

## Program at a glance

### Thursday, September 20

- 14:00 *Welcome*
- 14:15 *Sexual Health*
- 15:30 *Physiological and Self-Reported Sexual Arousal*
- 17:00 *Poster Session*
- 18:30 *Student Social Event*
- 20:00 *After Dark: The Final Girls in Slasher Films*
- 21:15 *Naughty Walk*

### Friday, September 21, 2012

- 09:00 *Sexuality in Relationships*
- 10:30 *Break*
- 10:45 *Invited Plenary Address: Internet-Facilitated Sexual Offending*
- 11:45 *Sexual Pain*
- 12:30 *Lunch & Visioning Exercise*
- 14:00 *Symposium: Friends With Benefits*
- 15:00 *Sex and the Family*
- 15:45 *Break*
- 16:00 *New Topics in Sexuality Research*
- 16:45 *The Making of We-Vibe*
- 17:30 *Student Meeting*
- 18:30 *Group Dinner at Stella Osteria*

### Saturday, September 22, 2012

- 09:00 *Sexual Crime Perpetration and Victimization*
- 10:15 *Break*
- 10:45 *Invited Plenary Address: The Puzzle of Women's Sexual Response*
- 11:45 *Lunch (and Executive Meeting)*
- 13:00 *Symposium: Comparative Research on Same-Sex Sexuality*
- 14:00 *Pornography*
- 14:45 *Break*
- 15:00 *Special Populations*
- 16:30 *Student Award Presentation*
- 16:45 *Business Meeting*

## Conference Abstracts

(in chronological order)

### Thursday

#### **Results of the Izindlela Zokuphila—Options for Health Project: HIV Prevention Intervention During Routine Clinical Care Reduces HIV Transmission Risk Behavior of HIV-Infected South Africans on Antiretroviral Therapy**

William A. Fisher, Western University

**Background:** South Africa currently experiences the world's most extensive HIV epidemic. Some 5.7 million South Africans are living with HIV, the prevalence of HIV infection in the 15-49 year age range is 18%, and the incidence of HIV infection is 1.8% per year in this age range. Over 450,000 new HIV infections occur in South Africa each year, and there are more than 300,000 AIDS-related deaths in this country annually. This current research applied the Information—Motivation—Behavioral Skills (IMB) model (J. D. Fisher & Fisher, 1992; W. A. Fisher & Fisher, 1993) to identify factors associated with HIV transmission risk behavior among HIV-infected South Africans receiving antiretroviral therapy (ART), a population of considerable significance for curtailing, or maintaining, South Africa's generalized HIV epidemic. A five-year IMB model-based HIV risk reduction intervention research project was then undertaken aimed at reducing HIV transmission risk behavior among HIV-infected South Africans, who represent one of the leading edges of South Africa's HIV epidemic.

**Methods:** 1,890 HIV-infected South Africans on ART completed measures of HIV prevention information, HIV prevention motivation, HIV prevention behavioral skills, and HIV risk behavior at baseline and at six month intervals over an 18-month period. Participants were randomized to intervention or standard of care comparison conditions. Participants in the intervention condition interacted with a lay counsellor, who used motivational interviewing techniques to strengthen HIV prevention information, motivation, and behavioral skills, during each routine clinical care visit.

**Results:** Structural equation modeling confirmed the assumptions of the IMB model. HIV prevention information and HIV prevention motivation worked through HIV prevention behavioral skills to affect HIV preventive behavior. Important gender differences in model paths indicated gender specific areas for intervention emphasis. The HIV prevention intervention versus standard of care control condition resulted in sustained reductions in risky sexual behavior including any and total unprotected sex with all partners and with partners who were HIV-negative or HIV-status unknown.

**Conclusion:** This program of research has confirmed the predictive strength of the IMB model in relation to risky sexual behavior among HIV-infected South Africans, and intervention research has identified a highly effective and easy to disseminate approach to sustained reduction in HIV transmission risk behavior among for HIV-infected South African, who represent one of the leading edges of the South African HIV epidemic.

## **Pilot-Test and Validation of Indicators of Sexual Health for Youth in Canada, Aged 16 to 24 years**

Lisa Smylie, Public Health Agency of Canada; Maryanne Doherty, Curtin University; Barbara Clarke, Public Health Agency of Canada; Joanne Otis, Université du Québec à Montréal; Jacqueline Gahagan, Dalhousie University; Matthew Numer, Dalhousie University; Greg Smith, Options for Sexual Health; & Alexander McKay, Sex Information and Education Council of Canada

**Rationale:** At a national level, Canada only routinely collects data on rates of positive tests of the three reportable sexually transmitted infections (STIs) - chlamydia, gonorrhea, and infectious syphilis- and rates of pregnancy. Sporadic data on select sexual behaviours are collected through national general health surveys, including age of first sexual intercourse, numbers of lifetime sexual partners, frequency of condom use, and contraception use. Data representing the various dimensions of sexual health articulated in the World Health Organization's working definition of sexual health are required in order to develop effective policies and programs that support the sexual health of youth. The Public Health Agency of Canada lead a team of Canadian sexual health researchers in developing, pilot-testing and validating a set of indicators of sexual health for young people, aged 16 to 24 years, in Canada. This presentation will highlight the results of the statistical validation of these indicators.

### **Research Questions:**

1. Are the indicators valid and reliable indicators of sexual health for youth in Canada aged 16 to 24 years?
2. Do the indicators demonstrate strong content and construct validity?
3. Do the indicators demonstrate internal consistency, test-retest and inter-rater reliability?

**Method:** A survey was administered to a purposive sample of 1185 participants between the ages of 16 and 24 years, recruited from British Columbia, Alberta, Québec and Nova Scotia. The survey was administered using computer-assisted self-interviewing technology, in both English and French languages. Data were analyzed for content validity and construct validity, and for internal consistency, test-retest, and inter-rater reliability.

**Results:** The set of indicators demonstrated good content validity, construct validity, internal consistency, test-retest reliability and inter-rater reliability. Seven scales representing protection use self-efficacy, STI/HIV testing self-efficacy, sexual limit setting, sexual assertiveness, sexual communication self-efficacy, partner violence victimization and sexual coercion were supported by the analyses.

**Conclusions & Implications:** This is the first attempt in Canada to create a comprehensive set of indicators of sexual health. A project team is being assembled to collect nationally representative data among 18 to 20 year-olds using these indicators. The data will inform a report on the sexual health of youth aged 18 to 20 years in Canada.

**Younger Men Who Have Sex With Men in New Zealand:  
The Importance of Knowledge, Attitudes, and Behaviours for Sexual Health**

Nathan J. Lachowsky, University of Guelph Department of Population Medicine; P. J. W. Saxton, N. P. Dickson, University of Otago AIDS Epidemiology Group; A. J. Hughes, New Zealand AIDS Foundation Research Analysis and Information Unit; & C. E. Dewey, University of Guelph Department of Population Medicine

**Title:** Younger men who have sex with men in New Zealand: the importance of knowledge, attitudes, and behaviours for sexual health

**Background:** International research indicates growing concern for younger men who have sex with men (MSM) with regards to risky sexual behavior and HIV, but debate continues on differences between those recruited online versus offline.

**Research Questions:** How do HIV-related risk outcomes differ between younger MSM (YMSM) 16-29 years and older MSM in New Zealand? How does these outcomes differ between YMSM recruited online versus offline?

**Methods:** A pooled sample of 3387 YMSM and 5602 older MSM was created from the Gay Auckland Periodic Sex Survey and Gay men's Online Sex Survey (2006-2011). Further division of the YMSM sample consisted of 1106 offline-recruited YMSM and 2281 online-recruited YMSM. Offline-recruited YMSM were recruited over one week from a gay community event, gay bar, or bathhouse. Online-recruited YMSM were recruited following offline-recruitment for 2-4 weeks from MSM dating sites. Mantel-Haenszel chi-square tests and logistic regression, controlling for survey year, were used to compare older MSM and YMSM and online- and offline-recruited YMSM.

**Results:** Compared to older MSM, YMSM were more likely to be recruited online, identify as bisexual or an ethnic minority, report fewer sexual partners, report condom use with boyfriends, report "receptive only" anal sex, expect a man to disclose being HIV-positive before sex. YMSM were less likely to have HIV-related knowledge, have tested HIV-positive, report condom use with casual partners. Recent sexual health testing/treatment, STI diagnoses, and concurrent partnering did not differ by age. Compared to offline-recruited YMSM, online-recruited YMSM were more likely to identify as bisexual, report their current regular partner as "fuckbuddy" rather than boyfriend, report casual sex and multiple regular partners. Online-recruited YMSM were less likely to identify as an ethnic minority, spend time with gay men, have HIV-related knowledge, have recent HIV/sexual health testing/treatment, use condoms with "fuckbuddies" and casual partners. HIV/STI diagnoses and condom use with boyfriends did not differ.

