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Abstracts

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ALTRUSTIC TENDENCIES TOWARD NIECES AND NEPHEWS IN CANADA. A NEW MEASURE AND ITS IMPLICATIONS FOR THE KIN SELECTION HYPOTHESIS

Miranda Abild, Doug VanderLoon & Paul Vasey

Background: The Kin Selection Hypothesis proposes that the genetic component of male androphilia (i.e., sexual attraction/arousal to adult males) may persevere over evolutionary time if the fitness costs of not reproducing directly are offset by increasing one's indirect fitness. Theoretically, this could be accomplished by allocating altruism toward kin, which would increase their ability to reproduce. Evidence for this hypothesis has been garnered by research conducted in Samoa, however, no support has been garnered from other cultures (i.e., USA, UK, Japan).

Method: Previous research has utilized an Avuncular/Materteral Tendencies Subscale (AMTS; 9-items). We constructed a new subscale (NAMTS; 12-items) that measured avuncular (uncle-like) and materteral (aunt-like) altruism using an alternative, diverse set of items. Canadian participants (100 androphilic males [AM], 115 gynephilic males [GM], and 138 androphilic females [AF]) were recruited from various online mailing lists, through a university human subject pool, and through online advertisements placed on Facebook.

Results: A factor analysis examining each of the 21 items from the AMTS and NAMTS was conducted and verified that each item loaded strongly on one factor suggesting that all items measured the same construct. A one-way ANOVA was conducted to evaluate group differences in the expression of altruistic tendencies toward nieces and nephews using the NAMTS. The ANOVA showed a significant between-group difference (*Brown-Forsythe F* (2, 287.75) = 11.26, $p < 0.001$). A Fishers LSD test for pairwise comparisons revealed: (1) a significant sex difference in altruism toward nieces and nephews (AF > GM and AM) and (2) a significant male sexual orientation difference (AM > GM).

Conclusions and Implications: These data are the first from a Western culture to indicate that androphilic males demonstrate elevated altruistic tendencies toward nieces and nephews compared to their gynephilic counterparts. The altruistic tendencies demonstrated by androphilic males toward nieces and nephews were intermediate between those of gynephilic males and androphilic females suggesting that androphilic males are shifted in a female-typical direction for this trait. Future research will be necessary to determine what distinguishes the NAMTS from the AMTS in order to better elucidate what environmental characteristics might be mediating the expression of altruistic behavior in androphilic males cross-culturally.

A PROPOSED MODEL OF LESBIAN SEXUAL FUNCTIONING

Heather Armstrong & Elke Reissing

Rationale: Lesbian women have been underrepresented in studies on female sexuality, and as a result, much of what is known may not be representative of or generalizable to the experiences of women who have sex with women. Further, many of the measures used to evaluate sexual functioning may be biased towards heterosexual respondents since they often focus on sexual intercourse (assumed to be penile-vaginal sex) or vaginal penetration which may or may not be appropriate for use with a lesbian population. Given this potential gap, it is important to consider the few studies which have focused specifically on women with same-sex partners in order to gain a better understanding of the factors that can have a positive influence on the sexual functioning of lesbian women.

Summary of Key Points: A model of lesbian sexual functioning based on a comprehensive, critical review and analysis of the literature is proposed. This model, which uses Bronfenbrenner's ecological model (1979) as a basis, represents the integration of findings reported in numerous studies in this area. The focus of the model is on thirteen variables which were identified as contributing to the sexual functioning of lesbian women based on the consensus in the literature. Of these, it is predicted that six will have direct effects on sexual functioning: age, income, cultural recognition, relationship duration, sexual satisfaction, psychological well-being, and relationship satisfaction. The remaining seven variables will have indirect effects through mediated or moderated relationships with other variables: sexual frequency, desire discrepancy between partners, internalized homonegativity, power, social support, emotional intimacy, and a discrepancy between partners in level of outness.

Conclusions: This predicted model demonstrates that the sexual functioning of lesbian women is determined largely by the main variables that are involved in heterosexual women's sexuality, for example, relational factors, intimacy, and factors of sexual function (Graham, Sanders, & Milhausen, 2006). However, additional factors of importance for lesbian women emerged such as internalized homonegativity and social support.

Implications: This research was an attempt to synthesize the available literature on lesbian sexuality and by doing so, provide a clear and parsimonious model of the variables that affect the sexual functioning of lesbian women. This model can provide a basis for future research and in depth analyses of variables that are specific to this sexual minority group.

References:

- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, M.A.: Harvard University Press.
- Graham, C. A., Sanders, S. A., & Milhausen, R. R. (2006). The Sexual Excitation/Sexual Inhibition Inventory for Women: Psychometric properties. *Archives of Sexual Behavior*, 35(4), 397-409.

ACCULTURATION AND IRANIAN IMMIGRANT WOMEN'S SEXUALITY IN CANADA

Roja Bagheri

Rationale/Background: Research in this area may guide clinicians to be more culturally aware in working with women of Iranian ancestry. The additional knowledge will help counsellors better comprehend Iranian immigrant women's situation and mental health when they are coming in for counselling. Furthermore, there are very few studies that have focused on the changing views on sexuality as a specific feature of the experience between migrants from traditional Islamic societies to modern egalitarian cultures

Research Question: This research proposes to explore the influence of acculturation on Iranian immigrant women's sexuality. My research will pose the two following questions: 1) how do Iranian immigrant women experience sexuality, and, 2) how has acculturation from Iran to Canada influenced Iranian immigrant women's sexuality?

Method: Five to ten participants will be interviewed for this study. The inclusion criteria requires that participants be first-generation Iranian immigrant women in Canada, who immigrated at the age of 19 or older and resided in Canada for a minimum of two years, and be fluent in the English language. The researcher will conduct a constructionist thematic analysis. With the use of the constructionist framework, the research will examine the ways in which meaning and experience are socially produced and reproduced.

SEX DIFFERENCES IN PARAPHILIC INTERESTS

Brittany Bannerman, Samantha Dawson, & Martin Lalumière

Rationale

Little research has been conducted to examine paraphilic interests and behaviours in non-forensic populations. In the few studies that have been conducted, paraphilic interests and behaviours are more often reported by men than by women, but this sex difference has yet to be satisfactorily elucidated. Possible explanations for this sex difference include sex difference in sex drive, impulsivity, and masculinity, as well as other factors such as mating effort, neurodevelopmental stress, and social desirability.

Research Question The current study explored the prevalence of paraphilic interests and behaviours in a non-forensic population. It was hypothesized that there will be a sex difference in self reported paraphilic interests and behaviours, and that this sex difference may be explained by personality characteristics that vary by gender.

Method: One-hundred and ninety-eight men and 493 women completed an online questionnaire that assessed arousal to (and the frequency of engaging in) a variety of paraphilic acts. The questionnaire also included measures of various personality characteristics such as hypersexuality, impulsivity, and sensation-seeking. Participants also answered questions about their sex drive, mating effort, masculine traits, neurodevelopmental stress, and social desirability.

Results: Men reported significantly less aversion to a greater variety of paraphilic acts than women. Interestingly, women reported significantly less aversion than men to activities involving masochism. The same pattern was true for engaging in paraphilic behaviours, with men reporting significantly more paraphilic behaviours than women. For men and women, sexual compulsivity and mating effort (preference for partner novelty and casual sex) were most significantly and positively correlated with paraphilic interests and behaviours. The sex difference in paraphilic interests was eliminated when sex drive/hypersexuality, mating effort/quest for novelty, or degree of masculinity were covaried.

Conclusion and Implications: These preliminary results support previous findings that men report more paraphilic interests and behaviours than women. Sex differences for paraphilic interests follow the same pattern found in previous research conducted with both forensic and non-forensic populations. The sex difference in paraphilic interests may be explained by the sex differences in sex drive/ hypersexuality, mating effort/quest for novelty, and masculinity.

SEXUAL RESPONSE INTERRUPTED: A FOCUS ON SEXUAL PAIN

ROSEMARY BASSON

Recurrent but intermittent, inevitable but yet preventable, considered as allodynia (pain from touch) but often lasting many minutes or hours after the provoking stimulus, provoked vestibulodynia (PVD), is typical of neither acute nor chronic pain. PVD is defined as allodynia to the vestibule (area containing the urethral and vaginal openings), with no visible abnormalities aside from variable redness. Both the pain and the suffering provoked vestibulodynia (PVD) are complex and only partially understood. Cortical functional reorganization of pain processing as demonstrated in other conditions of chronic pain is therefore likely to be complex, variable, as well as challenging to study in women with PVD. The potential link between stress and the changes reflecting brain plasticity may be relevant to women with PVD: currently, stress is construed to include personality and psychological as well as environmental factors. Recent investigation of the skin's own neuroimmunological systems along with histological findings in PVD highlights the potential role of stress. The amplification of the pain signals within the CNS (central sensitization) may be linked to stress and be an initiator rather than just a modulator of chronic pain syndromes. The suffering of PVD typically leads to the collapse of the woman's sex response cycle such that encouragement to move to non-penetrative sex is of very limited benefit. Current conceptualization of sexual response cycles assist our understanding of the ramifications of the "sexual inability" sensed by women with PVD.

Mindfulness therapy programs for stress have been used with benefit in western medicine for three decades and are now incorporated into pain management programs while functional imaging studies document the changes it invokes. That accepting unpleasant physical sensations in the moment and not reacting to them will ultimately lead to their reduction, is a difficult concept for many western women: the "buy-in" may be a discussion of "the brain in pain".

Objectives: An overall objective is for the presenter to learn from her audience! As well:

1. To discuss how PVD leads to the collapse of the entire sex response cycle.
2. To reflect on recent research on reorganization of cortical brain signaling when ongoing pain is not new -as well as the potential modulating role of stress.
3. To reflect on the role of stress on the emerging complex neuroimmunology networks in the skin and the histology of the skin in PVD.
4. To consider how mindfulness therapy may lessen the pain and the suffering of PVD.

THE RELATIONSHIP BETWEEN BODY IMAGE SELF-CONSCIOUSNESS AND SEXUAL FUNCTIONING AMONG HETEROSEXUAL MEN

Lindsay Benson, Robin Milhausen, & Andrea Buchholz

Research has demonstrated that erectile difficulties and early ejaculation are sexual problems prevalent among men (Laumann, Paik, & Rosen, 1999). Identified as a cause of sexual dysfunction, intense self-focus on performance during sex diminishes one's ability to perceive and appraise sexual cues necessary for sexual functioning (Barlow, 1986). Body-image self consciousness (BISC), thoughts about one's body during sexual intimacy has the potential to diminish one's ability to appraise sexual cues, thus, has recently been identified as an inhibitor of sexual functioning (Laumann, et al., 1999; Meana & Nunnink, 2006). Studies to date that have identified BISC as an inhibitor of sexual functioning have either focussed solely on women or are limited methodologically. The purpose of the current analysis was to assess the role of body image self-consciousness on erectile and ejaculatory difficulties in men.

Methods: The sample consists of 79 men (83.5% university students) between the ages of 18-25 ($M = 21.4$, $SD = 2.02$). Inclusion criteria required these men to be Caucasian, in a romantic relationship and that they have had sex in the previous month. Participants completed questionnaires and had body composition assessed at the Body Composition and Metabolism Laboratory at the University of Guelph as part of a larger study on body composition and sexual functioning.

The Erection and Ejaculatory subscales of the Male Sexual Functioning Inventory (MSFI; O'Leary et al., 1995), the BISC questionnaire (Wiederman, 2000) and a DXA machine (DXA, Hologic Discovery WI, Bedford, MA) were used to assess erection difficulties, ejaculatory difficulties, BISC and percent body fat respectively.

Results: The model predicting erectile difficulties including relationship length, percent body fat, frequency of sexual activity and BISC as predictors was not significant. The second model, predicting ejaculatory difficulties, including the same predictors, was significant and predicted 19.5% of the variance. BISC was a significant predictor of ejaculatory difficulties ($\beta = -.38$, $p = .001$), contributing 13.4% unique variance to the model ($p = .001$).

Conclusions: The results indicate that BISC predicts difficulties with ejaculation but not erection. This finding suggests that BISC is a form of cognitive distraction specific to ejaculation. It is possible that BISC is only relevant to ejaculation because thoughts about one's body may only occur during the sexual encounter when an erection is already present. It may be useful for clinicians to assess men's BISC when treating ejaculatory problems for men of all body sizes. More research is needed to determine if BISC impacts ejaculation among other samples of men.

