vastly greater than that of males, the sexes evolved disparate sexual strategies and different emotional reactions to different events. This paper draws on the following samples to discuss gender differences in emotional reactions to sexual rejection or betrayal: 3000 questionnaires from undergraduates and law students, and indepth interviews with 50 medical students and 250 married and divorced adults on both coasts, median age, 35.

Significant gender differences appear in the following: (a) motivations for initiating, maintaining, and ending sexual relationships; (b) the importance of sexual intercourse in determining reactions to betrayal/rejection and/or breakups; (c) the use of physical violence; (d) modes of healing and recovery.

Certain gender differences appear to be universal, but cultural factors moderate people's reactions to rejection and breakup; consequently, the magnitude of some gender differences varies cross-culturally. Both sexes tend to react strongly to loss of control over relationships (i. e., their partners decide what and when to terminate); both sexes may mourn the loss of a partner through breakup much as they would mourn a loss through death; and both men and women can resort to physical violence, although the incidence and level of violence are higher for men. Methodological and theoretical implications are discussed.

ARE FEMALE JAPANESE MACAQUES THAT ENGAGE IN HOMOSEXUAL BEHAVIOR MASCULINIZED? AN ANALYSIS OF MALE-FEMALE AND FEMALEFEMALE MOUNT POSTURES

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In some captive and free-ranging populations, unmanipulated female Japanese macaques (Macaca fuscata) routinely court, mount (with pelvic thrusting), compete for, and even prefer certain female sexual partners over certain males. The unusual nature of their sexual behaviour suggests that female Japanese macaques have been behaivourally masculinized. To test this possibility, we compared male-female and female-female mounting postures. If female Japanese macaques that routinely mount have been behaviourally masculinized, then they should demonstrate mount postures similar to the ones employed by male conspecifics. Over 100 hours of videotape data of male-female and female-female mounting interactions were collected on free-ranging, Japanese macaques at Arashiyama, Japan. Our analysis of mount positions demonstrates that male Japanese macaques overwhelmingly employ one type of posture: the double-foot clasp mount with pelvic thrusting. In contrast, although females also perform this type of male-typical mount, they often employ a much wider diversity of mount postures including sitting mounts, lying mounts and standing mounts, with and without pelvic thrusting. In light of these results, we preformed a Laban Movement Anlaysis (LMA) of male and female double-foot clasp mounts. LMA is a universal language for movement that was developed for describing the quantitative features of movement, such as the changes in the relation of the body segments, as well as its qualitative features, such as the intensity of movements. Preliminary results suggest male double-foot clasp mounts differ, both structurally and qualitatively, from those of the females. During double-foot-clasp mounts, females seem to position themselves higher on the mountee and perform a greater number of postural movements than males. Furthermore, during pelvic thrusting, male mounters display movement in the upper torso as well as in the pelvic girdle, whereas in females, thrusting movements seem to be limited to the pelvic girdle and the lower back. Although further analysis of the data is necessary to confirm these findings, it appears that these differences in movement may be due to the anatomical differences in the location of the genitalia in male and female Japanese macaques. Taken together, these data suggest that female Japanese macaques do not mount in a male-typical manner.

CONTEXTUAL AND GENDER EFFECTS ON THE NUMBER AND TYPES OF WORDS COLLEGE STUDENTS USE FOR MALE AND FEMALE GENITALIA

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In an expansion of previous research (Shideler, Gaither, & Sellbom, 2002) which found that individual difference characteristics affected how sexual and double-entendre words were perceived, the current study examined whether context had an effect on the number and types of sexual words college students report using in conversation. One hundred eighty-three undergraduate students (66 % female) completed an online questionnaire containing demographic items (including sexual orientation), the Sexual Opinion Survey, and several items on which they were asked to provide words that they would use to refer to male and female genitalia, different sexual acts, orgasm, and condoms in different contexts (i.e. with parents, same-sex friends, a mixed sex group of friends, and a lover/partner). In the present paper, we examine differences in the number and types of words participants provided for male and female genitalia. Using a mixed factor ANOVA with two within-subject factors [type (male vs female genitalia) and context] and one between-subject factor (participant sex), we found statistically significant main effects for context and type, which were qualified by significant context x type and context x gender effects. As expected, men provided more words than women, though this difference was most apparent in the contexts of friends. Results are discussed in the context of gender differences in sexuality, and their implications for high-risk sexual behavior, date rape, and sexual harassment.