**Conclusions:** This analysis provides New Zealand's first comprehensive analysis of YMSM. These rich data indicate that reliance on data from offline-recruitment only may not provide a true picture of YMSM's behavior and the possible role of online-recruited YMSM as drivers of new HIV infections.

**Implications:** Given differences by recruitment method, online-recruitment is important for holistically understanding YMSM. These results highlight the importance of research and strategic evidence-based sexual health promotion targeting YMSM at greatest risk.

## **Are You Paying Attention? Habituation of Genital Responses in Men and Women**

Samantha J. Dawson, Martin L. Lalumière, Scott W. Allen, Paul L. Vasey, University of Lethbridge; & Kelly D. Suschinsky, Queen's University

**Background:** Results of studies investigating men and women separately suggest that men habituate to sexual stimuli and that women do not (or not to the same degree). In a recent study, we found no sex difference in habituation of genital responses. In fact, men and women ceased to produce a genital response altogether. We suggested that diminution of attention may have been responsible for the habituation of genital responding. The aims of the current study were to examine whether habituation can be elicited when attention is maintained and whether a sex difference would be observed. The preparation hypothesis predicts that women should not habituate as completely as men when attention is maintained because the costs of not responding to sexual cues are higher for women than for men.

**Hypothesis:** If attention to sexual cues influences genital responding and if women's genital responses serve to prepare them for potential sexual encounters, then the genital responses of women should show less habituation compared to those of men and women's genital responses should not cease completely when attention is maintained.

**Method:** Rather than using the same film clip to elicit habituation, we aimed to maintain attention and elicit habituation by using stimuli that consisted of the same couple engaging in slightly different sexual activities in each trial. Eighteen heterosexual men and 18 heterosexual women were presented with one neutral stimulus trial, nine trials of the same couple (habituation), two trials of different couples (novelty), and two trials of the familiar couple (dishabituation). Genital responses were measured using circumferential phallometry and vaginal photoplethysmography. Participants rated their sexual arousal and attention after each stimulus.

**Results:** Genital responses and attention decreased across trials however habituated genital responses were significantly greater in magnitude than responses to the neutral stimulus. Surprisingly, subjective sexual arousal did not habituate. The diminution in attention was much less than what we obtained in the previous study.

**Conclusion:** This study replicated Dawson, Suschinsky, and Lalumière (accepted), in finding no sex differences in the habituation of genital responses. Women exhibited residual arousal after habituation had occurred, consistent with the preparation hypothesis. Attention decreased across trials, so we remain unsure whether habituation can be elicited when attention is maintained.

**Implications:** Understanding the role of attention on the development of genital and subjective arousal may aid in the development of sexual therapies for individuals suffering from difficulties with these responses.

### **References:**

Dawson, S. J., Suschinsky, K. D., & Lalumière, M. L. (under review). Habituation of sexual arousal in men and women: A test of the preparation hypothesis of women's genital responses. *Journal of Sexual Medicine*.

## Effect of Gender Cues in Audio Narratives on Women's Genital and Subjective Sexual Arousal

Katrina N. Bouchard & Meredith L. Chivers, Queen's University

**Background:** Recent research suggests that exclusively other-gender attracted women have a gender nonspecific pattern of sexual arousal (e.g., similar sexual response to female and male stimuli), while women with any degree of same-gender attractions have a gender specific pattern of sexual responding (e.g., significantly greater sexual arousal to female than to male stimuli); however, these effects only manifest with low-intensity audiovisual stimuli (e.g., depictions of solitary masturbation, but not coupled sex) (Chivers, Haberl, & Timmers, 2011). No research to date has considered same-gender attracted women's sexual responses to audio narratives, which are a less sexually-intense stimulus modality compared to audiovisual stimuli (e.g., Heiman, 1980).

**Hypotheses:** We expected that exclusively other-gender attracted women (Kinsey 0) would have similar levels of genital and subjective sexual arousal to female and male stimuli whereas, all other groups of women (Kinsey 1-6) would have significantly greater levels of genital and subjective sexual arousal to female stimuli than to male stimuli.

**Method:** Women with varying degrees of same- and other-gender sexual attractions (Kinsey 0 through 6) listened to audio narratives describing sexual and nonsexual interactions with female and male partners. Relative levels of sexual responding to female and male gender cues were compared between groups of women with exclusive other-gender attractions (Kinsey 0), predominant other-gender attractions (Kinsey 1), attractions to both genders (Kinsey 2-4), and predominant or exclusive same-gender attractions (Kinsey 5-6).

**Results:** Replicating findings using audiovisual stimuli, we found that exclusively other-gender attracted women showed a gender nonspecific pattern of genital sexual response whereas, for all other groups of women, genital sexual arousal to female stimuli was significantly greater than to male stimuli. Predominantly other-gender attracted women showed a gender nonspecific pattern of subjective sexual response whereas, the exclusively other-gender attracted group showed more subjective sexual arousal to male than to female stimuli and both same-gender attracted groups reported more subjective sexual arousal to female than to male stimuli.

**Conclusions and Implications:** Gender nonspecific genital response is therefore characteristic of exclusively other-gender attracted women whereas, specificity of genital sexual arousal – greater arousal to female versus male stimuli – is characteristic of women with any degree of same-gender attractions, including women who have low levels of self-reported same-gender attractions and identify as heterosexual (Kinsey 1). Implications for understanding women's sexual orientation will be discussed.

## Sociosexual Orientation and Sexual Arousal

Amanda Timmers & Meredith L. Chivers, Queen's University

**Background:** Previous research has found that heterosexual women, unlike men, show a nonspecific pattern of arousal; they demonstrate little discrimination in terms of physiological arousal to stimuli depicting their preferred and non-preferred gender (e.g., Chivers, Seto, & Blanchard, 2007). The current study examines a different trait-like aspect of mating psychology - sociosexuality - that might relate to heterosexual women's patterns of sexual arousal, given that sexual orientation to men or women does not.

**Research Question:** Are heterosexual women's and men's sociosexual orientations significantly associated with their levels of genital and self-reported sexual arousal toward stimuli depicting varying relationship contexts?

**Methods:** We investigated the relationship between sociosexuality - one's willingness to engage in uncommitted sexual activity - and women's and men's patterns of sexual arousal to stimuli varying by gender and relationship type. Assessments were made of 25 heterosexual women and 24 heterosexual men's subjective and genital arousal to 18 audio clips depicting sexual or neutral encounters with strangers, friends, and long-term relationship (male or female) partners. Significant associations were expected between participants' sociosexuality and genital and subjective arousal, such that more unrestricted sociosexual orientations should be associated with higher arousal to conditions where the sexual targets are unfamiliar (i.e., strangers) vs. familiar (i.e., friends and long-term relationship partners) to the participant, and to scenarios that are uncommitted (i.e., strangers and friends) vs. committed (i.e., long-term relationship partners).

**Results:** Results indicate that there is a positive association between women's and men's sociosexual orientation and patterns of genital arousal, though this association is only found in response to the stimuli depicting the participant's preferred gender.

**Conclusions:** This study provides the first empirical support for a facet of a heterosexual woman's self-reported sexual preferences corresponding to her genital responding. Results are consistent with previous research indicating that relationship cues are important determinants of genital and self-reported measures of arousal in heterosexual women (Chivers & Timmers, 2012).

**Implications:** It is remarkable that sociosexual orientation demonstrated meaningful relationships with heterosexual women's patterns of sexual response, unlike sexual orientation, or gender preferences. Even more striking, the results only appear in response to depictions of the participants' preferred gender, indicating that gender may, in fact, be an important determinant of both men and women's genital arousal, when framed within the correct context.

### References:

- Chivers, M. L., Seto, M. C., & Blanchard, R. (2007). Gender and sexual orientation differences in sexual response to the sexual activities versus the gender of actors in sexual films. *Journal of Personality and Social Psychology*, 93, 1108–1121.
- Chivers, M. L., & Timmers, A. D. (2012). Effects of gender and relationship context in audio narratives on genital and subjective sexual response in heterosexual women and men. *Archives of Sexual Behavior*, 41(1), 185-197.

## **Laser Doppler Imaging as a Measure of Female Sexual Arousal: Future Applications**

Stéphanie C. Boyer, Jennifer A. Bossio, Paulina Ezer, & Caroline F. Pukall, Queen's University

**Background:** Female genital arousal can be measured via internal or external devices, the latter of which have demonstrated higher correlations between subjective and genital arousal. Three studies have supported the validity of laser Doppler imaging (LDI) – a non-invasive, direct measure of vulvar blood flow – in assessing female sexual arousal. This promising new tool requires further validation via research examining its sensitivity and utility.

### **Research Questions:**

- 1) How long does it take for vulvar blood flow levels to return to baseline after watching an erotic film?
- 2) What is the reliability and validity among different types of LDI scans in the assessment of female sexual arousal?