WORKING WITH COUPLES WHERE ONE IS ON THE AUTISM SPECTRUM: A CLINICAL SNAPSHOT

Laurie Betito & Stephanie Mitelman

RATIONALE: In recent years, more and more information about Autism/Asperger syndrome/spectrum has come to the forefront, especially in childhood. However, although the diagnosis of Aspergers (high functioning Autism) was included in the DSM only in 1994, this cluster of characteristics has obviously existed for far longer. Thus, what has become of the children, now adults, often in relationships, who exhibited these characteristics? Interestingly, as more children are now being diagnosed, so are their parents (studies have shown a genetic link).

Many of these adults may find themselves in relationships where they struggle to connect and understand their partner's needs. These individuals may end up seeking marital and/or sex therapy. As therapists, we need to be aware of specific impairments that may be related to this spectrum such as differences in thought processing, sensory experiences, and ability to communicate and empathize.

This presentation will focus on a synthesis of existing research in this field to help in a better understanding of the therapeutic process with couples where one partner exhibits characteristics of the Autism Spectrum Disorder.

SUMMARY OF KEY POINTS THAT WILL BE HIGHLIGHTED:

- Definitions/Triad of impairments
- Co-morbidity
- Effect on sexuality (gender identity, sensory issues, orientation issues, fetishistic behaviors, libido)
- Communication/intimacy issues
- Tips for the therapist working with couples

CONCLUSION/IMPLICATIONS: Traditional marital therapy may not be effective, and may even be damaging with couples where one partner is on the Autism Spectrum. This issue will be highlighted using clinical case examples. It is important that as therapists we understand the particularities of this syndrome and the origins of the struggles faced by such couples, whether there is a formal diagnosis or not.

IMPACT OF RADICAL TRACHELECTOMY ON SEXUAL DISTRESS: A PILOT STUDY

Erin Breckon & Lori Brotto

Background: Radical trachelectomy (RT), a relatively new treatment option for early stage cervical cancer, differs from radical hysterectomy (RH) in that the uterus is left intact while removing the cervix, parametrium and upper one third of the vagina, preserving women's ability to bear children. Quality of life (QOL) and sexual health concerns following RH have been well documented; however, the extent to which these changes are related to cervical or uterine removal has been debated. Carter et al. (2010) found no significant differences in post-operative sexual functioning between women treated by RT versus RH. Because sexual distress is often unrelated to sexual functioning, the goal of this pilot study was to explore the impact of RT and RH on sexual distress.

Research Question: Will levels of sexual distress and QOL concerns be lower among women treated with RT compared to RH?

Methods: Women scheduled for a RH ($n=17$) or RT ($n=12$) through the BC Cancer Agency (Vancouver) completed a battery of questionnaires prior to and one month following surgery (FSDS, BDI, BAI, DAS, & Rand SF-36). Twelve RH and 11 RT completed the 6 month follow-up.

Results: No significant differences were found between the RT and RH groups on any outcome measures one month post-surgery. There was a main effect of surgery on anxiety, physical function/ related limitations (all decreased post-surgery), fatigue and general pain (increased post-surgery). At 6-months the RT group significantly decreased in anxiety compared to the RH group who increased in anxiety. A main effect of time was found on depression (decreased), physical function/ related limitations, fatigue, emotional wellbeing, social functioning and pain (increased to more favorable health states). No significant main effect of surgery type or time was found on sexual distress, but there was a marginal between-groups difference: the RT group had higher levels of sexual distress post-surgery compared to the RH group, however by 6 months distress decreased in the RT group and increased further in the RH group.

Conclusions: Our pilot study suggests no significant negative impact of RT on sexual distress 6 months post-surgery, despite increased distress one month post-surgery. Speculatively, this may be related to remaining concerns regarding cancer or fertility preservation.

Implications: Levels of sexual distress and other QOL sequelae following RT were not significantly lower than those following RH except for anxiety 6 months post-surgery; however our results are limited due to small sample size.

THREE RANDOMIZED CONTROLLED TRIALS OF MINDFULNESS-BASED THERAPY FOR SEXUAL DYSFUNCTION IN WOMEN

Lori Brotto

Background: Mindfulness is the practice of intentionally and non-judgmentally being in the present moment as if your life depended on it. Although mindfulness is rooted in Eastern spiritual practice, it is rapidly being embraced in Western approaches to both physical and mental health care.

Research Questions: Preliminary data from two non-controlled trials suggested that mindfulness might be effective in the treatment of sexual difficulties in women. The goal of this study was to conduct three RCTs examining a mindfulness-based intervention in separate populations of women with: (1) low sexual desire, (2) sexual distress due to a history of childhood sexual abuse, and (3) provoked vestibulodynia.

Method: In all three studies, the mindfulness-based cognitive behavioural program was delivered in groups to women seeking treatment at our university-affiliated sexual medicine treatment centre. Studies 1 and 3 administered a 4-session cognitive behavioural and mindfulness treatment versus a wait-list control. Study 2 randomized women to receive either a 2-session mindfulness intervention or a 2-session cognitive behavioural intervention.

Results: Women in study 1 had significant improvements on all measures of sexual response, significantly reduced sexual distress, and overall improved quality of life and there was no effect of the wait-list condition on any measure except a significant reduction in sexual distress. Women in study 2 randomized to the mindfulness group had significantly increased concordance between genital and subjective sexual arousal from pre- to post-treatment compared to women in the CBT group alone when tested in a controlled laboratory with sexually explicit stimuli. Women in study 3 had significant reductions on all psychological measures of pain-related affect, and significant reductions in provoked genital pain elicited by a q-tip test.

Conclusions: These studies support the utility of mindfulness-based approaches in the treatment of women's sexual dysfunction. Future research aimed at identifying the mechanisms by which mindfulness led to these positive effects is needed.

Implications: Our findings suggest that a brief, mindfulness-based approach may be effective for women seeking treatment for a diverse set of sexual complaints.

POPULAR METAPHORS OF WOMEN'S SEXUALITY IN REPORTING ON FEMALE SEXUAL DYSFUNCTION

Monica Brown

In 2009, the pharmaceutical corporation Boehringer-Ingelheim announced that clinical trials were underway to test its failed antidepressant, Flibanserin, as a potential treatment for hypoactive sexual desire disorder (HSDD). Shortly after a well-publicized rejection of the drug by the U.S. Food and Drug Administration (FDA) at the end of 2010, Flibanserin's promise was retracted by the drugmaker. The initial announcement, however, sparked renewed interest in reporting on sex research and the pharmaceutical treatment of women's sexuality. In this presentation, I take a closer look at two metaphors common to reporting on such research in newspapers, magazines, and on popular websites, which frequently characterize women's sexuality as either "mysterious," or "complicated," or both. Using methods from rhetorical and discourse analysis, this presentation examines these portrayals against the reported outcomes of pharmaceutical research into female sexuality, and considers how media characterizations of sex research influence and shape the discourse of sexual health.

SEXUAL WELL-BEING OF HIGH-FUNCTIONING ADULTS WITH AUTISM SPECTRUM DISORDERS

Sandra Byers, Shana Nichols, Susan Voyer, & Georgianna Reilly

Background: The social skills and communication deficits associated with high functioning autism (HFA) and Asperger Syndrome (AS) often create challenges in social relationships and may impact romantic and sexual relationships in particular. Healthy sexuality for individuals with HFA/AS is an important goal, yet it has received little empirical attention. What research has been done has focused primarily on problematic sexual behavior (Henault & Attwood, 2002).

Objectives: The aim of the current study was to examine the impact of the extent of autistic traits, gender, age, and relationship status on a wide range of aspects of dyadic and solitary sexual well-being in adults living in the community with HFA/AS, with an emphasis on understanding positive sexual functioning (e.g., sexual desire, sexual esteem, sexual thoughts and fantasies).

Methods: Participants were 101 men and 167 women with self-reported HFA/AS (21-73 years old) who completed a set of online questionnaires including a measure of autistic symptoms (Autism Spectrum Quotient) as well as measures of dyadic sexual and solitary sexual well-being (Global Measure of Sexual Satisfaction, Self-Esteem Subscale of the Sexuality Scale, Hurlbert Index of Sexual Assertiveness, Sexual Arousability and Sexual Anxiety Inventory, Sexual Desire Inventory, Sexual Activity Questionnaire, and Sexual Functioning Questionnaire, Sexual Knowledge Questionnaire, and Sexual Cognition Checklist..

Results: The results of a canonical correlation analyses showed that participants who were currently in a romantic relationship, but not those with more ASDs symptoms, reported more frequent dyadic sexual activity and greater sexual satisfaction, pointing to the importance of context in an active sex life. After controlling for the first variate, men and individuals with less autism symptomatology, particularly in the social, attention to detail, and communication domains, generally reported significantly greater dyadic sexual well-being. Men also reported better solitary sexual well-being. The pattern of gender differences is similar to those found with neurotypical individuals.

Conclusions: Results provide the first comprehensive assessment of the sexual functioning of adults with ASDs. It is important that research and sexuality education with individuals with HAS/AS conceptualize sexual well-being as a multidimensional construct consisting of both dyadic and solitary aspects.

BREAKING DOWN THE 'EAST ASIAN' CATEGORY: INTERETHNIC DIFFERENCES IN SEXUALITY BETWEEN JAPANESE, KOREAN, AND CHINESE INDIVIDUALS

Sabrina Chang & Boris Gorzalka

Rationale: When examining differences in East Asian and Western sexuality, researchers have regularly combined Chinese, Japanese, and Korean participants into a single category. These studies have consistently demonstrated differences between East Asian and Western sexuality on several dimensions. For example, Meston, Trapnell and Gorzalka (1996) have found that East Asians are more conservative than their non-Asian counterparts on all measures of interpersonal sexual behaviour, sociosexual restrictiveness as well as most indices of intrapersonal sexual behaviour. In the same vein, East Asians have also been noted to hold more conservative sexual values and attitudes coupled with less sexual knowledge (Kennedy & Gorzalka, 2002). However, such studies ignore any variability that may exist within East Asia. Currently, there lacks empirical justification in the literature for consolidating these ethnicities into one group. Given the divergence in various facets of Chinese, Japanese, and Korean cultures, there is likely to be considerable divergence in sexual practices and attitudes.

Research Questions: Our study was aimed to answer the following questions:

- 1: Are there significant interethnic discrepancies in sexuality between Japanese, Korean and Chinese undergraduate students?
- 2: How do students from each East Asian sub-culture compare with Euro-Caucasian students?
3. Do levels of mainstream acculturation and heritage culture adherence mediate the relationship between ethnic membership and various measure of sexuality in the same way for Japanese, Korean and Chinese undergraduate students?

Method: Various standardized scales assessing sexual beliefs, attitudes, behaviours, functioning and satisfaction were administered to Japanese, Korean, Chinese, and Caucasian UBC undergraduate students.

Results: Significant differences emerged between Korean and Chinese students with various sociosexual restrictiveness and interpersonal sexual behaviour variables. Moreover, several sexual attitudes significantly differed between Chinese and Korean students, Japanese and Korean students, as well as Chinese and Japanese students.

Conclusions: Our comparison revealed significant interethnic differences and this serves as the first evidence that the practice of clumping Chinese, Japanese and Koreans together in sexuality studies may be empirically unsound if results emerging from these studies are assumed to apply equally to Chinese, Japanese and Korean individuals.

Implications: Understanding the interethnic differences between the three East-Asian sub-cultures may help clinical practitioners tailor their approach to Japanese, Korean and Chinese clients, instead of serving them within the sociocultural value system that is currently deemed suitable for all clients of East Asian descent.

CANNABINOIDS AND FEMALE SEXUAL AROUSAL

Silvain Dang, Carolin Klein, & Boris Gorzalka

Background: The endocannabinoid system is a complex system in the body that modulates a variety of psychophysiological functions. Converging evidence from research with humans and other species suggests that this system may play a role in female sexual functioning. This includes research on the self-reported effects of cannabis use on sexual functioning in women. However, a relationship between cannabis use and physiological sexual arousal in women has not been investigated to date. As well, no studies investigating the relationship between levels of endogenous cannabinoids (i.e., arachidonylethanolamide [AEA] and 2-arachidonoylglycerol [2-AG]) and sexual functioning have been conducted. Examining how exogenous and endogenous perturbations to the endocannabinoid system influence female sexual function will have important implications for elucidating the psychophysiology of female sexual dysfunctions.

Research Question: This investigation examined 1) the relationship between cannabis use and sexual arousal in women, and 2) whether increases in sexual arousal in women are accompanied by changes in circulating AEA and 2-AG levels.