GENDER-RELATED NEUROPSYCHOLOGICAL TRAITS IN 46,XX CAH

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Background: CAH due to 21-hydroxylase (21-OH) deficiency results in both a reduced production of cortisol and an increased production of precursors to cortisol (i.e., adrenal androgens and 17-hydroxyprogesterone). When 21-OH deficiency is severe the result is the salt-losing (SL) form of CAH, and when 21-OH deficiency is mild the simple-virilizing (SV) form develops. Thus, individuals affected by the SL form of CAH are exposed to greater concentrations of androgens and 17-hydroxyprogesterone than those affected by the SV form in the absence of medical treatment.

Hypotheses: Visuospatial tasks sensitive to testosterone can show large effect sizes (0.7) between men and women, while fine motor tasks sensitive to estrogens show more modest effect sizes (0.3) between the sexes. If exposure to androgens during early development, prior to glucocorticoid replacement, contributes to less female-typical neuropsychological performance, then performance by SL women should differ more than that of SV women from controls. If exposure to androgens later in development contributes to neuropsychological performance, then medical compliance with cortisol replacement at testing could impact behavior regardless of SL or SV status.

Methods: Performance on neuropsychological tests was assessed in a total of 41 women, 24 affected by CAH (SL = 13, SV = 11) and 17 controls, ages 21-71 years. Pre-morbid intelligence was assessed with the National Adult Reading Test (NART) and working memory was measured with the Digit Span Forward and Backward tasks. Verbal memory and visual memory were measured with the Hopkins Verbal Learning Test (HVLT) and Rey Complex Figure-Delayed Recall respectively, and visuospatial ability was determined by performance on a 3-D Mental Rotation task. Executive Function was measured with the FAS Verbal Fluency test and the Trails A & B tests. Finally, the Identical Pictures test was used to assess fine motor performance. Endocrine labs were drawn following a 12 h fast.

Results: Age and IQ did not differ between groups. Women with CAH were more likely to have elevated 17-hydroxyprogesterone ($?^2(1) = 13.54$, p < 0.05) and testosterone ($?^2(1) = 4.71$, p < 0.05) concentrations than controls at the time of testing. Generally, SL women had higher concentrations of these hormones than SV women, but these differences did not reach statistical significance. Medical noncompliance with cortisol replacement was equally distributed between SL and SV women. Women in the SV group had poorer verbal memory scores compared to the SL and control groups (F(2,35) = 3.58, p < 0.05). CAH women tended to perform better on verbal memory tasks when their 17-hydroxyprogesterone (F(2,35) = 2.5, p = 0.09) and androgen (F(2,35) = 3.04, p = 0.06) concentrations were elevated above the normal range (>500 ng/ml and >120 ng/dl respectively). Apart from verbal memory, performance did not differ between groups on the cognitive tasks.

Conclusions: We did not observe group differences on tasks that are influenced by sex steroids, such as 3-D Mental Rotation, despite the elevated androgen concentrations in CAH women during perinatal development and at the time of neuropsychological testing. SV Women exhibited the worst performance of all groups for verbal memory, and CAH women who were noncompliant with their cortisol replacement performed better than their counterparts who were compliant on this task. We interpret these data as evidence that verbal memory is negatively affected by glucocorticoid treatment in women with CAH due to 21-OH deficiency. We

speculate that this is a result of over-treatment, and other patient populations with excess cortisol exposure exhibit similar patterns of performance on tasks of declarative verbal memory.

REJECTION IN THE JAPANESE CULTURAL DISCOURSE: A COMPARATIVE PERSPECTIVE

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Japanese culture has a number of narratives featuring a spiteful female ghost aiming at revenge. Curiously, it has always been women (and gay men), not heterosexual men, who appear as ghosts. In my paper I will be discussing two such folk stories, Of a Promise Broken (1896) and Reconciliation (1904), retold by a modern American writer, Lafcadio Hearn, in order to give a comparative analysis of how the imagination of terror, concerning rejection, is constructed across the border. I will demonstrate how Hearn (and subsequently, a contemporary Japanese critic) had to rationalize the story of a woman's revenge, re-reading it into a narrative of reconciliation on the basis of the Victorian, patriarchal sense of morality, thereby, acquitting a man of the feeling of guilt, arising from deserting a woman/wife, and how such re-reading can be subverted from a women's point of view. I will further relate such a narrative to contemporary stereotypes of docile women who submit to the fate of being deserted, dictated in various media and internalized by women themselves, can be, nonetheless, ambiguous.