**Methods:** Thirty to forty heterosexual women will participate in the study during Spring 2012. Participants will watch four film clips while the LDI scans their vulvar region: 1) nature scenes (acclimatization), 2) a travelogue (baseline), 3) an erotic film (erotic), and 4) nature scenes (return to baseline). Participants will answer questions about their genital and subjective arousal before and after the third and fourth films, and continuously rate their level of sexual arousal during these films. Method of scanning will be varied across participants: scanning of the entire vulvar region (consistent with previous studies), scanning of a smaller vulvar region, or a continuous scan of blood flow levels at a single point on the vulva throughout the film. The subgroup of participants in the first scanning condition will be randomized to an erotic film featuring penetrative intercourse or cunilingus.

**Results:** The amount of time required for participants to return to baseline blood flow levels will be investigated via repeated measures analyses. To address our second research question, the concordance amongst the three scanning conditions will be examined, as well as their association with subjective ratings of sexual arousal. Finally, group differences in genital and subjective arousal will be examined in the two different erotic film conditions.

**Conclusions:** The findings will determine whether it is feasible for female participants to watch multiple erotic stimuli during one testing session using the LDI. In addition, it will inform researchers about the strengths and weaknesses of different LDI scanning methods for the assessment of genital blood flow.

**Implications:** Future LDI research directions, such as research design considerations and clinical applications will be established. The results will also be relevant to other external methodologies to measure female sexual arousal.



## Women's Genital Responses to Reproductively Relevant Sexual Stimuli Across the Menstrual Cycle

Kelly D. Suschinsky, Jenn Bossio, Queen's University; Michael C. Seto, Royal Ottawa Health Care Group;  
& Meredith L. Chivers, Queen's University

**Background:** Cues of sexual activity may be a more important factor in women's genital arousal relative to cues of gender (Chivers et al., 2007). To date, no one has investigated whether women's genital or subjective sexual arousal varies as a function of the reproductive relevance of the activities depicted, and whether women's sexual responses to these sexual stimuli vary with fertility status.

### Research Questions

1. Do women show higher genital or subjective sexual responses to reproductively relevant sexual stimuli (i.e., penetrative sex) compared to other sexual stimuli (i.e., oral sex)?
2. Are women's genital or subjective sexual responses to reproductively relevant stimuli related to fertility status?
3. Does the order of testing sessions influence women's genital or subjective sexual responses?

**Methods:** Twenty-four heterosexual women participated in two identical testing sessions, once during the follicular (i.e., pre-ovulatory) and once during the luteal (i.e., post-ovulatory) phase of their menstrual cycle. In both sessions the women watched the same 90s films varying by couple type (gay, lesbian, and heterosexual) and sex type (oral or penetrative sex). Genital responses were assessed with a vaginal photoplethysmograph and participants reported their feelings of sexual arousal before and after each film.

**Results:** Preliminary results indicate that women had significantly greater genital responses to all sexual stimuli in the follicular than luteal phase, and had greater genital responses to penetrative than oral sex overall. Women first tested in the follicular phase showed significantly greater genital responses to heterosexual penetrative stimuli than heterosexual oral sexual stimuli across sessions, but did not differentiate between penetrative and oral sexual acts for the lesbian and gay stimuli. Women first tested in the luteal phase did not have significantly different genital responses to the heterosexual sexual acts, but did show significantly less arousal to oral than penetrative gay sex. Self-reported sexual arousal was highest to heterosexual stimuli overall and was unaffected by cycle phase or order of testing sessions.

**Conclusions:** Preliminary results are consistent with previous research indicating that fertility status at first exposure to a sexual stimulus has a significant effect on subsequent processing of sexual stimuli (e.g., Slob et al., 1991; Wallen & Rupp, 2010), and that this effect may differ between objective and subjective measures of sexual arousal.

**Implications:** Women's hormonal status may have significant effects not only on the processing of sexual stimuli in laboratory settings, but also within sexual relationships (Roberts et al., 2011).

### References:

- Chivers, M. L., Seto, M. C., & Blanchard, R. (2007). Gender and sexual orientation differences in sexual response to the sexual activities versus the gender of actors in sexual films. *Journal of Personality and Social Psychology*, 93, 1108–1121.
- Roberts, S. C., Klapilova, K., Little, A. C., Burriss, R. P., Jones, B. C., DeBruine, L. M., et al. (2012). Relationship satisfaction and outcome in women who meet their partner while using oral contraception. *Proceedings of the Royal Society B (Biological Sciences)*, 279, 1430-1436.
- Slob, A. K., Ernste, M., & van der Werff ten Bosch, J. J. (1991). Menstrual cycle phase and sexual arousability in women. *Archives of Sexual Behaviour*, 20, 567–577.
- Wallen, K., & Rupp, H. A. (2010). Women's interest in visual sexual stimuli varies with menstrual cycle phase at first exposure and predicts later interest. *Hormones and Behavior*, 57, 263–268.

## Poster Session

### The Assessment of Distraction From Erotic Stimuli by Non-Erotic Interference

Alex Anderson & Lisa Dawn Hamilton, Mount Allison University

**Rationale:** Difficulty paying attention to erotic cues during a sexual encounter is a common contributor to sexual difficulties. At present there is no empirically identified way to easily assess distraction in the laboratory. This study aimed to identify the most accurate assessment of distraction from erotic cues by non-erotic interference.

**Research questions:** 1) Which method of assessing attention most accurately represented the level of distraction present during the viewing of VSS?; and 2) Which method of assessing attention best corresponded with both physiological and psychological sexual arousal?

**Method:** Sexually functional men ( $n = 23$ ) and women ( $n = 29$ ) were assigned to a no distraction, low distraction, or high distraction condition. Distraction was induced using an auditory distraction task that occurred during the presentation of visual sexual stimuli (VSS). Attention to erotic cues was assessed using three methods: a written quiz, a visual quiz, and a self-report measure of distraction, while physiological and psychological sexual response were also measured.

**Results:** Self-reported distraction and attention most accurately represented the level of distraction present and also corresponded with a decrease in genital arousal. Conversely, low levels of distraction enhanced performance on the visual and written quiz compared to controls. Results revealed sex differences on written quiz performance, such that women scored higher than men across all distraction conditions. In addition, men reported higher levels of psychological arousal compared to women during the viewing of VSS.

**Conclusions:** Self-report measures were the most accurate and sensitive way to measure experimentally-induced distraction. In contrast, tests of attention appear to mimic the facilitatory effects of anxiety on performance, showing an inverted-U shaped pattern of response.

**Implications:** In the absence of high technology techniques, self-reported distraction may aid in the diagnosis and treatment of sexual problems. Insight into distraction assessment techniques will enable an accurate evaluation of naturally occurring distraction in patients suffering from sexual problems.

## **Sexual Minority and Heterosexual Women's Motivations for Having Sex: A Preliminary Analysis**

Heather Armstrong & Elke D. Reissing, University of Ottawa

**Rationale:** In 2007, Meston and Buss reported 237 motivations for individuals to have sex. The current study expands this knowledge by exploring sexual motivations in women by relationship type and sexual orientation. Specifically, people may express different motivations for having casual sex compared to sex in a committed relationship. Likewise, reasons for having sex vary by sexual orientation and can change depending on the gender of one's partner. Given this variability, a study investigating the motives of sexual minority women is needed.

### **Research Objectives:**

1. To validate the original 237-item measure (YSEX?; Meston & Buss, 2007) in a sample of sexual minority women.
2. To identify if women's sexual motivations vary by relationship type, and to explore if these motivations differ by sexual orientation.
3. To identify if sexual minority women have different motivations for engaging in casual sex and sex in a committed relationship, depending on the gender of their sexual partner.

**Methods:** Using the YSEX? in an online format, women 18 years and older will indicate their motivations for having casual sex, sex in a committed relationship, and sex with male and female partners. Data from women who indicate at least some level of same-sex attraction will be used to validate the YSEX? in a sample of non-heterosexual women.

**Anticipated Results:** Based on sexual strategies theory and strategic pluralism theory, it is expected that women will differ in their reasons to engage in casual sex and sex in a committed relationship. Additionally, given the importance sexual minority women place on emotional intimacy, it is expected that they will endorse more emotionally intimate motivations for sex at both relationship levels. It is also expected that women will endorse more physical motivations for having sex with a male partner and more emotional motivations for having sex with a female partner and this too is expected at both relationship levels. Finally, while expected to yield similar results as the initial analyses, the validation of the YSEX? ensures the measure is appropriate for use with this population and increases confidence in the results.

**Implications:** Validation of the YSEX? may encourage research with sexual minority women making the literature more inclusive and representative to all women. Additionally, past research has shown that motivations for having sex are related to differences in sexual outcomes such as sexual functioning, satisfaction, desire, and behaviour. As such, a more thorough understanding of sexual motives, specifically as they apply to sexual minority women in both short- and long-term sexual relationships, can help inform a wide range of important sexual health and sexuality related issues.

### **References:**

Meston, C. M., & Buss, D. M. (2007). Why humans have sex. *Archives of Sexual Behavior*, 36, 477-507.