Method: In study 1, the participants were 48 medically-healthy, premenopausal women. Of these, 31 had used cannabis at least once per week over the last six months. The remaining 17 had not used cannabis in the past six months. Participants were shown an erotic and a neutral film, during which continuous physiological and subjective sexual arousal were measured via the vaginal photoplethysmograph and a computer mouse, respectively. Subjective sexual arousal was also measured non-continuously via pre- and post-film, Likert-scale questionnaires. Repeated measures ANOVA was used to examine the relationship between cannabis user status and physiological and subjective sexual arousal. In study 2, the participants were 21 medically-healthy, premenopausal women. The procedures were the same as study 1, except serum AEA and 2-AG levels were measured before and after the presentation of film stimuli. Pearson's r was used to investigate the correlations between endocannabinoid levels and arousal.

Results: In study 1, cannabis users exhibited significantly smaller increases in physiological sexual arousal, but no significant differences in subjective sexual arousal, in response to erotic film stimuli compared to non-users. In study 2, presentation of erotic film stimuli was associated with a significant decrease in AEA levels from pre- to post-film. This decrease in AEA was significantly negatively associated with physiological and subjective sexual arousal. 2-AG was significantly negatively associated with subjective sexual arousal in response to the erotic film.

Conclusion: This investigation suggests that marijuana use in women is associated with lower increases in physiological sexual arousal upon exposure to erotic stimuli. As well, the current investigation provides the first evidence to date that alterations in circulating endocannabinoid levels are in direct relation to changes in physiological and subjective sexual arousal in women.

Implications: This research provides exciting preliminary evidence that the endocannabinoid system has a role in female sexual arousal, and contributes to knowledge regarding the physiology underlying female sexual functioning. Evidence that the endocannabinoid system plays an integral and direct role in female sexual functioning also has significant implications for the treatment of female sexual dysfunctions.

A REAL TURN OFF: A TEST OF THE PREPARATION HYPOTHESIS OF WOMEN'S GENITAL AROUSAL

Samantha Dawson, Martin Lalumière, and Kelly Suschinsky

Background: There are two well-replicated sex differences in genital arousal patterns, category-specificity and sexual concordance. Men's genital responses are dependent on specific sexual cues, and are concordant with subjective reports of arousal. Women's genital responses are less dependent on the types of sexual cues presented, and are less concordant with their subjective reports of arousal. The preparation hypothesis provides a functional explanation for these sex differences and posits that women's genital arousal are not tied to sexual preferences but rather occur automatically in the presence of sexual cues, to protect the genital tract from injuries incurred through sexual activity. This hypothesis leads to the prediction that women's genital responses should not habituate as quickly or as effectively as men's.

Hypothesis: If sexual arousal in women occurs automatically then women should show a genital response each time a film is presented and not habituate. In comparison, men will show a gradual decrease in genital responses upon repeated presentation of the stimulus, consistent with habituation.

Method

Using a habituation design, 20 heterosexual men and 20 heterosexual women were presented with nine trials of the same erotic film, followed by two different films, and two trials with the original stimulus reinstated. The novel films were introduced to eliminate physiological fatigue as an explanation for the decline in responding. The reinstatement of the original stimulus tested for dishabituation. The stimuli were counter-balanced among participants. Genital sexual arousal was measured using circumferential phallometry and vaginal photoplethysmography.

Results

Confirming previous research, men displayed a pattern of genital arousal consistent with habituation. That is, men's genital responses declined significantly during repeated stimulus trials and were restored to their original levels upon introduction of the novel stimuli. Unexpectedly, women displayed the same response pattern. A dishabituation response was not observed in either sex.

Conclusion

This study was the first to find habituation in both men and women using the same experimental design. These findings are not consistent with the hypothesis that women's sexual arousal is an automatic response. Further research is needed to confirm these results in order to be able to conclude definitively that human sexual arousal habituates and what, if anything, modulates such a response.

Implications

This study provides the first evidence for habituation of sexual arousal in men and women using the same experimental design. Understanding the impact of learning on genital responses may aid in the development of more effective sexual therapies for men and women.

OUTLIERS AND SMALL SAMPLE SIZES, A RESEARCHER'S NIGHTMARE: MARGINALIZATION AND INVISIBILITY, THE ON-GOING OCCURRENCE AND REALITY FOR SEXUAL MINORITIES

Carm De Santis

Rationale: Sex researchers could be facing a conundrum as they embrace the difficult road to continue their robust research in a field that is ethically scrutinized, at times misunderstood and judged by other scholars. Sex researchers continue to pioneer and create forums for academic freedom, hence, why they must reflect on their options and practice with “non-statistical significant” sample groups from their findings, and perhaps question the “criteria” of sound research within a systemic structure that continues to oppress sexual minorities and their sexual experiences.

Sex researchers are uniquely positioned to acquire information on sexuality and its complexities at the personal, relational, cultural, and spiritual levels. Since Havelock Ellis, sex researchers continue to forge new ground, and deeper understanding of the intersections between biology, psychology, sociology, and physiology from various epistemological positions. A critical theory analysis will discuss the value for sex researchers to advocate for a “just society” in the scholarship of sexuality, and invite introspection and reflexivity of research practices. This paper hopes to generate a dialogue among sex researchers to explore ways to continue establishing new ground, rigours research and ethical practices, while creating space for research participants who are under-represented, and to “be at the forefront of sexual minority social justice by serving as scientist-advocates or social justice agents who are informed by scholarship.” (Moradi, Mohr, Worthington, & Fassinger; 2009, p.19).

ONLINE PSYCHOEDUCATIONAL INTERVENTION FOR SEXUAL DYSFUNCTION IN CANCER SURVIVORS

Cara Dunkley, Carolin Klein, Dianne Miller, Carl Brown, & Lori Brotto

Background: Gynecological and colorectal cancers, as well as their treatments, are known to negatively impact various facets of sexual functioning. Although the range and severity of sexual difficulties following treatment for an array of cancer types has been well established, the availability of evidence-based treatments for the sexual sequelae of cancer is extremely limited. The primary objective of the present study was to modify an existing face-to-face psychoeducational intervention for sexual problems in cancer survivors for online administration, and to establish its feasibility and preliminary efficacy.

Research Questions: To assess the efficacy of an online psychoeducational intervention on endpoints of sexual distress, desire, arousal, orgasm and genital pain in male and female cancer survivors experiencing sexual difficulties. In addition, the effectiveness of this intervention on relationship satisfaction and quality of life was investigated.

Methods: Thirty men and thirty women previously diagnosed with colorectal (men and women) or gynecologic (women only) cancer participated in this study. All participants had undergone surgical treatment for cancer in the past five years and all were experiencing sexual difficulties following the cancer diagnosis and/or its treatment. Participation involved completion of a 12-week, online psychoeducational program which focused on increasing understanding of the role of cancer in sexual difficulties; cognitive-behavioural and mindfulness-based techniques to increase awareness, guide attention, and challenge sexual beliefs; strategies to improve relationship satisfaction and communication; and strategies to enhance sexual function. Questionnaires assessing sexual functioning, relationship satisfaction, and quality of life were completed before and after the program in order to assess changes in sexual function with participation in the program.

Results: Preliminary results suggest that our program was effective in reducing sexual distress and improving sexual function, quality of life, and relationship satisfaction in both men and women diagnosed with colorectal and gynecological cancers.

Conclusions: The findings from this research provide preliminary support for the efficacy of an on-line psychoeducational intervention for sexual difficulties in cancer survivors.

Implications: As sexual difficulties following gynecologic and colorectal cancers are common, these findings have important treatment implications for geographically remote survivors experiencing sexual dysfunction. The online application of a psychoeducational intervention also increases accessibility to individuals who would otherwise refrain from seeking treatment for sexual health concerns due to embarrassment and/or discomfort in speaking about these issues in a face-to-face setting.

THE SEXUAL, PSYCHOLOGICAL AND BODY IMAGE HEALTH OF WOMEN UNDERGOING ELECTIVE VULVOVAGINAL PLASTIC/ COSMETIC PROCEDURES: A PILOT STUDY

Samantha Fashler, Michael Goodman, John Miklos, Robert Moore, & Lori Brotto

Background: Vulvovaginal aesthetic (VVA) surgery has become increasingly popular and there is anecdotal support for its enhancing effects on sexual functioning and self-concept.

Research Question/Aim: We conducted a prospective pilot study to evaluate the impact of VVA surgery on sexual response.

Methods: A prospective cohort of women electing VVA cosmetic surgery completed questionnaires at three time points: pre-VVA surgery, post-VVA surgery, and again 6-9 months later.

Main Outcome Measures: Sexual functioning (Female Sexual Function Index; FSFI); psychological functioning (Brief Symptom Inventory; BSI); and body preoccupation (Yale-Brown Obsessive Compulsive Scale for Body Dysmorphic Disorder; YBOCS-BDD).

Results: A total of 33 women provided complete baseline data. Post-surgery data were provided by 18 women, and 12 provided 6-9 month follow-up data. There were no significant differences between women who provided post-surgery data and those who did not on any dependent variable. There was no significant effect of VVA surgery on desire, lubrication, orgasm, pain, or the total score at either time point, but scores on arousal and satisfaction increased at immediate post-surgery then fell back to baseline levels at follow-up. There was no significant effect of VVA surgery on psychological functioning at either time point. Using established cut-off scores for Body Dysmorphic Disorder (BDD), 61.1% of participants met criteria for BDD at baseline and this proportion significantly dropped to 11.1% post-surgery, and to 8.3% at follow-up.

Conclusions and Implications: Contrary to anecdotal claims, women in the present sample did not have symptoms of sexual dysfunction that may have motivated them to seek VVA surgery, nor was there a significant negative effect of surgery on sexual response. Importantly, there was a high proportion of women seeking VVA who met criteria for BDD which has implications for surgeons consenting patients for these cosmetic genital procedures.

THE SWINGING PARADIGM: THE SHIFT IN THE MODERN CONCEPTS OF MONOGAMY AND MARITAL FIDELITY

Edward M. Fernandes

In this presentation, the findings of four research studies on swingers and swinging is synthesized and the implication of such findings is discussed. The studies were conducted by the author on the swinging lifestyle, swingers' sexual and marital satisfaction, STI profiles associated with swinging, swinging protocols and sexual activities, swinging satisfaction, self-determination theory as a psychological predictor of swinging satisfaction and the willingness to engage in swinging behaviour; the commercialization of swinging.

Study1: The marital and sexual satisfaction of a sample of 1,376 men and women swingers were examined. Data revealed that both men and women in the sample scored high on marital and sexual satisfaction scales. No statistical differences were found in the scores of men and women in these measures. Further, both men and women scored high on swinging satisfaction.

Study 2: The prevalence and incidence of STIs among a population of swingers were measured through a self-reporting protocol. Data were collected from 2,727 participants using a survey posted on fifteen (15) international swinger's dating sites. The study explored areas of sexual behaviour, safe sex practices, and STI history. The results showed that swingers had a lower incidence of STI than that of the general population. However, a larger percentage of women than men reported having contracted an STI through swinging sexual activity. Moreover, overall, swingers reported using protection on a regular basis (over 78%) and get tested for STIs at least once a year. Again, swingers reported a high level of satisfaction with their swinging activities.

Study 3: This study explored the relationship between positive feelings of individual well-being as measured by scores in the self-determination and swinging satisfaction. This study compared the scores of 3,242 swingers in the self-determination scale with scores in a swinging satisfaction scale. The results showed that individuals scoring higher on the self-determination scale also scored high on the swinging satisfaction scale.

Study 4: A data mining study was conducted to identify swingers social clubs online as well as resorts catering to swingers and swinging activities. There are an estimated 15 million people worldwide engaging in some form or organized swinging activities; there are swingers social clubs in states of the union with the exception of Idaho; there are over fifty social swinging dating sites with an average membership of over 1000,000 members; swing chat rooms and adult sites are multiplying at an increased rate on the internet; on-premise swing clubs are rapidly expanding in every state and Canadian province (there are at least over 400 clubs continent-wide); Caribbean swingers resorts are estimated to number over twenty; there is an estimated twenty two million dollars of monthly revenue from all swing sites and resorts.