SEXUALITY IN THE PROCESS OF JAPANESE MODERNIZATION_THE HISTORICAL SITUATION OF RAPE_

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The following expression is often used about sexual violence or rape: sexual violence, unlike other violence, is an act that tramples down a victim's dignity itself. In other words, the victims of sexual violence or rape suffer "the greatest insult". Surely, it is positively proved that the victims sustain not only physical scars but also mental ones. However, why are sex and dignity connected so deeply? How was the view that sex is located at the core of human dignity produced?

Matsuura Rieko indicates that, if one emphasizes that rape victims receive "the greatest insult", it pleases rapists because this is precisely what they want. It can be said that Matsuura's view is epoch-making in that it reversed the dominant image of rape. However, at this thesis seeks to prove, the discourse that links sex and dignity was not monolithic from the beginning.

The neologism "Ren'ai" was made in Japan to translate the imported idea of Western love, and came to define man and woman's new relationship in the second half of the 19th century. While eliminating the "Iro" accompanied by carnal lust, the thought that idealizes a spiritual "Ren'ai" which respects a partner's "dignity" appeared. This was the beginning of the view that connects dignity to sex.

The virginity and chastity dispute, which took place in 1914, showed this symbolically. Hiratsuka Raicho and Yosano Akiko advocated the "ideal" relationship in which sex and love were connected, whereas Ikuta Hanayo, Yasuda Satsuki, and Ito Noe pointed out the "reality" that sex and love were not always connected, as in the situation of rape.

In several magazines of the Taisho era, it was emphasized that the victim of rape has "an unguarded moment", so that she is at fault. However, it also stated that women should have "the strength" that adhered to neither virginity nor chastity. Arishima Takeo and Ito Noe promoted the method of coping with the "reality" of rape. The view of rape victims that dignity should not be connected with sex was already expressed when dignity was connected to sex by the virginity and chastity dispute.

The stronger the trend that respects virginity or chastity becomes, the more those who lost their virginity or chastity against their will will be scorned. Although the observation of Matsuura was important in this respect, in fact, the negative attitude toward the idea that dignity is connected to sex has continued since the Taisho era.

GENDER-RELATED BEHAVIOR IN GIRLS WITH OR WITHOUT SOMATIC INTERSEXUALITY

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It is well-established that girls who have been exposed to excessive amounts of prenatal androgens relative to unaffected control girls show more masculinized sex-dimorphic behavior (e.g., toy play, activity level, etc). This has been shown most regularly in genetic females with congenital adrenal hyperplasia (CAH) when compared to unaffected female siblings and cousins. There is also some evidence that genetic males with various androgen resistance syndromes (e.g., mixed gonadal dysgenesis, partial androgen insensitivity syndrome) who are raised as girls also show masculinized sex-dimorphic behavior although these groups have been studied less systematically than girls with CAH. Lastly, there is indication that genetic males with cloacal exstrophy (CE) who are raised as girls also show masculinized sex-dimorphic behavior. Regarding gender identity or gender dysphoria, the literature suggests that most girls with CAH or androgen resistance syndromes have a relatively "typical" female gender identity although there is clear indication of individual differences. For girls with CE, the literature suggests much more variation in gender identity, including reports of "spontaneous" gender change during childhood.

The present study examined gender role and gender identity in girls with CAH (N = 10), in girls with partial androgen resistance syndromes (N = 11), and in girls with CE (N = 4). We compared these girls to two comparison groups: clinic-referred girls with gender identity problems (N = 48) (who have no known indicators of somatic intersexuality) and control girls (maximum N = 202) (siblings of both boys and girls with gender identity problems, clinic-referred girls, and non-referred girls).

The results showed that both the clinic-referred girls with gender identity problems and the girls with physical intersex condition had significantly more masculinized gender role behavior than the control girls. On some measures of gender role behavior, the clinic-referred girls with gender identity problems and the girls with physical intersex condition did not differ significantly, but on other measures the clinic-referred girls with gender identity problems were significantly more masculinized than the girls with physical intersex conditions. On measures pertaining to gender identity or gender dysphoria, the clinic-referred girls with gender identity problems were significantly more gender dysphoric than were the girls with physical intersex conditions.

The results of this study will be discussed, in part, in relation to the principles of equifinality and multifinality as they might apply to the mechanisms that underlie psychosexual differentiation.