## **Factors Associated with Sexual Activity in Older Adults: Current Knowledge and Future Directions**

Suzanne Bell, Elke D. Reissing, Lisa Henry, Anne-Rose Bouaziz, & Angela Wilson, University of Ottawa

**Rationale:** Sexuality and the desire for intimacy are important to individuals across the lifespan. In North America there is an increasingly older population who seeks to stay active, involved, and youthful in their later years. Unfortunately, while sexual activity is generally considered a natural endeavour for individuals earlier in the lifespan, sexual activity in the later years of life is often mocked and parodied. Although there is general consensus that older adults do experience a decline in their sexual activity, a complete loss of sexual interest and activity is not an inevitable aspect of aging. Given the significant benefits of sexual activity throughout the adult life course, it is important to investigate factors that may moderate this negative relationship between sexual activity and age.

**Summary of Key Points:** This presentation is based on a systematic review of pertinent literature and will synthesize the research on factors related to sexual activity in older adults (i.e., 60 years of age and older). Associated biological, psychological, and social factors will be identified and directions for future research will be discussed.

**Conclusions:** This review of literature encompasses a diverse body of work that expresses both complementary and sometimes competing perspectives. Overall there is a strong emphasis on biological factors that contribute to older adults' sexual activity reflecting the medical perspective. More recent studies, however, highlight the importance of social context for understanding sexual activity in later life such as partner availability and sexual interest, sexual knowledge and attitudes, marital context, sense of self-worth, as well as a variety of demographic-related factors. Elements that are underrepresented within the literature are a diverse range of intrapsychic factors that might explain the variability of sexual experience of older adults and the incorporation of theory-driven hypotheses and methodologies into study construction.

**Implications:** Sexual health would be best considered as an integral part of overall health and quality of life in older adults. This presentation will provide a clearer picture of the determinants of sexual activity in older adults and dispel myths about older adults' sexuality that may on the one hand trigger unnecessary performance pressures and/or on the other hand trivialize sexual problems. Overall, sexual expression seems to remain a significant aspect of intimate relationships in the later years of life.

## Sexuality-Related Training, Comfort, and Attitudes in Medical Residents

Stéphanie C. Boyer, Caroline F. Pukall, & Susan M. Chamberlain, Queen's University

**Background:** Physicians play an important role in addressing common patient sexual health and concerns. Unfortunately, medical trainees receive a variable amount of training surrounding sexuality-related issues. It has been suggested that ameliorating doctor-patient communication about sexuality must be addressed via increased knowledge and evaluation of personal biases/attitudes during medical training. However, little recent research has investigated these factors in Canadian medical residents.

### Research Questions:

- 1) What amount, content, and format(s) of training do residents in Canadian Family Medicine and Obstetrics and Gynecology programs receive?
- 2) What are resident attitudes and comfort about dealing with sexuality in medical practice, their personal sexual attitudes, and the relationships amongst these variables?

**Methods:** Canadian medical residents enrolled in Family Medicine and Obstetrics and Gynecology were recruited to participate in an online survey about sexuality training. The survey included sections about demographics, training, and attitudes about sexuality in medical practice. Personal sexual attitudes were assessed via the Sexual Opinion Survey (SOS), which assesses erotophobia-erotophilia. Preliminary results are presented below ( $N = 87$ , 52% Family Medicine, 84% female).

**Results:** One third of participants reported receiving 5 to 10 hours of training, one third less than 5 hours, and 10% more than 25 hours. The majority reported training experiences via clinical work (79%) and coursework (72%), and 5% reported no previous training. Over 90% of residents reported learning about biology-based sexuality topics (e.g., sexually transmitted infections, reproduction, sexual development). The least covered areas were sexuality in special populations and cross-cultural issues. The SOS distribution was negatively skewed ( $M = 82.35$ ,  $SD = 20.42$ , range 15-119), indicating that more resident scores fell toward the erotophilic end of the scale. On average, respondents reported feeling adequately trained and comfortable discussing sexual matters with their patients. The relationships amongst these variables will be explored via correlational and regression analyses.

**Conclusions:** The majority of medical residents surveyed reported didactic and clinical training in sexuality-related issues, however, most students reported receiving less than 10 hours of training and variable training around specific topics. Nevertheless, respondents reported feeling comfortable asking about sexual matters in their practice.

**Implications:** This study highlights areas of strength as well as gaps in training of Canadian residents. There were a wide range of responses on attitudinal, training, and comfort measures, suggesting that some residents may benefit from additional training in order to be better able to address sexual concerns with their patients.

## **Adolescent Perturbations to the Endocannabinoid System Cause Long-Term Changes in Sexual Behaviour in Male Rats**

Silvain S. Dang, Tiffany T.-Y. Lee, University of British Columbia; Matthew N. Hill, University of Calgary; & Boris B. Gorzalka, University of British Columbia

**Background:** An extensive literature documents the frequently adverse effects of cannabinoids on adult male sexual behaviour in many species, including humans. However, very little is known about whether adolescent cannabinoid exposure affects male sexual activity in the long term. Previous work in our laboratory has shown that both pharmacological cannabinoid receptor agonism and antagonism during adolescence can induce long term neural, cognitive and behavioural changes in adulthood. The endocannabinoid system is a major neuromodulatory system in the central nervous system. Adolescence is known to be an important sensitive period for the development of this system. Therefore, changes to the endocannabinoid system during development may underlie in part the formation of patterns of adult sexual functioning.

**Research Question:** The current study seeks to investigate whether modulation of the endocannabinoid system via cannabinoid receptor agonists and antagonists during adolescence will cause lasting changes in adult sexual behaviour in male rats.

**Methods:** Forty male Sprague-Dawley rats were administered, via intraperitoneal injections, either HU-210 (a cannabinoid receptor agonist), AM-251 (a cannabinoid receptor antagonist), or vehicle daily over the course of 12 days. Drug administration started when the subjects were 35 days old. Sex testing of the males with ovariectomized and hormone-replaced female conspecifics started when the subjects were 75 days old, with two sessions a week for three weeks. Male sexual behaviour was measured by recording mount, intromission, and ejaculation frequencies and latencies, and refractory period lengths.

**Results:** Chronic HU-210 administration caused an increase in sexual behaviour in adulthood. Rats administered with HU-210 displayed decreased latencies to mount, intromit, and ejaculate, and engaged in those behaviors more frequently. We expect AM-251 administration will cause decreased sexual behaviour.

**Conclusion:** The finding of increased sexual behaviour following HU-210 administration in adolescence is paradoxical when compared to the inhibitory effects of cannabinoid receptor agonists administered in adulthood. The presence of exogenous cannabinoid agonists in adolescence may lead to the compensatory development of reduced endogenous ligand and receptor levels in adulthood.

**Implications:** This study may provide insight into the biological development of human sexual functioning. Physiological disruptions to the endocannabinoid system during adolescence may underlie some cases of sexual dysfunction. A better understanding of this interaction presents new opportunities for prevention and treatment of these conditions.

## **A Multidimensional Study of Perinatal Sexuality in Relation to Francophone Parenting Couples Living in a Minority Situation in Ottawa and Eastern Ontario**

Catherine de Pierrepont & Viola Polomeno, University of Ottawa

**Rationale:** Francophone parenting couples living in a minority situation in Ottawa and Eastern Ontario appear to be a particular group concerning health services, due to a lack of health services and health care professionals who do not always know how to respond to their specific needs. Little is known about this population both clinically and from a research perspective, despite their unique profile. In the area of perinatal sexuality, there is a dearth of interventions for this group, despite couples' great needs for intimacy and sexuality during the transition to parenthood. A general portrait of perinatal sexuality in this context will take into account the intimacy and sexuality needs of these parenting couples, the attitudes and practices of perinatal health care professionals (generalist and specialist doctors, nurses, midwives, doulas, lactation consultants), the hospital context (Montfort Hospital) serving the Francophone population in a minority situation in Ottawa and Eastern Ontario, and the public health context of Ontario and Canada (policies and guidelines).

### **Summary of Key Points:**

- A- Research purpose: The goal of this research is to conduct a multidimensional evaluation of Francophone parenting couples' sexual perinatal needs by considering their importance according to the different levels of health services in Ottawa and Eastern Ontario.
- B- Research questions: What are the Francophone parenting couples' sexoperinatal needs? What are the responses to their needs? What are the services offered in sexual perinatal for the Francophones? Do the services answer their needs? What could be done better for them?
- C- Research design: Case study with mixed methodologies
- D- Sample: 30 parenting couples in post-partum, 12 perinatal health professionals (2 of each profession), 3 directors of Montfort Hospital and the Ontario and Canada's guidelines in perinatal
- E- Settings: Montfort Hospital, Ottawa, Eastern Ontario
- F- Data collection procedures: Questionnaires and interviews with parents; interviews with health professionals and directors; documents of Ontario and Canada in perinatal
- G- Data analyses: Content analysis, descriptive statistics, correlations and t-test

**Conclusions:** The studied population has specific needs in the sexoperinatal domain and the responses from the different levels of health services need to be adjusted.