MALE SEXUAL ORIENTATION AND AVUNCULARITY IN CANADA: IMPLICATIONS FOR THE KIN SELECTION HYPOTHESIS

Deanna Forrester, Jessica Parker, & Paul Vasey

Androphilia refers to sexual attraction and arousal to adult males, whereas *gynephilia* refers to sexual attraction and arousal to adult females. The Kin Selection Hypothesis (KSH) posits that genes for male androphilia can persist if androphilic males offset the fitness costs of not reproducing directly by enhancing indirect fitness. In theory, by directing altruistic behavior toward kin, androphilic males can increase the reproduction of kin, thereby enhancing indirect fitness. Evidence supporting the KSH has been documented in Samoa. Samoan transgendered, androphilic males, known locally as *fa'afafine*, are socially accepted by the majority of Samoans. In contrast, no supportive evidence has been garnered from other cultures (i.e., USA, UK, Japan) that are characterized by less social tolerance toward male androphiles. Tests of the KSH in Canada might be more likely to yield findings consistent with Samoa because Canadian social and political attitudes toward male androphiles are markedly more tolerant and accepting. Here, we compared the willingness of Canadian androphilic men, gynephilic men, and androphilic women to invest in nieces and nephews as well as nonkin children. Consistent with the KSH and findings from Samoa, androphilic men exhibited a significantly greater cognitive dissociation between altruistic tendencies directed toward kin versus nonkin children relative to gynephilic men and androphilic women. The present study, therefore, provides some tentative support for the KSH from a culture other than Samoa. Findings and future directions for research are considered within the context of the existing cross-cultural literature.

THE SEXUAL AND RELATIONAL WELL-BEING OF WOMEN IN RELATIONSHIPS: THE IMPACT OF CHILD SEXUAL ABUSE

Kerri Gibson & Sandra Byers

Background & Hypothesis: A number of researchers have documented the negative impact (and association) of child sexual abuse (CSA) on women's sexual well-being, including low sexual self-esteem, low sexual satisfaction, and low sexual assertiveness (e.g., Johnsen and Harlow, 1996; Lemieux & Byers, 2008; Van Bruggen, Runtz & Kadlec, 2006). However, some researchers have found that CSA does not uniformly affect women's sexual well-being negatively (e.g., Lemieux & Byers, 2008; Matorin & Lynn, 1998).

This may be because past studies have overlooked the influence of whether women are currently in a romantic relationship. That is, researchers have included both women in and women not in a relationship in their samples (see Leonard, Iverson, & Follette, 2008 for an exception). However, many aspects of sexual well-being are influenced by the relationship within which it occurs (Hendrick & Hendrick, 2004; Lawrance & Byers, 1995), confounding the results of these studies. Therefore, the goal of the current study was to further our understanding of the sexual well-being of women in a romantic relationship who have experienced CSA. We assessed a wide-range of potential sexual outcomes including behavioural, cognitive/affective, and risk factors. We also assessed two aspects of relationship well-being: relationship satisfaction and frequency of affectionate behavior.

Hypothesis 1: Compared to women without a history of CSA, women with a history of CSA will report more negative sexual outcomes and less positive sexual outcomes, as well as lower relationship well-being.

Method: Participants were 606 heterosexual women in a romantic relationship for a minimum of 3 months who completed an on-line survey that included a Background Questionnaire, measures of sexual and relational well-being, and child sexual abuse. Child sexual abuse was defined as any unwanted sexual contact experience occurring before the age of 14, and with someone who was older than the participant.

Results: A total of 206 women (34%) reported one or more incidents of "contact" sexual abuse in their childhood. Of these, 92 women (15%) reported experiencing penetrative CSA experiences. A MANOVA was used to compare the CSA group to the No CSA group with the 13 sexual and relationship outcome measures as dependent variables (alpha was set at .01). The main effect for the CSA group was significant, $F(1, 593)=6.74, p=.001$. Follow-up ANOVAs revealed that the women in the CSA group reported lower sexual satisfaction, relationship satisfaction, sexual rewards (total), and level of sexual rewards. They also reported a higher level of negative thoughts during sexual activity, more sexual costs (total), a higher level of sexual costs, and were more likely to have experienced adult sexual victimization. The two groups did not differ in the extent to which they experience sexual problems, sexual assertiveness, frequency of sexual activity, frequency of affection, and sexual self-esteem.

Conclusions & Implications: Similar to past research that has used mixed samples of women who are single and women who are in a relationship (Lemieux & Byers, 2008), CSA was found to have a negative relationship with many but not all aspects of women's sexual well-being and relationship well-being. These results suggest that CSA is associated with negative adulthood sexual well-being even for women in relationships- however, *this is not a pervasive effect*.

References

- Johnson, L. W., & Harlow, L. L. (1996). Child sexual abuse linked with adult substance use, victimization, and AIDS-risk. *AIDS Education and Prevention*, 8, 44-57.
- Lawrance, K., & Byers, E. S. (1995). Sexual satisfaction in long-term heterosexual relationships: The Interpersonal Exchange Model of Sexual Satisfaction. *Personal Relationships*, 2, 267-285.
- Lemieux, S. R., & Byers, E. S. (2008). The sexual well-being of women who have experienced child sexual abuse. *Psychology of Women Quarterly*, 32, 126-144. doi:10.1111/j.14716402.2008.00418.x
- Leonard, L. M., Iverson, K. M., & Follette, V. M. (2008). Sexual functioning and sexual satisfaction among women who report a history of child and/or adolescent sexual abuse. *Journal of Sex & Marital Therapy*, 34, 375-384. DOI: 10.1080/00926230802156202
- Matorin, A. I., & Lynn, S. J. (1998). The development of a measure of correlates of child sexual abuse: The traumatic sexualization survey. *Journal of Traumatic Stress*, 11, 261-280. doi:10.1023/A:1024499019860
- Van Bruggen, L. K., Runtz, M. G., & Kadlec, H. (2006). Sexual revictimization: The role of sexual self-esteem and dysfunctional sexual behaviors. *Child Maltreatment*, 11, 131-145. doi:10.1177/1077559505285780

EFFECTS OF MINDFULNESS-BASED GROUP INTERVENTION ON SEXUAL ENDPOINTS IN WOMEN WITH SEXUAL PAIN AND AROUSAL DISORDERS

Madeline Hannan-Leith & Lori Brotto

Background. Mindfulness, an ancient Eastern philosophy, is a practice that focuses on bringing awareness and attention to the current moment in a nonjudgmental way. In recent years, mindfulness practice has been increasingly incorporated into Western medicine, demonstrating many promising implications for physical and psychological treatments across a wide range of disorders. This has led to the development of self-report questionnaires, such as the Five Facet M Questionnaire (FFMQ), a 39-item questionnaire assessing five elements of mindfulness (observing, describing, acting with awareness, nonjudging of inner experience and non-reactivity to inner experience) in order to quantify the extent to which mindfulness-based interventions significantly improve symptoms due to increases in mindfulness.

Hypothesis. The current studies investigated two populations of women with sexual concerns. Study 1 consisted of women with arousal and desire difficulties, and Study 2 examined women with provoked vestibulodynia. We predicted that improvements in sexual endpoints would be correlated with improvements in mindfulness as a result of the techniques learned in a group treatment setting.

Method. Participants were instructed to complete a battery of self-report questionnaires, before and after treatment, over the course of a four-session group psychoeducational program. Sexual endpoints were measured using the Female Sexual Function Index (FSFI) and the Female Sexual Distress Scale (FSDS), self-report instruments that measure female sexual function and distress respectively, while mindfulness was measured using the FFMQ.

Results. In both studies, there was a significant increase in most domains of the FSFI and a corresponding decrease in sexual distress. There was a significant correlation between changes in sexual endpoints and changes in mindfulness in both populations with treatment. In Study 1, the *Observing* subscale was positively correlated with the *Desire* domain on the FSFI, and increases in all five facets on the FFMQ were negatively correlated with the *Distress* domain on the FSDS. In Study 2, a positive relationship was observed between the *Awareness* facet and the *Desire* and *Satisfaction* domains on the FSFI, whereas the *Non-reactivity* and *Non-judgment* facets were correlated with *Desire* and *Lubrication* on the FSFI.

Conclusions. These data suggest that the mechanisms by which a brief mindfulness-based intervention improve sexual endpoints may directly be attributed to improvements in one's ability to be mindful. Moreover, these results provide promising support for the use of mindfulness-based treatments among women with sexual complications.

CHEMISTRY FADES: CHANGES IN ATTRACTIVENESS TO PARTNER AND WOMEN'S SEXUAL DESIRE IN A SAMPLE OF HETEROSEXUAL WOMEN IN LONG-TERM RELATIONSHIPS

Kristen Mark & Debby Herbenick

Background: Research on women's sexual desire has been well documented in the literature both in and out of the context of long-term relationships. Some research has shown that sexual desire decreases as duration of partnership increases. However, other research does not find this effect. Attractiveness to partner has been shown to significantly impact level of sexual desire for women and men in long-term relationships. Unknown is the relationship between initial reports of sexual chemistry and current levels of attractiveness and sexual desire.

Research Questions: This mixed method cross-sectional retrospective study aimed to examine how initial and current attractiveness to partner impacted sexual desire in women. Additionally, the current study aimed to examine how these women described their initial sexual and romantic chemistry for their partner.

Method: Data were collected from 200 heterosexual women in the form of online surveys and semi-structured interviews. The average age of sampled women was 36 and they were with their male partners for an average of 11.6 years (minimum of 5 years, maximum of 35 years). Approximately half (55%) of the women had children and all participants were living with their partner at the time of data collection. The online survey included demographic questions, questions about sexual functioning, sexual desire, sexual and relationship satisfaction, and relationship dynamics such as attractiveness to partner. The interview portion of the study asked women to recall and describe their sexual and romantic chemistry with their partner in the first few months they were together.

Results: We found initial and current attractiveness to partner significantly impacted sexual desire in women. Women were split into two categories (attraction level has changed vs. attraction level has not changed) for the qualitative analysis of the question "How would you describe your sexual or romantic chemistry in the first few months of your relationship?" This was analyzed using thematic analysis to discover whether women's self-descriptions were related to their change in attractiveness to partner. Women who had experienced a change in their attractiveness to their partner qualified their initial attractiveness differently than women who had not experienced a change in their attractiveness.

Conclusions/Implications: Women's sexual desire is impacted by the attractiveness to their partner and whether that attractiveness level has changed over time. The ways in which women explain their initial sexual or romantic chemistry is different depending on whether they currently feel the same level of attraction to their partner.

SEEKING ILLICIT PLEASURE: YOUNG MEN AND INTOXICATED SEX

Jennifer Matthews, Cameron Wild, & John Oliffe

Background: Having intoxicated sex with female casual sex partners is considered a sign of masculine success and a normative male experience. Men having intoxicated sex has rarely been questioned or explored in terms of risks and pleasures for men. A central trope in teen films, young men are seen to use alcohol and drugs to lower young women's resistance to having sex, usually in a comedic sense. Where young women are given voice, it is usually in a tragedy as victim of drug facilitated sexual assault or unwanted pregnancy.

Study: A qualitative study involving 16 young men living in Whistler, a BC ski resort town, suggests there is more at play with intoxicated sex than performance of dominant masculinity. Contrary to stereotypic notions of young masculinity, participants described seeking pleasure through the recreational use of substances in ways more nuanced than as a tool to simply gain access to sexual partners. Moreover, the narratives exposed the vulnerabilities of young men to negative outcomes such as unwanted sex, blackouts, emotional fallout and unintended pregnancies, risks that were simultaneously minimized or denied.

Discussion: This presentation will discuss the notions of pleasure and risk that young men described in their narratives of intoxicated sex. The discussion will focus on the ways in which young men use different substances to explore, contest and escape dominant notions of masculinity and how these findings might shape sexual health messaging for men.

REASONS FOR SEX: DO THEY MAKE A DIFFERENCE WITH REGARD TO SEXUAL AND RELATIONSHIP SATISFACTION?

Robin Milhausen & Jessica Wood

Traditional models of sexual response have emphasized sexual desire and physical release as reasons for sex (Kaplan, 1977; Masters & Johnson, 1966). However, recent research suggests that men and women may engage in sex for a whole host of reasons unrelated to these. Specifically, Meston and Buss (2007) surveyed undergraduate students regarding their reasons for sex and generated a list of 142 distinct reasons. The question remains, however: does it matter why we have sex? Having sex is associated with a myriad of psychological, physical and relational benefits. Perhaps our reasons for sex are not as important as simply having it. The purpose of the current investigation was to determine if reasons for sex impacted relationship and sexual satisfaction among a sample of heterosexual men and women.

Participants were 1358 men and women between the ages of 18 and 57 in current sexual relationships. Participants completed the YSEX Questionnaire (Meston & Buss, 2007) and answered three questions about their relationship and sexual satisfaction.

Age, relationship duration and frequency of sex during the past month were entered into linear regression models as control variables with scores on the four subscales of the YSEX as predictors: Physical Reasons for Sex, Goal Attainment Reasons for Sex, Emotional Reasons for Sex, and Insecurity Reasons for Sex.

The models predicting relationship satisfaction accounted for 26 and 16 percent in women and men, respectively. Among women, having sex for emotional reasons was associated with increased relationship satisfaction while having sex for insecurity reasons was associated with decreased relationship satisfaction. For men, insecurity reasons were associated with decreased relationship satisfaction.

The models predicting *emotional* satisfaction with current sex life accounted for 35 and 25 percent in women and men, respectively. In both men and women, having sex for emotional reasons was associated with increased emotional satisfaction with current sex life while having sex for insecurity reasons was associated with decreased emotional satisfaction.

Finally, the models predicting *physical* satisfaction with current sex life accounted for 30 and 39 percent in women and men, respectively. In both men and women, having sex for emotional reasons was associated with increased physical satisfaction with current sex life while having sex for insecurity reasons was associated with decreased physical satisfaction. However, for both genders, having sex for physical reasons was an additional predictor of physical sexual satisfaction.

Thus, it appears that having sex for emotional reasons (e.g., to express love or for emotional closeness) is associated with relationship and sexual benefits. However having sex for insecurity reasons can have a strong negative impact. Notably, having sex for physical reasons was not a strong predictor of positive sexual and relationship outcomes. Findings support Rosemary Basson's (2000) Different Model of Sexual Response suggesting that reasons for sex beyond pleasure and release are valid and reinforcing. However, individuals should be cautioned against having sex to boost esteem, gain attention or feel attractive as these reasons are likely to lead to negative sexual and relationship consequences.

DYSFUNCTIONAL SEXUAL BELIEFS: DIFFERENCES BETWEEN EAST ASIANS AND CAUCASIANS

Heather Morton & Boris Gorzalka

Background: Research suggests that beliefs about sexuality play a role in sexual functioning. Whether this holds equally across cultures remains to be determined. The majority of the research in this area has been restricted to a single cultural group. East Asians and Caucasians have been found to differ across many aspects of sexual functioning. There has been minimal research however, examining dysfunctional sexual beliefs that may be associated with these differences.

Research Questions: The purpose of the current study was to investigate Canadian female undergraduates' sexual beliefs. This study examined differences in the sexual beliefs held by East Asians and Caucasians. In addition the relationship between beliefs and aspects of sexual functioning was investigated.

Method: Caucasian (n = 76) and East Asian (n = 100) Canadian undergraduates completed the Sexual Dysfunctional Beliefs Questionnaire, the Vancouver Index of Acculturation, and the Female Sexual Function Index.

Results: East Asian women had a significantly greater endorsement of beliefs relating to sexual conservatism, sexual desire as a sin, age related beliefs, body image, and motherhood primacy than Caucasian women. Significant positive correlations among East Asian women were found between heritage culture and several sexual beliefs (sexual conservatism, sexual desire as a sin, age related beliefs, body image beliefs, and denying affection primacy). Significant negative correlations were found among East Asian women between mainstream culture and beliefs relating to sexual conservatism, and sexual desire as a sin.

Significant negative correlations were found in East Asian women between sexual conservatism and several sexual functioning variables including desire, arousal, lubrication, and pain (where higher scores indicate better sexual functioning). Denying affection primacy was negatively correlated with arousal, satisfaction and pain in this group. Significant negative correlations were also found between pain and age related beliefs, body image beliefs, and beliefs relating to sexual desire as a sin. The only relationships between beliefs and aspects of sexual functioning found in the Caucasian group were a significant positive correlation between sexual conservatism and arousal, and significant negative correlation between motherhood primacy and orgasm.

Conclusions: East Asian women appear to endorse more dysfunctional sexual beliefs than Caucasian women. Several of these beliefs were significantly related to problems in sexual functioning.

Implications: Differences in the beliefs held by East Asian and Caucasian women may be associated with the differences in sexual functioning that are frequently observed between these two groups.

PATIENT CHARACTERISTICS AND PREVIOUS HEALTH CARE EXPERIENCES AMONG WOMEN SEEKING TREATMENT FOR PROVOKED VESTIBULODYNIA

Melissa Moses, Lori Brotto, Kelly Smith, Leslie Sadownik, & Sydney Thompson

Background: Vulvodynia refers to persistent genital pain in women. In the search for a diagnosis and treatment, many women remain undiagnosed and attempt numerous treatments to try and reduce their pain. The purpose of this study was to examine the characteristics and previous health-care experiences of women with provoked vestibulodynia (PVD) who were seeking treatment through a multidisciplinary program.

Research Question/Hypotheses: 1) What are the characteristics of women seeking treatment for PVD? 2) How long do women wait before seeking intensive treatment through a multidisciplinary program? 3) What are women's previous experiences with healthcare providers and treatment? We expected that most women would report visiting more than one practitioner and trying more than one treatment approach prior to seeking treatment through a multidisciplinary program.

Method: Participants consisted of 116 women with a diagnosis of PVD who were seeking treatment at the Multidisciplinary Vulvodynia Program (MVP) at Vancouver General Hospital. Prior to beginning a course of treatment that included group cognitive behavioural therapy, individual physiotherapy and medical management (if needed), participants completed questionnaires to assess demographics and pain/medical history. Participants' sexually-related distress was also evaluated using the Female Sexual Distress Scale.

Results: On average, participants were 28.8 years old ($SD = 7.5$). Mean duration of vulvar pain symptoms was 58 months; 91% of women had sought help from family doctors and gynaecologists, whereas only 30% and 17% of participants, respectively, reported seeing physiotherapists or counselors. On a scale of 0 (not at all) to 4 (very), women provided average ratings of 1.96 and 2.35 for how helpful their family doctors and gynaecologists were and ratings of 2.97 and 2.86 for physiotherapists and counselors. Participants reported levels of sexual distress that were higher than a validated sample of women with superficial dyspareunia (Brauer et al, 2009).

Conclusion: Women presenting for intensive, multidisciplinary treatment of vulvodynia previously contacted at least two healthcare providers and many have tried some form of oral or topical treatment. Providers associated with the highest ratings of helpfulness were only seen by a small percentage of participants, indicating that many women with vulvodynia are not accessing potentially helpful sources of treatment.

Implications: This study draws attention to the complexities women confront as they seek care for vulvodynia and navigate through the health-care system.

DOES JEALOUSY LEAD TO “CREEPING”? GENDER DIFFERENCES IN RESPONSE TO JEALOUSY TRIGGERS ON FACEBOOK

Amy Muise, Emily Christofides, & Serge Desmarais

Background Past research suggests that spending time on Facebook is associated with increased jealousy in romantic relationships and that these factors have a cyclical relationship: jealousy triggers lead to information seeking, exposing individuals to more jealousy triggers, prompting more information seeking (Muise, Christofides & Desmarais, 2009).

Research Questions/Hypotheses: Does being exposed to a jealousy trigger increase the amount of time a person spends searching for information on Facebook (termed “creeping” in the popular media)? Do men and women differ in the amount of “creeping” following a jealousy trigger? We predicted that women would be more likely to seek out additional information whereas men would be more likely to avoid looking at their partner’s Facebook page.

Method: The current study tests this relationship using an experimental design. One hundred and fifty undergraduate students (75 men and 75 women) accessed a simulated Facebook site that ostensibly belongs to their romantic partner. Participants viewed a photo of their partner and an attractive member of the opposite sex that matched one of the following three conditions: the person in the photo is their partner’s cousin, a mutual friend, or someone the participant does not know. Participants were then able to search for further information; search behaviours, and reactions were recorded.

Results: A multivariate analysis of variance (MANOVA) reveal a significant interaction between gender and condition on feelings of jealousy and creeping behaviour. Most notably, when women felt jealous they spent more time searching for information on Facebook, whereas men did not spend significantly more searching across conditions.

Conclusions/Implications: In general, the findings indicate that there are gender differences in responses to jealousy triggers on Facebook. The results have implications for understanding the ways in which men and women cope with feelings of jealousy and the new challenges that Facebook may present to dating relationships.

APPROACHING SEXUAL DESIRE IN LONG-TERM COUPLES: HOW APPROACH AND AVOIDANCE GOALS INFLUENCE DESIRE

Amy Muise, Serge Desmarais, Emily Impett, & Robin Milhausen

Background: Approach goals direct individuals toward positive outcomes, such as closeness in their relationship, whereas avoidance social goals direct individuals away from negative outcomes, such as conflict (Gabel, 2006). Sex with a partner can be pursued for approach goals (e.g., to foster closeness between you and your partner) or for avoidance goals (e.g., to avoid upsetting your partner; Impett & Peplau, 2003). Impett and colleagues (2008) demonstrated that the adoption of approach goals buffered against declines in sexual desire over a six-month period of time for individuals in romantic relationships. In the current study we explored the dyadic influence of approach goals on sexual desire in long-term romantic couples.

Hypotheses: We predicted that individuals in romantic relationships would report higher levels of sexual desire for their partner both on days when they engaged in sex for approach goals and on days when their partners engaged in sex for approach goals. We also predicted that engaging in sex for approach goals would be associated with greater relationship quality the following day.

Method: Fifty married or cohabitating couples (mean relationship length = 10 years) participated in a three-week daily diary study where they reported their relationship and sexual goals as well as their level of sexual desire and relationship quality each day.

Results: Hierarchical Linear Modeling (HLM) revealed increased levels of sexual desire when an individual or their partner engaged in sex for approach goals. The findings also indicated positive consequences for both partners' level of relationship satisfaction the following day.

Conclusions/Implications: The findings of the current study provide further support for the importance of approach goals in the experience of sexual desire. It is also important to note that sexual desire was highest when both couples engaged in sex for approach goals, but not significantly higher than when only one partner had approach goals. The findings highlight the dyadic nature of sexual desire in long-term couples.

SEXUAL DESIRE AND RELATIONSHIP DURATION IN YOUNG MEN AND WOMEN

Sarah Murray & Robin Milhausen

Rationale: At the beginning of a relationship sexual desire is often high because of the need to connect intimately with one's partner (Levine, 2003). However, research is divided regarding whether, and how, desire is maintained beyond the beginning phase of a new relationship. Some researchers suggest that desire decreases over time as a result of a reduced need to bond with one's partner or due to increased familiarity, routine, and monotony (e.g., Basson, 2000; Hatfield & Sprecher, 1986; Levine, 2002). Others suggest sexual desire may be maintained or even increase in a long-term relationship (e.g., Granvold, 2001; Impett, Strachman, Finkel, & Gable, 2008; Kleinplatz et al., 2009).

Research Questions: Does relationship duration predict sexual desire for men and women over and above other relationship factors? Is the relationship between relationship duration and sexual desire different for men and women?

Method: Relationship duration and its impact on sexual desire were examined in 170 undergraduate men and women between the ages of 18-25. Relationship length ranged from 1-108 months ($M = 24.54$, $SD = 21.83$). Demographic information, sexual desire scores (Female Sexual Function Index, Rosen et al., 2000 and Brief Male Sexual Function Index; O'Leary et al., 1995), sexual satisfaction (Index of Sexual Satisfaction; Hudson, et al., 1981) and relationship satisfaction (Dyadic Adjustment Scale; Spanier, 1976) were collected.

Results: Hierarchical multiple regression results indicated that women's sexual desire was significantly, negatively predicted by relationship duration after controlling for age, relationship satisfaction, and sexual satisfaction $F(1, 73) = 6.79$, $p < .05$. The model accounted for 33.5% of the variance in sexual desire. Control variables explained a significant 28.3%, and relationship length explained an additional 5.9% of the variance in sexual desire.

Men's sexual desire was not significantly impacted by the duration of their romantic relationships ($F(1, 56) = 1.62$, $p > .05$). The only significant predictor of sexual desire in the men's model was sexual satisfaction.

Conclusions: These findings suggest that men and women may have different experiences with sexual desire as relationships progress, and that sexual desire might be impacted by different factors depending on one's gender.

Implications: The finding that sexual desire may decrease for women over time, but may not decrease for men, could lead to desire discrepancy within heterosexual couples as their relationship progresses. Understanding how acquired low sexual desire could be explained would be helpful in normalizing sexual desire and potential sexual desire problems for women.