**Implications:** This study will provide recommendations to develop, implement and evaluate interventions for perinatal sexuality and for accessible, equitable and adapted health services for Francophone parenting couples living in a minority situation in Ottawa and Eastern Ontario.

## **Sexual Functioning Following Bilateral Salpingo-Oophorectomy: A Mixed Methods Approach**

Cara Dunkley, Lori A. Brotto, Nadia Branco, University of British Columbia; Mary McCullum, British Columbia Cancer Agency; & Jessica McAlpine, University of British Columbia

**Background:** Women with mutations in BRCA1 or BRCA 2 genes are at increased risk for the development of ovarian cancer, and often elect to have a prophylactic bilateral salpingo-oophorectomy (BSO), or the surgical removal of both ovaries, as a means of reducing that risk. Many studies suggest that gynecologic surgery is not associated with impaired sexual function or distress, however, other studies, particularly those concerning gynecologic cancer, suggest a negative impact of BSO on sexual function. The primary objective of this research was to investigate changes in sexual function following BSO, and to investigate whether differences in sexual after-effects arise when contrasting BRCA carriers choosing an elective BSO compared to women receiving BSO for benign indications.

**Research Questions:** To explore narrative stories of sexual experience among women undergoing elective risk-reducing BSO and women who had BSO for benign indications.

**Methods:** Our study included 25 women who had undergone a risk-reducing BSO because of their BRCA carrier status or for benign indications. Participants completed validated measures of sexual response, sexual distress, sexual self-image, and mood. They then participated in an in-depth interview that included open-ended questions regarding their sexual health and relationship functioning in the context of receiving a BSO.

**Results:** No significant quantitative group differences in post-operative sexuality, mood or relationship satisfaction. Qualitative results suggested that BRCA carriers experienced more negative sexual sequelae than the benign group, an effect possibly mediated by age. Through content analysis of interviews, four main themes were identified (1) Pre-operative knowledge of sexual side effects, (2) Pre-operative drive to educate oneself on BSO side-effects, (3) Partner support, and (4) Treatment for sexual side effects. Pre-operative knowledge was highly associated with patient satisfaction and inversely correlated with post-operative sexual distress.

**Conclusions:** This was the first study to utilize both quantitative and qualitative measures to examine women's sexual function after prophylactic BSO. Major themes were not found to differ between the two groups of women. These results suggest that women may experience sexual difficulties following gynecological surgery, regardless of its indication, and that pre-operative sexual difficulties and lack of information are associated with post-surgery difficulties. Importantly, qualitative analysis provided a nuanced view of sexual health in a manner that was not captured by quantitative measures.

**Implications:** The importance of pre-operative knowledge substantiates the necessity of pre-operative counseling with regards to sexual health.



## **Insights into the influences of caregiving in the explanation of intimate sexual violence in a non-clinical sample of men**

Josée Fitzpatrick, Marie-France Lafontaine, Jamie Lyn Flesh, & Angela Caron, University of Ottawa

**Rationale:** Intimate sexual violence is a widespread phenomenon, with lifetime prevalence rates estimated at up to a 10% in the general population (O'Leary & Woodin, 2009). Intimate sexual violence is conceptualized as behaviours conducted with the intention of forcing one's partner to engage in non-desired sexual activity, be it by verbal insistence or by physical force (Straus et al., 1996). Since the 1970s, an impressive body of literature has investigated violence in heterosexual couples, however a majority of existing research has focused exclusively on physical and psychological violence, and has disregarded intimate sexual violence in the context of couple relationships. Thus, this shortcoming attests to the importance of developing a more complete understanding of the predictive factors related to intimate sexual violence in heterosexual couples. This study aims to expand insights regarding intimate sexual violence by examining the influences of caregiving strategies in the explanation of this troubling phenomenon.

**Method:** The present study's sample consisted of 124 heterosexual men from the Ottawa-Gatineau region, all of who were 18 years of age or older. All participants were involved in a romantic relationship with their partner for at least 12 months and had been living with their partner for at least six months at the time of participation. Participants completed a questionnaire package that included the Caregiving Questionnaire (CGQ; Kunce & Shaver, 1994), and the Conflict Tactics Scale-Revised (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996).

**Results:** Multiple regression analyses permitted us to examine the relative contribution of the underlying variables of caregiving in relation to intimate sexual violence. Results obtained demonstrated various caregiving strategies differed in their ability to predict intimate sexual violence received amongst heterosexual men. Also, certain caregiving strategies were revealed as better predictors of perpetrated intimate sexual violence in our given sample.

**Conclusion/Implications:** Intimate sexual violence represents a multi-dimensional phenomenon which impacts couple well-being and functioning in a myriad of ways. The present study presents an important effort in the elaboration of comprehensive explanatory models of this phenomenon.

## Variety of Online Sexual Activities: What Are Students Really Doing Online?

Miranda Fudge, Krystelle Shaughnessy, & E. Sandra Byers, University of New Brunswick

**Background:** Significantly more men than women have engaged in online sexual activities (OSAs) both by themselves (solitary-arousal) and with a partner (partnered-arousal; Goodson, McCormick, & Evans, 2001; Shaughnessy, Byers, & Walsh, 2011). Due to the rapid rate of technological change, researchers have not assessed the range of OSAs now available, thus, failing to capture the complexity of OSA experiences. The goal of this study was to increase our understanding of the variety of men's and women's OSAs.

**Hypotheses:** H1: The variety of solitary-arousal but not partnered-arousal OSAs would be greater for men than for women. H2: Both men and women would report trying a greater variety of activities than they currently engage in.

**Methods:** A total of 239 heterosexual university students ages 18 to 29 completed the Online Sexual Experiences Questionnaire which assessed experience of 16 solitary- and 18 partnered- arousal OSAs both ever and within the last three months. Items were summed to create separate scores (4) for Lifetime and Current Variety of Solitary OSA and Variety of Partnered OSA.

**Results:** More men than women had engaged in solitary-arousal (99.8% vs 78.4%) but were equally likely to engage in partnered-arousal (82.6% vs 72.5%) OSAs ( $p < .001$ ). Only two solitary- and three partnered-arousal OSAs were reported by the majority of men and women; the majority of men also endorsed two additional solitary-arousal OSAs. In keeping with H1, both Lifetime and Current Variety of Solitary OSA was significantly higher for men ( $M = 5.64$  and  $M = 4.89$ , respectively) than for women ( $M = 3.44$  and  $M = 2.37$ , respectively) ( $p < .001$ ); men and women did not differ in Lifetime or Current Variety of Partnered Activities ( $M = 3.96$  and  $M = 2.84$ , respectively). In keeping with H2, Lifetime Variety of Solitary and Partnered OSA ( $M = 4.22$  and  $M = 3.96$ ) were greater than Current Variety of Solitary or Partnered OSA ( $M = 3.27$  and  $M = 2.84$ ) ( $p < .001$ ).

**Conclusions:** Men reported engaging in nearly twice as many types of solitary-arousal OSAs as women; their number of partnered-arousal OSAs did not differ. Further, neither gender had engaged in a broad range of activities. On average, students had only tried one more activity than they were currently engaging in.

**Implications:** This study adds to our understanding of the types of OSAs that students engage in. The results will facilitate the clinical assessment of OSA experiences by providing information about which OSAs are common and which are not.

## Attachment Style and Female Sexuality

Kaitlyn Goldsmith, Cara Dunkley, Sabrina Chang, & Boris B. Gorzalka, University of British Columbia

**Background:** A proliferation of research examining the importance of sexuality in close relationships has emerged in recent years. The expansion of Bowlby's (1970) developmental theory of attachment and its application to adult romantic relationships has received particular attention. According to Bowlby's theory, children's initial years of formative infant-caregiver interactions are internalized to create working models of self and others. Hazan and Shaver (1987) describe that the three primary attachment styles – secure, avoidant, and anxious-ambivalent – present from infancy persist into adulthood, and influence the manner in which adults experience and behave in romantic relationships. To date, attachment style differences in sexual communication, sex role ideology, and sexual satisfaction remain relatively unstudied. Thus, the primary aim of the current study is to investigate disparity in the aforementioned facets of sexuality among women with differing attachment styles.

**Hypotheses:** We anticipated that attachment style differences would arise among sexual communication, sexual satisfaction and gender role adherence. Furthermore, we predicted that gender role adherence and sexual communication would mediate the relation between attachment style and sexual satisfaction.

**Method:** Female undergraduate students ( $n = 440$ ) completed an online survey of validated questionnaire measures assessing attachment style, gender role ideology, sexual communication, and sexual satisfaction.

**Results:** Secure attachment was associated with higher levels of sexual satisfaction. Both avoidant and anxious attachment styles were associated with lower levels of sexual communication and sexual satisfaction. Anxious attachment (but not avoidant attachment) was associated with more traditional gender role adherence. In addition, sex role ideology and sexual communication were found to totally mediate the relation between anxious attachment and sexual satisfaction. Sexual communication (but not gender role ideology) partially mediated the relation between avoidant attachment and sexual satisfaction.