HOW'S YOUR TEXT LIFE? HIGH TEXT USE AND ITS ASSOCIATION WITH SEXUAL ACTIVITY AND HEALTH RISK BEHAVIOURS IN A LONGITUDINAL STUDY OF HIGH SCHOOL STUDENTS

Lucia O'Sullivan

Background: Frank (2010) created a media stir by reporting that US adolescents who engage in high rates of texting were at far greater risk for binge drinking, illegal drug use, physical aggression, and reported higher rates of sexual experience and numbers of sexual partners. It is unclear whether there is something unique about this form of computer-mediated communication or whether in fact any or all forms of technology-related screen time are related to sexual outcomes and risk behaviours. The current study used data from a longitudinal study of Eastern Canadian high school students to determine whether sexual and risk outcomes were associated with high rates of texting, computer, video and TV use.

Research Questions/Hypotheses: Are high levels of texting associated with differential sexual and/or health risk profiles relative to high levels of other forms of technology use?

Method: The sample comprised 367 adolescents (134 male and 233 female; 13-17 years; $M = 14.9$), from eight regional high schools in New Brunswick. All completed online surveys about a range of health variables relevant to their sexual behaviour over a two-year period. Online survey data came from two assessments spaced one year apart (81% retention rate). Standard measures were used to assess demographic information, risk behaviour, sexual experience, and technology use.

Results: Logistic regressions were used to predict high levels of text, computer, TV, video or total screen time. Predictor variables included oral sex experience, intercourse experience, depression, alcohol and cigarette use in past month, family functioning and student status. High text use was associated with higher odds of oral sex experience ($OR = 2.49$) at baseline. Logistic analyses predicting oral sex or vaginal intercourse experience at the one-year assessment from (high versus moderate/low) text computer, video or TV use at baseline were also conducted. Only high text use was a significant predictor of both oral sex ($OR = 4.41$) and vaginal intercourse experience (4.84). No other differences emerged regarding adolescents' sexual profiles (number of dating or sexual partners, age of first sexual experiences).

Conclusions and Implications: Unlike Frank (2010), this study did not indicate that text use was associated with a strong profile of health risk activity. However, high text users were approximately 4.5 times more likely to report oral sex and vaginal intercourse activity a year later compared to moderate or low users of this social technology. No other differences emerged, suggesting it is important to explore these particular associations further. The findings may ultimately have implications for understanding the integration of technology and social media into sexual development.

VIRTUAL CHEATING HEARTS: THE RELATIONSHIP BETWEEN INTERNET ACTIVITY AND SEXUAL INFIDELITY

Scott Ronis & Lucia O'Sullivan

Background: The Internet and other technologies allow people all over the world to communicate with ease. However, these tools provide opportunities and challenges for offline relationships. For example, online communication has allowed couples to simultaneously be connected to each other on a regular basis and be at risk for relationships with others (Mileham, 2007). Indeed, the Internet affords people the opportunity to meet strangers, flirt, engage in sexualized conversations, and engage in online sex acts. In particular, adolescents frequently engage in these online behaviours (Valkenburg & Peter, 2009), yet limited research has been conducted with this population. In this study, we examined reports of sexualized interactions with strangers and known others online and associations with extradyadic relations offline.

Research Questions:

- (1) Are adolescents' reports of sexualized interactions with strangers online associated with extradyadic relations offline?
- (2) Does this relationship differ for male and female adolescents?
- (3) If so, are there psychosocial factors that help explain this association?

Method: Participants were 224 youth, ages 15 to 19 years, from eight regional high schools in New Brunswick. Online survey data came from the fourth assessment wave of a longitudinal dataset (O'Sullivan, PI) on youths' sexual behaviour and psychosocial characteristics. Standard measures were used to assess demographic information, sexual behaviour, and Internet activity. Participants were predominately females (67.0%); mean age was 17.0 years ($SD = 0.9$); 92.0% Caucasian, 3.7% Asian, 4.3% other ethnicities; and from households with a mean of 3.9 members ($SD = 1.2$). Most (82.6%) reported ever having a boyfriend or a girlfriend.

Results and Conclusions: Of the 224 participants, 18% reported ever viewing Internet pornography at least 50, 29% reported receiving or sending a nude or semi-nude photo of themselves or someone else, and 10% reported talking about sex with someone online who they did not know. There were 43 participants (19.2%) who reported ever cheating on their boyfriend or girlfriend with someone else. Talking with a stranger online was associated with cheating on a partner ($\chi^2 = 9.74$, $p = .002$), especially for male adolescents. Other variables were also examined to help explain this statistical relationship.

Implications: Findings from this study are expected to contribute to our understanding of the nature of youths' online sexual activity and how this activity may be related to off-line intimate relationships. Implications for researchers and educators will be discussed.

CHILDHOOD SEXUAL EXPERIENCES: RESULTS FROM A RETROSPECTIVE ONLINE SURVEY

Scott Ronis, Sara Thornton, & Andrea DuPlessis

Background: Childhood sexual experiences (CSE) are not well understood (Larsson & Svedin, 2002). Specifically, researchers are unclear about the nature and prevalence of CSE as well as what differentiates normative experiences from abuse (Pereda, Guilera, Forns, & Gomez-Benito, 2009). In addition, there is evidence that some CSE have been associated with short- and long-term psychological, interpersonal, and sexual problems (Maniglio, 2009). However, there are debates in the literature about the certainty that all CSE have negative outcomes (Larsson & Svedin, 2002).

Research Questions:

- (1) What are the broad range and prevalence of CSE in a university sample?
- (2) How consensual/coercive are these sexual experiences perceived?
- (3) What is the perceived psychological impact of these sexual experiences?

Method: Participants were 174 individuals enrolled at the University of New Brunswick who completed an anonymous online survey. The survey included nine measures of functioning: (1) background demographic information; (2) family substance abuse and psychiatric history; (3) family dynamics; (4) sexual experiences in childhood; (5) delinquent history and substance use; (6) psychological functioning; (7) feelings of self; (8) interpersonal relationships; and (9) sexual history. Participants were given the option of entering their name to win a gift card.

Results: Participants were predominately females (77.6%); mean age was 19.3 years ($SD = 2.7$); and 89.7% Caucasian, 2.9% Asian, 2.9% Hispanic, 1.7% black, and 2.8% other ethnicities. Nine participants (5.2%) reported being physically abused by their parents while growing up, and 32 participants (18.4%) reported running away from home at least sometimes. We have completed cleaning the data for the present study and have begun to analyze the prevalence of CSE.

Conclusions: Although the prevalence of CSE is relatively low, it is important to examine the consensual/coercive nature and impact of these experiences. In total, 22 participants (12.6%) reported having sexual experiences (i.e., looking at nude, having sexually suggestive talk, exposing genitals, touching genitals, oral sex, sexual intercourse) with an adult during their childhood (age 16 or prior). Of these participants, 9 reported their experiences to be consensual and 13 reported them to be coercive. The perceived psychological impact of the sexual experiences, both consensual and non-consensual, is reported as being high.

Implications: Findings from this study will help researchers to define and assess typical and atypical childhood sexual experiences. In addition, the use of online methodology for assessing sexual experiences will be discussed.

FACILITATIVE VERSUS SOLICITOUS PARTNER RESPONSES IN PREDICTING PAIN IN WOMEN WITH PROVOKED VESTIBULODYNIA

Natalie Rosen, Sophie Bergeron, Maria Glowacka, Isabelle Delisle, & Mary Lou Baxter

Background. Provoked vestibulodynia (PVD), a subtype of dyspareunia, is an acute, recurrent, vulvo-vaginal pain condition that is triggered primarily through sexual contact. It is a highly prevalent chronic pain problem (estimates of 12-15% in community samples) that results in significant sexual dysfunction, psychological distress and reduced quality of life. There is growing interest in the role of interpersonal variables in PVD, which have been widely neglected. Prior research has emphasized the detrimental impact of partner solicitousness. Specifically, greater partner solicitous responses have been associated with greater patient pain in chronic pain populations and among women with PVD. Few studies have examined how adaptive partner responses might improve functioning of pain patients. Schwartz et al. (2005) found that facilitative responses to patient pain behaviours were associated with less patient disability in a chronic pain population. Nothing is known about how facilitative partner responses may improve functioning in PVD.

Hypotheses. We hypothesized that solicitous partner responses would be associated with higher vulvo-vaginal pain whereas facilitative partner responses would be associated with lower vulvo-vaginal pain in women with PVD.

Method. A sample of 85 women (M age = 29.00, SD = 8.00) with PVD completed the spouse response scale of the Multidimensional Pain Inventory and the Spouse Response Inventory assessing perceptions of solicitous and facilitative partner responses to the pain. Women also completed measures of depression, frequency of engaging in pain-relevant and sexual behaviours, and pain. The dependent variable was assessed by women's responses to the short form of the McGill Pain Questionnaire with reference to their pain during intercourse.

Results. Controlling for depression and frequency of engaging in pain-relevant and sexual behaviours, higher solicitous partner responses were associated with higher vulvo-vaginal pain intensity $F(3,82) = 6.50$, $p = .001$, and higher facilitative partner responses were associated with lower vulvo-vaginal pain intensity $F(4,81) = 6.25$, $p < .001$.

Conclusions, Implications. Results suggest that partner responses to women's pain may negatively and positively impact women's pain experience. Solicitous responses may increase women's pain by encouraging avoidance and passivity whereas facilitative responses may encourage patient's efforts at adaptive coping with the pain. The findings may inform the development of targeted psychological interventions for couples dealing with PVD.

TEACHING SEXUAL INTIMACY IN CHINA

Bianca Rucker & Lance Rucker

Background: Although much has changed in family life in China over that past decade, sexual intimacy has received little attention. Valuing oneself and aspiring to positive personal relationships are new concepts for couples in China. Dr. John Banmen, a Canadian psychologist has been instrumental in the creation of programs in China to train thousands of Chinese therapists using the Satir Growth Model.

As a sex therapist, one of the presenters was invited to teach sex therapy workshops in Hong Kong and in Seoul in 2010. After this successful experience, she was invited by two of the major Satir Institutes of China to come to Beijing and in Guangzhou. In June 2011, she will be teaching a 3-day workshop in each of these cities to couples and individuals on "Sexual Intimacy", with her husband as co-presenter. They will share their experiences and observations regarding sexual intimacy in China.

They have been asked to provide workshop activities aimed at changing limited sexual beliefs, to discuss ways to improve womens' satisfaction with sex, and to address erectile dysfunction and premature ejaculation. In particular, the Chinese have requested that there be a focus on sexual desire issues, because "many people exhibit sexual indifference under the stress of China's rapidly-developing society." There is also a special interest in how to prevent marriage break-down, repair relationships, and improve the quality of sex. These concerns are all the more imperative because, in keeping with traditional Chinese culture, couples do not usually divorce.

Questions to be Addressed in the Presentation:

- What currently characterizes Chinese couple relationships?
- What is the Satir Growth Model?
- Why has the Satir Growth Model been accepted in China and what is changing there as a result?
- What are the differences between men and women in China with respect to their feelings, beliefs, and expectations in intimate relationships?
- What are the Chinese taboos about sex?
- What are common sexual and relationship problems in China?
- How open are the Chinese to Western concepts of sexual intimacy?

Final steps in the development of the Sexual Script Scale: Confirmatory Factor Analysis and test-retest reliability

John Sakaluk, Leah Todd, Robin Milhausen, & Nathan Lachowsky

Background: Simon and Gagnon's Sexual Scripting Theory (1986) has become a widely used theoretical framework for sexuality research; over 100 peer-reviewed studies have been conducted to examine sexual scripting. Measurement of sexual script endorsement, however, has been limited. LaPlante, McCormick, and Brannigan (1980) proposed a sexual script measure, but this questionnaire was limited to only assessing initiator and gatekeeper scripts. Following a focus group study examining contemporary sexual scripts, the current

authors and URGiS developed a more comprehensive measure to assess sexual script endorsement.

Research Questions: The Sexual Script Scale was developed in a previous study using exploratory factor analysis, which measure six related factors: Sexual Standards, Sexual Simplicity/Complexity, Sex Drive, Performance and Orgasm, Players, and Emotional Sex. However, as this initial study was exploratory in nature, the current study was conducted to formally test the proposed factor structure on a separate sample. Additionally, the current study was conducted to examine the test-retest reliability of the Sexual Script Scale.

Method: 289 heterosexual young adults ($M_{\text{age}} = 24.89$, $SD = 7.07$) completed the 33 item Sexual Script Scale. 34 participants submitted complete data for the Sexual Script Scale two weeks later to assess test-retest reliability of the scale.

Results: Confirmatory factor analysis was conducted in MPLUS using Maximum Likelihood estimation. Following Hu and Bentler's (1998 and 1999) recommendations, model fit was evaluated using the Root Mean Square Error of Approximation (RMSEA), the Tucker-Lewis Index (TLI; Bentler & Bonett, 1980), the Comparative Fit Index (CFI; Bentler, 1990), and a residual-based measure, the Standardized Root Mean Square Residual (SRMR). The RMSEA and SRMR indicated a good fit for the six-factor model, while the TLI and CFI approached acceptable fit values. More importantly, the present study replicated the model fit from the previous EFA study. Further analyses did not support the presence of a higher-order latent variable.

Test-retest reliability was within an acceptable range for five of the factors ($r = .72 - .90$), but low for the Player factor ($r = .60$).

Conclusions: The hypothesized six-factor solution provided an acceptable fit, and all but one of the factors demonstrated adequate test-retest reliability. These findings, combined with the absence of a higher-order latent variable, support a theoretical model of multiple related—yet distinct—sexual scripts. The results will be discussed in their relation to existing sexual scripting research, and an emphasis will be placed on testing Sexual Scripting Theory using a developmental framework.

SPECIFICITY OF ATTITUDES TOWARDS ONLINE SEXUAL ACTIVITIES

Krystelle Shaughnessy & Sandra Byers

Shaughnessy, Byers, and Walsh (2011) suggested that online sexual activities (OSA) can be divided into three categories: non-arousal (e.g., seeking sexuality information), solitary-arousal (e.g., watching sexually explicit videos), and partnered-arousal (e.g., participated in sexual discussion groups for arousal purposes). Although it is likely that people's attitudes toward these three types of activities are not uniform, this has not been studied empirically. The purpose of the current study was to examine similarities and differences in attitudes toward these three forms of OSA. Specifically, we expected that although attitudes towards non-arousal, solitary-arousal, and partnered-arousal OSA would be significantly related to each other, men and women would report more positive attitudes toward non-arousal OSA than toward the other two forms of OSA. We also expected that men and women would report more positive attitudes toward solitary-arousal OSA than towards partnered-arousal OSA. Finally, we expected that specific attitudes would be more strongly associated with engaging in that type of OSA than would sexual attitudes in general or attitudes to the other types of OSAs.

We recruited men (170) and women (241) online to complete a survey that included a background questionnaire and measures of attitudes toward and experiences with non-arousal, solitary-arousal, and partnered-arousal OSAs. On average, participants reported neutral attitudes toward solitary- and partnered-arousal OSA ($M = 45.23$, $SD = 13.30$ and 43.78 , $SD = 13.66$ respectively), and slightly positive attitudes toward non-arousal OSA ($M = 50.02$, $SD = 10.94$). The three types of attitudes were significantly and highly correlated with each other (r ranged $.61 - .78$). A 2 (gender) X 3 (type of attitude) repeated measures ANOVA found a significant main effect for Type of Attitude ($F(2, 256) = 40.56$, $p < .01$) and a significant Gender X Type of Attitude interaction ($F(2, 256) = 11.98$, $p < .01$). Mean comparisons revealed that the men were significantly more positive in their attitudes toward non-arousal and solitary-arousal activities than toward partnered-arousal OSAs. However, the women were significantly more positive in their attitudes toward non-arousal activities than to either solitary- or partnered-arousal activities. To disentangle these findings, we will conduct a factor analysis of the attitude measures. Based on the resulting factor structure, we will regress the attitude measures on each type of OSA experience to determine the extent to which specific OSA attitudes predict OSA experience. This study contributes to our knowledge of attitudes toward online sexual activities and their association with behaviour.

What about the partners? An examination of sexual, relational, and psychological functioning among male partners of women with provoked vulvar pain

Kelly Smith & Caroline Pukall

Background: Provoked vulvar pain in women that is localized to the vaginal opening is a highly prevalent and distressing condition. Such pain is typically provoked by sexual intercourse, and affected women experience increased rates of sexual dysfunction and dissatisfaction. However, despite the partnered sexual context in which the pain typically occurs, only a handful of studies to date have included partners. The purpose of this study was to examine sexual, relationship, and psychological functioning among male partners of women with provoked vulvar pain.

Research Questions/Hypotheses: 1) Do partners of women with provoked vulvar pain differ from controls with regard to sexual, relationship, and psychological functioning? 2) How does

the sexual, relationship, and psychological functioning of male partners compare to that of their pain-affected female partners? We expected that pain partners would report decreased functioning in comparison to controls. However, we also expected that these partners would report higher functioning as compared to their pain-affected female partners.

Method: Participants were 29 heterosexual couples in which the female partner reported provoked vulvar pain and 33 male controls. Participants completed validated measures via an online survey to assess sexual functioning, sexual satisfaction, relationship adjustment, mood, and quality of life. Participants also rated: 1) how important sex was to them; 2) how strongly their relationship matched their idea of a satisfying relationship; and 3) how much vulvar pain impacted their relationship (for pain couples only).

Results: Male pain partners reported significantly lower levels of sexual satisfaction in comparison to controls. Although 77% of these partners reported that pain negatively impacted their relationship, no significant differences were found between pain partners and controls with regard to overall relationship adjustment. However, male pain partners were significantly more likely to report a mismatch between their current relationship and their idea of a satisfying relationship. No significant differences were found between pain partners and controls with regard to erectile function, desire, mood, or quality of life. Male partners only differed significantly from their pain-affected female partners with regard to importance of sex and quality of life.

Conclusions: These findings indicate that partners of women with provoked vulvar pain experience reduced sexual satisfaction and some negative effects of pain on their relationships.

Implications: This study draws attention to the impact that provoked vulvar pain likely has on male partners, and is one of the first to use controlled methodology to examine such partners.

EXAMINING THE CONSISTENCY OF SEX DIFFERENCES IN SEXUAL AROUSAL PATTERNS

Kelly Suschinsky & Martin Lalumière

Background: There are two important differences between men and women's sexual arousal patterns. The first involves *category-specificity* (i.e., the degree to which certain features of a sexual stimulus elicit arousal). Men exhibit different levels of genital arousal to different sexual stimuli (i.e., category specific arousal), whereas women exhibit relatively equal levels of genital arousal to different sexual stimuli (i.e., category-nonspecific arousal). The second difference involves *sexual concordance*, or the degree to which an individual's genital arousal corresponds to her or his subjective experience of sexual arousal. Men's sexual arousal is typically concordant, in that their genital and subjective sexual arousal are highly correlated. Women's sexual arousal is typically less sexually concordant, in that their genital and subjective sexual arousal tend to be significantly less correlated.

Although these sex differences are consistent across studies, no researchers have examined the consistency of these differences within the same study. Women tend to report less sexual experience than men (e.g., lower erotic material consumption and masturbation frequency). It is possible that the sex differences in sexual arousal patterns are the result of sexual experience, and that giving women the opportunity to be exposed to erotic material may alter their sexual arousal patterns. In any case, examining the test-retest reliability of these sex differences would support their validity.

Research Question: Are the sex differences in sexual arousal patterns consistent across two testing sessions

Method:: Sixteen heterosexual men and eleven heterosexual women participated in two sessions held approximately one month apart (data collection for session two is ongoing and will be completed by the end of April 2011; $n = 20$ men and 20 women). In each session, the participants were presented with a variety of sexual and non-sexual audiotape narratives while their genital and self-reported sexual arousal were measured. Genital arousal was measured with circumferential phallometry and vaginal photoplethysmography, and subjective sexual arousal was assessed after each narrative.

Results: Preliminary results indicate that men and women exhibited significantly different patterns of genital arousal and that men exhibited significantly higher sexual concordance relative to women in session one.

Conclusion and Implications: The results of the current study may shape how future sexual arousal research is conducted. If the sex differences in sexual arousal patterns remain after two testing sessions, further research must be conducted to explain these differences. If the sex differences decrease over testing sessions, researchers must question the validity of these sex differences.

ARE YOUR BIASES SHOWING? AN IAT TEST OF STUDENTS' IMPLICIT ATTITUDES TOWARD SEX AMONG THE ELDERLY

Ashley Thompson, Krystelle Shaughnessy, Lucia O'Sullivan, & E. Sandra Byers

Background: Previous research has indicated that although sexual expression throughout the lifespan is valued by young adults, their attitudes towards elderly sexuality are inconsistent (Allen, Petro & Phillips, 2008; Bouman, Arcelus, & Benbow, 2006; Floyd & Weiss, 2001). Some studies report the endorsement of positive attitudes toward elderly sexuality whereas others report negative attitudes. The inconsistencies produced by these studies may be related to an over-reliance on self-report measures to assess these attitudes. The use of self-report measures is associated with socially desirable responding, especially when assessing socially sensitive topics (e.g., sexual attitudes). One tool that has proven successful at overcoming these issues is the Implicit Association Test (IAT; Greenwald, McGhee & Schwartz, 1998), which measures implicit rather than explicit attitudes.

Research Questions/Hypotheses: The current study employed the IAT to measure young adults' implicit attitudes towards elderly sexuality. Specifically, we sought to compare the implicit attitudes toward sexual and non-sexual (general) interactions of elderly versus young adults.

Method: One hundred and fifty students attending an Eastern Canadian university were recruited for the purposes of the study. Each participant completed four different IAT components, as well as items assessing demographic information and explicit attitudes toward aging and sexuality. Four different categories of images were used for the purposes of this study. These categories included images depicting (1) general activities (e.g., walking, playing a game) among young adults, (2) general activities among the elderly, (3) sexual interactions among young adults, and (4) sexual interactions among the elderly.

Results: Through counterpositioned images that require sorting into categories, the IAT generates scores based on reaction times, which provide an index of the valence of an individual's implicit attitude. Results indicate that young adults have much more negative implicit attitudes toward elderly adults than younger adults in both general and sexual contexts, and less positive attitudes toward sexual versus general interactions. The results of multiple regressions will be presented to demonstrate the unique variance depicting negative attitudes towards elderly sexuality.

Conclusions/Implications: Research attention focusing on young adults' attitudes toward elderly sexuality is beneficial when informing educators about bias or discrimination in the context of an aging population. Our results can assist in program development in order to decrease the stigma associated with sexual activity in later life.

THE DEVELOPMENT OF MALE SAME-SEX SEXUAL ORIENTATION IN SAMOAN *FA'AFAFINE*

Doug P. VanderLaan & Paul Vasey

Background: The expression of male androphilia (i.e., male sexual arousal and attraction to adult males) varies across cultures. In Western cultures, androphilic males most commonly identify as *gay* or *homosexual* men. In contrast, androphilic males in non-Western cultures often do not identify as such; rather, they are *transgendered* and adopt “third” gender identities that are distinct from the categories of “man” and “woman.” Such differences in the expression of male androphilia might reflect differences in its development across cultures. Most research concerning the development of male androphilia focuses on samples derived from Western populations, showing a number of family demographic correlates of male sexual orientation. In particular, compared to men who exhibit gynephilia (i.e., sexual arousal and attraction to adult females), Western androphilic men show: (1) greater numbers of older biological brothers, (2) larger family sizes, and (3) a tendency to cluster in particular families.

Research Question:

Do these three correlates of male sexual orientation exist in non-Western populations?

Method: We focused on a non-Western population of transgendered androphilic males in Samoa, known locally as *fa'afafine*. In Study 1, we interviewed *fa'afafine* and Samoan gynephilic men about their numbers of older and younger biological brothers and sisters. In Study 2, we interviewed *fa'afafine* and Samoan gynephilic men about their numbers of aunts and uncles as well as their numbers of cousins on the maternal and paternal sides of their families. In Study 3, we examined the case of a natal village of 17 *fa'afafine* to assess whether the genealogies of these *fa'afafine* showed that they clustered in particular families.

Results: In Study 1, number of older biological brothers was a unique predictor of male sexual orientation, with *fa'afafine* showing significantly greater numbers of older biological brothers. In Study 2, analysis of family sizes for *fa'afafine* versus Samoan gynephilic men showed that *fa'afafine* have significantly larger extended family sizes. In Study 3, the 17 *fa'afafine* belonged to five lineages, which was a significant degree of family clustering.

Conclusion: The three developmental correlates of male androphilia identified in the West appear to also exist in Samoa, a non-Western culture.