**Conclusions:** Adult attachment styles influence the ways in which people communicate sexually with one another, experience sexual satisfaction, and adhere to traditional sex roles. Further research is needed to better understand the mechanisms by which attachment style influences sexual satisfaction.

**Implications:** Information on attachment style differences in relation to sex role ideology, sexual communication and sexual satisfaction may be beneficial for developing therapies for individuals who suffer from sexual and relational difficulties. Additionally, knowledge on the relation between attachment styles and sexual satisfaction may be considered in clinical practice, as it has the potential to aid practitioners in tailoring their therapeutic approach.

## **Pelvic Floor Surface Electromyography (sEMG) as a Measure of Sexual Arousal in Sexually Healthy Women**

Madeline Hannan-Leith, Lori A. Brotto, University of British Columbia; Martin L. Lalumière, University of Lethbridge; & Marcy Dayan, Dayan Physiotherapy and Pelvic Floor Clinic

**Background:** Since the introduction of the vaginal photoplethysmograph (VPP) in the 1970s, there have been relatively few advances in the physiological assessment of sexual arousal in women. While the validity of the VPP, which measures vaginal blood flow, has been widely documented, limitations of this tool (such as the need for within-subjects comparisons) necessitate the development of alternate measures of sexual response. Pelvic floor surface electromyography (sEMG), a method used to assess skeletal muscle tone and neural control of the pelvic floor muscles (PFM), is widely used clinically for the assessment and treatment of individuals with sexual difficulties associated with pelvic floor abnormalities. Although a substantial body of research has examined the role of the PFM in sexual dysfunction, little is known about whether the PFM are directly involved in sexual arousal. A major limitation in existing research that has examined the role of PFM in women's sexual functioning is related to varying study methodologies: PFM EMG activity has been assessed with no differentiation between superficial and deep PFM layers. Thus, the objective of this research was to examine whether measurement of PFM sEMG activity is responsive to explicit sexual stimuli, and whether it correlates with self-reports of sexual arousal in healthy women.

**Research Question:** To assess PFM EMG as a potential measure of sexual arousal in sexually healthy women.

**Methods:** To assess the sensitivity of the EMG device to changes in involuntary pelvic floor muscle activity during sexual arousal, vaginal and anal sEMG were monitored during exposure to neutral and erotic films. sEMG measurements were obtained using a vaginal sEMG probe inserted by the participant. To distinguish between deep and superficial PFM layers, the probe was placed just inside the introitus. Surface electrodes were positioned by the investigator over the right and left bulbocavernosus muscles and perianal single sEMG electrodes were placed bilaterally (at 2 and 10 o'clock). Participants were also required to provide ratings of subjective sexual arousal prior to and immediately following each film segment, as well as operate a continuous measure of self-report sexual arousal during exposure to an erotic film.

**Results/Conclusions:** To date, we have pilot tested the protocol in two healthy women. Results are pending.

**Implications:** If pelvic floor sEMG is validated as a psychophysiological measure, these findings may have important clinical and research implications by providing a greater understanding of the mechanisms involved in sexual arousal.

## **Relationship Between Impression Management and Three Measures of Women's Self-Reported Sexual Arousal**

Jackie Huberman, Kelly D. Suschinsky, Meredith L. Chivers, Queen's University; & Martin L. Lalumière,  
University of Lethbridge

**Background:** Self-report measures have been criticized for potential inherent biases including impression management (IM), a response bias where one deliberately distorts answers to appear socially desirable (Paulhus, 1991). This may be particularly relevant when studying female sexual arousal, since traditional social messages encourage women to inhibit sexual responses to avoid negative reputations (Leitenberg & Henning, 1995). Given that measures of women's genital arousal are not always consistent with self-reported sexual arousal (Chivers et al., 2010), it is important to evaluate which measures of women's subjective arousal are most vulnerable or robust to IM biases.

**Research Questions:** Are women's self-reported levels of sexual arousal to erotic stimuli associated with IM? Which measures of women's self-reported sexual arousal most strongly relate to IM?

**Methods:** We examined the relationship between IM and measures of women's subjective arousal in two studies with women who reported sexual attractions toward men. In Study 1, 39 women reported their sexual arousal levels continuously throughout neutral and erotic audio-narratives and following each stimulus using discrete scales. In Study 2, 40 women reported their sexual arousal prior to, continuously throughout, and following neutral and erotic films. All participants completed the IM subscale of the Balanced Inventory of Desirable Responding (Paulhus, 1984).

**Results:** Preliminary results are consistent across studies. Discrete measures of arousal, reported before (Study 2) and after (Studies 1 and 2) erotic stimuli, significantly negatively correlated with total IM scores whereas continuously-rated sexual arousal (Studies 1 and 2) was not significantly associated with IM. IM significantly negatively correlated with some pre/post-stimulus difference scores (Study 2), representing the magnitude of change in self-reported arousal, though not consistently. Biased responding was most evident for erotic stimuli.

**Conclusions:** Results suggest that discrete ratings of sexual arousal are prone to IM bias. Continuous ratings of sexual arousal may be more robust to IM biases because women are absorbed in the stimulus and are not able to reflect on responses, which may trigger biases pre- and post-stimulus. The pre/post-stimulus difference scores may be more robust to IM bias than discrete measures by allowing some IM bias to cancel out, but remain more vulnerable than continuous reports.

**Implications:** To effectively measure women's subjective sexual arousal while minimizing IM biases, we recommend that researchers use continuous rather than discrete measures.

## **Understanding the Barriers to Sexual Intimacy Among People Living With HIV & AIDS: A Qualitative, Community-Based Research Study**

Sarah Hunter Murray, University of Guelph; Megan DePutter, Tom Hammond, AIDS Committee of Guelph & Wellington County; Tanya Darisi, University of Guelph; & Tim Walker, AIDS Committee of Guelph & Wellington County

**Background:** Many men and women living with HIV and AIDS report being reluctant to engage in sexual activity due to their fear of infecting others and fear of rejection after disclosing their status. However, to date, most of the research on this topic is based in the United States and focuses on individuals living in large urban centers. The AIDS Committee of Guelph & Wellington County (ACG) has also heard complaints related to loneliness, isolation, and lack of intimate and sexual relationships in our community. In response to these needs, we conducted research to understand barriers to sexual intimacy and identify opportunities to support People Living with HIV & AIDS (PHAs) with these challenges.

**Research Objectives:** To gain an in-depth understanding of barriers to sexual intimacy among PHAs in Guelph & Wellington County, and to identify the strategies that ACG clients can utilize when forming sexual relationships which may be shared and strengthened through ACG programming.

**Methods:** Using a community-based research approach, the project was guided by a working group and an advisory committee comprised of PHAs, researchers, and community agencies. Face-to-face semi-structured interviews were held with 18 ACG clients (PHAs) about their experiences with finding sexual partners, maintaining long-term relationships, and barriers to sexual intimacy. A thematic analysis was completed in various collaborative sessions with working group members, the advisory committee, and participants.

**Results:** The participants expressed desire for monogamous relationships that included sexual activity as well as other forms of physical intimacy, but these desires were not often met. A number of barriers were described and were organized into six larger themes. Men and women reported that negotiating disclosure, fear of rejection, fear of transmission, the need to protect others from loss, difficulty meeting potential partners, and physical changes in their body made entering into, and maintaining, sexual relationships challenging. These barriers resulted in the majority of the sample not engaging in sexual activity (even when currently in a partnered relationship) and dealing with internalized stigma. However, some participants indicated that being open to disclosing their status and being comfortable with their diagnosis of HIV were protective factors that could lead to positive sexual relationships and dating experiences.

**Conclusions/Implications:** HIV diagnosis introduces challenges to sexual relationships that compromise health and wellbeing. The current study identified a number of barriers to sexual intimacy among PHAs living in a mid-sized and rural area, highlighting the particular impact of HIV stigma on sexual activity. The present study also identifies opportunities to build on resilience through peer support and community-based initiatives.

## **The Effects of Sexual Arousal on Subsequent Stress Response**

Amanda Julian & Lisa Dawn Hamilton, Mount Allison University

**Rationale:** Stress and sexual arousal share a number of underlying mechanisms, both psychological and physiological in nature. Although the effects of stress on subsequent sexual arousal have been addressed by previous literature, the opposite relationship has not.

**Research Question:** The primary purpose of this study was to investigate the effects of sexual arousal on subsequent stress response. There were two competing theories predicting opposing results: 1) excitation transfer theory would predict that sexual arousal would lead to an increased stress response 2) the 'endocrine inhibition' hypothesis would predict that increased DHEAS and decreased cortisol resulting from sexual arousal would be protective and result in decreased stress response.

**Method:** Data were collected from male participants who were recruited from the student population and the community. All participants were presented with an erotic video (arousal condition) or a neutral video (control condition) and subsequently subjected to the Trier Social Stress Test. Psychological sexual arousal was measured, as well as physiological (cortisol, DHEAS, heart rate) and psychological stress response.