Implications: Despite cross-cultural variability in the expression of male androphilia, it nonetheless appears to show developmental consistencies across diverse populations.

DOES FORBIDDEN FRUIT TASTE SWEETER?: THE EFFECT OF PERCEIVED RELATIONSHIP STATUS ON ATTRACTIVENESS AND DESIRABILITY.

Sarah Vannier, Lucia O'Sullivan, & Anna Currie

Rationale: According to evolutionary theory, both men and women have developed sexual strategies for identifying potential mates (Buss & Schmitt, 1993). Past research indicates that an individual's relationship status may signal qualities that he or she possesses as a potential mate (Parker & Berkley, 2009).

Hypotheses: 1) As women's reproductive success is maximized by identifying mates who are willing to invest resources in a relationship, we predicted that women would find men involved in a committed relationship as more attractive than those who are single. 2) As men's reproductive success is maximized by reproducing in more casual contexts, we predicted that men would be more attracted to women who are single as compared to women who are involved in a committed relationship.

Method: Participants comprised 83 men and 137 women between the ages of 18 and 24 ($M = 19.5$ years) recruited from introductory psychology classes. Participants viewed target photos and a brief biography of opposite-sex young adults described as being single or in a relationship. Participants rated the targets' attractiveness, and desirability as a short term partner and long-term partner (imagining both participant and target were single).

Results: Male participants rated targets as more attractive, $F(1,217) = 5.57$, $p < .05$, and more desirable as short-term partners, $F(1,213) = 62.59$, $p < .001$, than did female participants, possibly corresponding to theory suggesting that women are more selective when choosing a mate. However, as compared to targets who were described as being involved in a relationship, both men and women rated targets who were described as single as more attractive, $F(1,217) = 7.88$, $p < .01$, more desirable as short-term partners, $F(1,213) = 7.77$, $p < .01$, and more desirable as long-term partners, $F(1,213) = 22.49$, $p < .001$.

Conclusions: Socialization may be a stronger determinant of preferences when rating attractiveness and desirability as a partner. There are societal norms against selecting a mate who is already involved in a relationship, and the potential risks of mate poaching include loss of status and reputation (Schmitt & Buss, 2001). Thus, individuals may be less likely to report that an individual who is involved in a committed relationship is desirable. Future research may benefit from implicit measures of attraction and mate preference.

Implications: This research improves our understanding of the ways in which individuals identify potential mates and provide greater insights regarding the dynamics of partner selection.

THE EVOLUTION OF MALE ANDROPHILIA: CROSS-CULTURAL DATA FROM SAMOA AND JAPAN

Paul Vasey & Doug VanderLaan

Rationale/Background: Research indicates that there is a genetic basis for male androphilia (i.e., male sexual attraction to adult males), yet androphilic males reproduce at a much lower rate than gynephilic males (i.e., males that are sexually attracted to adult females). One would expect genes for male gynephilia to have long replaced those for male androphilia given the reproductive benefits associated with the former. Given this, how do genes for male androphilia persist over evolutionary time?

One potential explanation, the Kin Selection Hypothesis (KSH), holds that genes for male androphilia could be maintained in a population if enhancing one's indirect fitness offsets the cost of not reproducing directly. Androphilic males could increase their indirect fitness by directing altruistic behaviour toward close kin, which, in principle, would allow kin to increase their reproductive success. Research conducted in Western cultures has failed to find any support of the KSH.

Research question/hypothesis: Is there any support for the KSH from non-Western cultures?

Method: Questionnaires measuring altruistic tendencies toward: (1) nieces and nephews and (2) non-kin children were employed in Samoa and Japan. Questionnaires were also employed in Samoa that measured recalled attachment to the family in childhood. Gynephilic men, androphilic men and women were recruited at both fieldsites.

Results: In Samoa, androphilic men exhibit significantly higher altruistic tendencies toward nieces and nephews compared to gynephilic men and women. In addition, the avuncular cognition of androphilic men appears to exhibit special design features indicative of past evolutionary selection in that, androphilic males appear to be more focused on maximizing resources directed to nieces and/or nephews while minimizing resources directed to non-kin children. Samoan androphilic males recalled increased attachment to the family in childhood than women and gynephilic men.

Comparable data from Japan fails to provide any support the Kin Selection Hypothesis for male androphilia.

Conclusion: Repeated support of the Kin Selection Hypothesis for male androphilia has been garnered from Samoa, but, to date, no support has been garnered from Japan.

Implications: In Samoa, elevated avuncular (uncle-like) tendencies and behaviour likely contribute to the fitness of genes for male androphilia. These cognitive tendencies appear to have early developmental precursors in the form of elevated attachment to the family. Comparative data from Samoa and Japan suggest that development of elevated avuncularity in adult male androphiles will be dependent upon the appropriate social context and, as such, will be cross-culturally variable in its expression.

VALIDATING DEFINITIONS OF CASUAL SEXUAL RELATIONSHIPS

Jocelyn Wentland & Elke Reissing

Rationale or Background

The term ‘casual sex’ is used indiscriminately to describe all types of sexual activity that occurs outside the context of a committed relationship. However, recent research suggests that specific casual sexual relationships, such as One Night Stands, Booty Calls, F*ck Buddies, and Friends with Benefits, represent unique relationships that differ in regards to frequency of contact, type of contact (sexual or non-sexual), personal disclosure, discussion of relationship, and friendship (Wentland & Reissing, submitted manuscript).

Research Questions/Hypotheses

Can the One Night Stand, Booty Call, F*ck Buddy, and Friend with Benefits relationships be validated using the definitions identified in previous research?

Method: On online survey was used to examine the validity of definitions of the various casual sexual relationships and 60 specific items related to various aspects of the relationships (e.g., These individuals: contact each other late at night to make arrangements to see each other; add each other to Facebook; remain friends post sexual activity). Both undergraduate students from the University of Ottawa and a community sample were recruited to complete the online study.

Results: Preliminary analyses¹ suggest that participants readily identified the definitions for the various casual sexual relationships (e.g., One Night Stand, Booty Call, F*ck Buddy, Friends with Benefits). In addition, participants identified the various items that are specific to the different casual sexual relationships. Age and gender effects will be discussed.

Conclusions/Implications: Participants validated the definitions for each casual sexual relationship suggesting that each relationship can be distinctly placed along a continuum of casual sex. Given the popularity of these sexual relationships among young adults (Bisson & Levine, 2009; Grello, Welsh, & Harper, 2006; Hughes, Morrison, & Asada, 2005; Puentes, Knox, & Zusman, 2008), it is important for researchers to use the valid terminology to measure these relationships so that casual sex research results can be compared across studies and researchers identify the multiplicity of casual sexual relationships that young adults engage in.

¹ An updated abstract will be submitted once the final analysis of this dataset has been conducted.

THE RELATIONSHIP BETWEEN BREASTFEEDING AND SEXUALITY: SEXUAL FUNCTIONING PRE-PREGNANCY AND POSTPARTUM

Christina Young

Background: Despite the recommendation that infants should be breastfed exclusively for six months (Health Canada, 2004), only 69.1% of women in Newfoundland and Labrador initiate breastfeeding, and 10.3% of women breastfeed exclusively for six months (Statistics Canada, 2007/2008). Since breasts are a sexualized organ with the dual purpose of both sexual pleasure, and nourishment for infants, the choice to breastfeed becomes complicated for many women (Rodriguez-Garcia & Frazier, 1995).

Research Question: What is the relationship between breastfeeding and sexual functioning, and how does this relationship impact women's experiences of breastfeeding?

Method: Twenty women were recruited through a breastfeeding support group in St. John's, Newfoundland, and subsequently through snowball sampling. The study involved an anonymous questionnaire, including retrospective and current measures of sexual functioning. Sexual functioning was examined through subjective ratings of sexual desire, satisfaction, and on frequency of sexual relations with a partner, and frequency of masturbation. The questionnaire also examined elements of partner support of breastfeeding, perception of breasts as sexual or nutritive, and involvement of breasts in sexual play.

Results: Almost all participants were exclusive breastfeeders, and over half had been breastfeeding for 12 months or more. Most participants had resumed full sexual relations (such as sexual intercourse) by three months postpartum. Decreases were observed in ratings of sexual desire, and sexual satisfaction, and on frequency of sexual relations with a partner, and frequency of masturbation from pre-pregnancy to the last month of breastfeeding. Generally participants rated their breasts as having a more nutritive than sexual function, and participants demonstrated a substantial decrease in involvement of breasts in sexual play while breastfeeding.

Conclusions: While changes were observed in several areas of sexual functioning during the last month of breastfeeding, the most dramatic change was observed in the sharp decrease in ratings of sexual desire from pre-pregnancy to the last month of breastfeeding. Other studies have demonstrated this finding, with breastfeeding women being shown to experience a greater decrease in sexual desire postpartum than non-breastfeeding women (Hyde, DeLamater, Plant, & Byrd 1996; LaMarre, Paterson, & Gorzalka, 2003).

Implications: This study reinforced previous findings that substantial changes in sexual functioning are observed in breastfeeding women, particularly related to sexual desire. Further research is required to understand the complex relationship between breastfeeding and sexual functioning, and how this relationship impacts infant feeding choice.

BIOLOGICAL MARKERS OF ASEXUALITY: FINGER LENGTH RATIOS, HANDEDNESS AND OLDER SIBLINGS IN SELF-IDENTIFIED ASEXUAL MEN AND WOMEN

Morag Yule, Lori Brotto, & Boris Gorzalka

Background/Rationale: Human asexuality is defined as a lack of sexual attraction to anyone at all, and evidence suggests that it may be a sexual orientation. It has also been suggested that asexual individuals experience a sexual dysfunction known as hypoactive sexual desire disorder (HSDD). If correct, this has important implications for how asexual individuals are cared for by health-care providers. There is some evidence that asexuality is fundamentally different from HSDD, and members of the asexual community propose that if asexuality were more accurately considered as a sexual orientation, this would decrease stigma surrounding asexuality. Measures of finger length (2D:4D) ratios, handedness, and number of older siblings may be related to prenatal development, and have been linked to sexual orientation. We consider results of a large internet study investigating the relationship between these three putative biological markers of sexual orientation, and self-identification as asexual.

Research Questions/Hypothesis: The aim of this study was to compare 2D:4D ratios, handedness and number of older siblings in asexual, heterosexual, and non-heterosexual men and women. We predicted that asexual individuals would have atypical 2D:4D ratios, atypical patterns of handedness, and an atypical number of older siblings relative to heterosexual and non-heterosexual individuals.

Method: Nine hundred and sixty-nine women (265 asexual, 502 heterosexual, and 202 non-heterosexual) and 315 men (60 asexual, 191 heterosexual, and 64 non-heterosexual) completed an online questionnaire including measures of finger lengths, handedness and older siblings.

Results: Asexual men and women were more likely to be non-right-handed than their heterosexual counterparts, and there were significant differences between sexual orientation groups on number of older siblings, and this differed depending on handedness. We found no significant differences between sexual orientation groups on measurements of 2D:4D ratio, however this is likely due to relatively small sample size.

Conclusions: This is the first study to test and provide empirical support for an underlying biological etiology to account for the lack of sexual attraction characteristic of asexuality, in a manner similar to the demonstrated link between biological factors and sexual orientation more generally.

Implications: This study adds to growing support from the research community for a biologically-based theory of asexuality as a sexual orientation. This has implications for how asexuality is conceptualized, and may lead to educating and reducing stigma surrounding asexuality.

AT ARMS RACE: COMMUNITY, SEX WORKERS AND LEGAL PROTECTION

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Abstract: In the last four decades, debate over whether to criminalize, legalize or decriminalize sex work has gained momentum and has become a subject of many political debates. Even in light of the popularity of the debate, there is no consensus on which legal system is preferred and there has been little research conducted on the political discourses surrounding sex work. In 2003, New Zealand (NZ) became the first country to decriminalize sex work becoming an ever more important case study and a needed addition to the current literature. Using NZ as the case study, and relying on critical discourse analysis (Fairclough 1993) and parliamentary debates, I problematize the moral order rhetoric by demonstrating how it placed sex workers and communities at an arms race with each other. I argue that influenced by a public moral order perspective, some Members of Parliament (MPs) insisted on the need for the relationship between moral order and criminalization, while others insisted on the opposite: the disassociation of moral order from criminalization, emphasizing individual rights. This reduced the debate to a competition between community residents and sex workers. With the use of excerpts from the debate, these tensions are discussed to highlight the complex relationship between language use and law reform in politics.