**Results:** Results did not fully support either theory, but provided some preliminary evidence for both. Physiological data demonstrated a pattern indicative of potential endocrine inhibition in the control condition, where participants unexpectedly showed greater increases in DHEAS. Psychological data demonstrated a pattern of results consistent with excitation transfer theory in the arousal condition.

**Conclusions:** These preliminary findings indicate that both excitation transfer and endocrine inhibition are both potentially valid theories relating to the relationship between stress and sexual arousal.

**Implications:** This study provides further insight into the underlying mechanisms mediating both sexual arousal and stress response and the ways in which they interact.

## **Sexual Satisfaction Within Hook Ups, Friends With Benefits Relationships, and Committed Romantic Relationships**

Kathleen Leadbeater & Angela Weaver, St. Francis Xavier University

**Background:** Sexual satisfaction is an important part of sexual health and is related to relationship satisfaction (e.g. Young et al., 1998; Paik, 2010). However, most studies of sexual satisfaction focus on long-term couples and little is known about sexual satisfaction in other types of sexual relationships. One of the only studies of sexual satisfaction that assessed casual sexual relationships compared young adults who were either married, in cohabitating relationships, in committed dating relationships, or were unattached and found that individuals who were married or cohabitating reported higher levels of sexual satisfaction compared to sexually active individuals not in these types of relationships (Pedersen & Blekesaune, 2003). However, a limitation of that study was not delineating the types of relationships within the “unattached” category. Friends with Benefits Relationships (FWBRs; relationships comprised of two individuals who participate in sexual activity without defining the relationship as romantic) and hookups (sexual encounters, which may or may not involve sexual intercourse, that occur between two individuals who are usually strangers or acquaintances) are quite common among young adults, yet little is known about sexual satisfaction within these types of sexual interactions.

**Research Questions:** The purpose of the present study was to examine sexual satisfaction across three contexts for sexual interaction: hookups, Friends with Benefits Relationships (FWBRs), and committed romantic relationships using an event-sampling method focusing on participants’ Most Recent Sexual Experience (MRSE). Gender and the type of MRSE were explored as independent variables and endorsement of the sexual double standard investigated as a possible covariate.

**Method:** Participants (n=208) completed a questionnaire package which included a demographics questionnaire, The Sexual Double Standard Scale (Muehlenhard & Quackenbush, 1996), a Most Recent Sexual Experience questionnaire, and The New Sexual Satisfaction Scale (Stulhofer, Busko, & Brouillard, 2010).

**Results:** Overall, participants reported the highest levels of sexual satisfaction if their MRSE occurred within a committed relationship ( $M=78.70$ ) followed by FWBRs ( $M=70.73$ ) and hookups ( $M=64.72$ ), respectively,  $F(2,201)= 16.91$ ,  $p<0.001$ . Also, males whose MRSE occurred within a hookup reported significantly greater satisfaction ( $M=68.59$ ) than females ( $M=62.34$ ),  $F(62.17)= 2.28$ ,  $p<0.027$  but there was no gender difference for MRSE-FWBR. Sexual double standard was not found to act as a covariate.

**Conclusions:** The current suggest that a) casual sexual relationships should not be excluded when studying sexual satisfaction and b) studies of casual sexual relationships should delineate types of relationship as there are unique differences among subtypes.



## **The Ottawa Youth Sex Survey: Access to Sexual Health Services**

Polly Leonard, Natalie Dias, Katie Ratcliffe, Katrina Levasseur, & Carol Chevalier, Carleton University

**Background:** Recent increases in sexually transmitted infection (STI) rates amongst Ottawa youth have sparked the concern of both sexual health organizations and the community (Public Health Agency of Canada, 2008). In response, Planned Parenthood Ottawa (PPO) has identified a need to better understand the sexual health of youth in Ottawa. In partnership with PPO, a Master of Social Work student research team from Carleton University conducted research on the consensual sexual experiences of Ottawa youth (aged 16-24). The intent of this research was also to generate an enhanced understanding of the sexual health services that young people require, enriching the knowledge base of Ottawa area social service practitioners.

**Research Questions:** 1) What sexual activities are Ottawa youth engaging in? 2) Are Ottawa youth accessing sexual health services? 3) What barriers do Ottawa youth experience when accessing sexual health services?

**Methods:** An online self-administered 25-question survey was used to gather exploratory data. 408 participants completed the survey. When data was excluded based on research criteria, the sample size was 295. Questions pertaining to demographics were asked, and subsequently analyzed, in order to identify the impact of the social determinants of health on youth sexual health and access to resources.

**Results:** Our data suggests that Ottawa youth are engaging in a wide variety of sexual activities, with a wide variety of sexual activity partners, whom identify on a broad gender and sexuality continuum. Ottawa youth are most likely to seek services from their family doctor, sexual health centres and campus clinics. The majority felt most comfortable discussing their sexual health with friends. Data suggests that barriers to accessing services include discrimination, judgment and accessibility.

**Conclusions:** This research project is intended to fulfill preliminary research goals that will help foster more in-depth research concerning the sexual health needs and experiences of Ottawa youth.

**Implications:** Our research makes several contributions to research on youth sexual health needs and experiences accessing sexual health services and information. Results reflect an emphasis on pregnancy protection, rather than STI prevention. A public education campaign focusing on STI prevention may be necessary. The data suggests that many Ottawa youth feel judged, embarrassed or treated with insensitivity when accessing sexual health services. PPO could engage with sexual health providers around anti-oppression training and sex-positivity training.

**Changing the Face(book) of Relationships:  
A Daily Diary Study of Facebook-Related Jealousy and Partner-Monitoring**

Sarah McCaffrey, Amanda Neves, Nasima Mehraban, University of Guelph-Humber; & Amy Muise,  
University of Guelph-Humber and University of Toronto

**Background.** Social media sites, such as Facebook, have increased access to information about romantic partners and created new challenges in dating relationships. Previous research suggests that monitoring a partner's activities on Facebook is associated with increased feelings of jealousy and conflict in romantic relationships (Muise, Christofides, Desmarais, 2009). However, researchers have not yet explored *who* is most likely to experience these consequences. According to attachment theory, people high in attachment anxiety are more likely to express feelings of jealousy by engaging in surveillance behaviours, such as following their partner or snooping through their partner's belongings (Guerrero, 1998). In the current study we consider how individual differences in attachment anxiety influence the daily association between jealousy and partner-monitoring on Facebook.

**Hypotheses.** Our central prediction is that daily feelings of jealousy will be associated with increased partner-monitoring on Facebook, and that this association will be stronger for individuals who are high in anxious attachment.

**Methods and Results.** In a 14-day daily experience study of 105 couples in dating relationships, hierarchical linear modeling (HLM) analyses revealed that on days when participants experienced higher levels of jealousy, they spent more time on their partner's Facebook page ( $b = 1.49$ ,  $t(2273) = 3.37$ ,  $p < .001$ ). This association was moderated by attachment anxiety ( $b = .63$ ,  $t(2273) = 3.50$ ,  $p < .001$ ); individuals high in anxious attachment were more likely to engage in partner-monitoring on Facebook in response to feelings of jealousy.

**Conclusions and Implications.** The current research suggests that Facebook is one tool used to manage daily feelings of jealousy, especially for people high in anxious attachment. The findings have implications for understanding daily experiences on Facebook and their impact on romantic relationships.

## **An Exploratory Study of African Canadian Men's Sexuality During the Perinatal Period**

Annie Mwenda & Viola Polomeno, University of Ottawa

**Rationale:** According to the World Health Organization, sexuality is central to the health of people. Sexuality is influenced by biological psychological, social, economical, cultural, ethical, legal, historical, religious and spiritual factors. Several studies have been conducted on women during pregnancy and in the postpartum. Yet, men's perspective is often presented through that of the women's. Many immigrant couples are still influenced by myths surrounding sexuality during pregnancy and after birth. There is a dearth of studies regarding the sexuality of couples of African Canadian origin during the perinatal period, less even of those living in a francophone minority situation in Ottawa.

**Summary of Key Points:** A mixed methods approach will be used with 20 francophone African Canadian men living in a minority situation in Ottawa. Through interviews, they will be asked questions 1) about their sexuality during the different phases of the perinatal period such as preconception, pregnancy, birthing and the postpartum, and 2) about living in a francophone situation in Ottawa. Questionnaires on their health, access and utilization of health services, sexuality, stress, conjugal relationship and support behaviors will also be distributed to them.

**Conclusions:** The sexuality needs of francophone African Canadian men living in a minority situation in Ottawa will be identified through this study. Nurses and other perinatal health care professionals will gain knowledge about these needs as well as how these men access and utilize health services.

**Implications:** Nurses and other health care perinatal professionals will be able to develop, implement and evaluate health programs and interventions for these men. Also, recommendations for provincial and regional health care policies will be provided.

## Do Homosexual Males Recall Elevated Childhood Concern About the Wellbeing of Parents?

Lanna J. Petterson, Doug P. VanderLaan, & Paul L. Vasey, University of Lethbridge

**Background:** Separation anxiety disorder (SAD) involves childhood anxiety due to separation from parents. Elevated traits of separation anxiety exist in boys diagnosed with Gender identity disorder (GID). GID is characterized by strong, persistent cross-sex behaviour and identity. Similarly, transgendered Samoan males, known as *fa'afafine*, recall elevated traits of separation anxiety during childhood as do Canadian homosexual males, a group known to be feminine during childhood. Most of the diagnostic criteria for SAD pertain to anxiety in relation to extended separation from kin. Interestingly, however, GID boys, *fa'afafine*, and Canadian homosexual males all scored highest on the diagnostic criterion for SAD pertaining to anxiety regarding the wellbeing of parents during separation.

**Hypotheses:** Based on this previous research, the hypotheses of the current study are: (1) homosexual men should recall greater separation anxiety related to concern about the wellbeing of parents than anxiety resulting from simply being separated from parents for extended periods of time, and (2) homosexual men should recall elevated separation anxiety related to concern about the wellbeing of parents compared to heterosexual men.

**Methods:** This study was conducted via an online questionnaire advertised to Canadian heterosexual men and women, and homosexual men over the age of 18 through university distribution lists, community organizations, and Facebook. The questionnaire included biographic information, an item to measure participant's sexual orientation (the Kinsey Scale), and an expanded Separation Anxiety Scale (SAS). The SAS contained two subscales, one that pertained to anxiety regarding extended separation from kin (Separation Subscale), and one that pertained to anxiety regarding concern regarding the wellbeing of kin (Worry Subscale).

**Results:** All groups in this study scored higher on the Worry Subscale than the Separation Subscale. Within subscales, no group differences existed for the Separation Subscale, however, heterosexual men scored significantly lower than both heterosexual women and homosexual men on the Worry Subscale with no difference between these latter groups.

**Conclusions:** These results support the predictions and suggest that homosexual males primarily experience elevated traits of separation anxiety due to increased concern regarding the wellbeing of kin. Additionally, homosexual males are similar to heterosexual females in this regard.

**Implications:** This research suggests that feminine boys, such as GID boys, experience elevated concern for the wellbeing of parents, thus resulting in elevated separation anxiety. Also, this research adds to a growing literature showing that the psychology of homosexual males is shifted in a female-typical direction.

**Knowledge Is Power – Or Is It?:  
The Relationship Between Sexual Health Knowledge and Casual Sexual Activity**

Derek Rowsell, Jocelyn J. Wentland, & Elke D. Reissing, University of Ottawa

**Background:** Previous research regarding sexual health education has focused on examining comprehensive versus abstinence-only education programs in regards to age at first intercourse, teenage pregnancy, and condom use (Kirby, 2002) resulting in a dearth of information regarding knowledge about sexual behaviour and sexual health (Kohler et al., 2008). Multiple studies have found that sexual health education increases age at first intercourse, suggesting the possibility of the moderating effect of sexual health education on sexual behaviour (e.g., Walcott, Chenneville, & Tarquini, 2011).

**Hypotheses:** The relationship between sexual health knowledge, sociosexual orientation (SOI-R), and number of casual sexual partners is important to examine. It was hypothesized that individuals with greater SOI-R scores would report more casual sexual partners and individuals with higher scores for sexual knowledge (SHK) would have fewer casual sexual partners.

**Methods:** The data came from an undergraduate and community sample ( $N = 882$ ) recruited for an online study regarding various casual sexual relationships. The sample consisted of 39% males ( $n = 340$ ) and 61% females ( $n = 543$ ); 80% of respondents were 30 years of age or younger.

**Results:** Both males and females reported a median of two casual sex partners. Females scored significantly higher ( $M = 12.31$ ) than males ( $M = 11.49$ ) on the SHK scale ( $t_{(632)} = -5.437$ ,  $p = 0.001$ ). Males reported significantly higher scores ( $M = 37.58$ ) on SOI-R than females ( $M = 29.00$ ) ( $t_{(880)} = 9.444$ ,  $p = 0.001$ ). Multiple linear regressions revealed that number of casual sexual partners ( $r = 0.201$ ) and SOI-R score ( $r = 0.616$ ) predict SHK scores. However, the SHK score accounted for little variance (1%); the reduced model suggests SOI-R score as a predictor of total casual sexual partners for both men and women.

**Conclusions:** As expected, a more permissive sexual attitude was associated with more casual sexual partners, but SHK did not influence the number of casual partners. It is possible that a person with high SHK may choose multiple partners, but place importance on practicing safer sex.

**Implications:** These findings suggest that a complicated relationship between sexual health knowledge and casual sexual behaviour exists. Sexual health education efforts should focus on providing students with skills-based knowledge.

## **An Exploratory Study of African Canadian Women's Sexuality Living in a Minority Situation in Ottawa**

Martine Sawadogo & Viola Polomeno, University of Ottawa

**Rationale:** There has been a steady rise in the number of women newcomers to this country in the last decade. Little is known about their sexual health, which is an essential part of holistic health. Sexuality depends on the socio-cultural context that is lived at the intersection of the social structures and is often associated with the production of inequalities for women who are in an ethnically racial minority. Studies have specified social and cultural factors, which hinder the sexual development of Afro-Americans such as taboos, negative educational messages and perceptions regarding their inability to determine their sexual selves. It appears that African women living in Canada may face the same problems. Social and cultural factors may have a negative impact on their sexual health and access to health care. This situation is compounded for francophone women in a minority situation in Ottawa.

### **Summary of Key Points:**

A- Research questions:

1) What are the knowledge and perceptions of Afro-Canadian francophone immigrant women living in Ottawa regarding their health and their sexual health? 2) How are health services accessed and utilized by them?

B- Research design: exploratory, descriptive study

C- Sample: 20 Afro-Canadian francophone women living in Ottawa aged between 25 to 40 years, married for at least one year and having at least one child.

D- Data collection methods: A mixed methods approach will be used. Each woman will be interviewed about her immigration experience, how health and sexual health have been affected by immigration, and how health services have been accessed and utilized. Six questionnaires will also be distributed: sociodemographic one, stress, support behaviors, quality of the marital relation, intimacy and sexuality, and emotional support. Certain women will be invited for a focus group to further discuss these issues.

E- Data analyses: descriptive statistics, correlations and multiple regressions will be used as well as content analyses

**Conclusions:** This study will present the knowledge and perceptions of francophone Afro- Canadian women living in Ottawa, and how they access and utilize health services in our city.

**Implications:** Nurses and other health care professionals will 1) gain greater knowledge about the sexual health issues being faced by African immigrant women, 2) develop and evaluate sexual health programs to meet the needs of these women, and 3) provide recommendation.

## **Mindfulness-Based Cognitive Therapy for Provoked Vestibulodynia: Women's Feedback & Treatment Experiences**

Kelly B. Smith, Pretty J. Verma, Rosemary Basson, & Lori A. Brotto, University of British Columbia

**Rationale/Background:** Provoked Vestibulodynia (PVD) involves severe pain in the vulvar vestibule and is most commonly experienced with sexual intercourse; it is highly distressing and detrimental to women's sexual functioning, self-image, and psychological health. In order to manage PVD pain and distress, initial evidence suggests that psychological approaches are promising. One such approach, mindfulness-based cognitive therapy (MBCT), has been increasingly applied to manage various chronic pain conditions, yet has only recently been tested for PVD (Brotto et al., in press). The purpose of this presentation is to share women's feedback and treatment experiences after participation in a group MBCT for PVD.

**Research Questions:** (1) What aspects of MBCT do women with PVD find beneficial? (2) What recommendations do women have regarding group content and structure? (3) To what degree are women able to practice the home assignments associated with MBCT?

**Methods:** 87 women with PVD participated in four, bi-weekly group sessions of MBCT. They completed feedback forms after the fourth session. The form, returned by 32 women, consisted of rating scales (completed by a subset of women) from 0 (not at all) to 5 (very) to assess how beneficial the group sessions were and the degree to which participants completed their homework assignments; it also included a mixture of closed and open-ended questions. The open-ended responses were independently coded by two authors.

**Results:** Various aspects of the MBCT sessions were deemed beneficial, including the sense of community women felt being part of the group and the education provided (*M* benefit rating = 3.6). While the majority of women (84%) felt that offering sessions more or less frequently would not have enhanced the effectiveness of the group, most (75%) wanted more than 4 sessions (*M* number of sessions requested = 6.6). While women reported a moderate degree of homework completion (*M* rating = 3.2), they also noted several factors that would have made compliance easier (e.g., more time in their schedules). Finally, women reported a number of topics for consideration in future groups.

**Conclusions:** Women with PVD perceived benefit from various components of a 4-session MBCT. As well, women identified some aspects that, if altered, could enhance the effectiveness of the program.

**Implications:** These results can be used by clinicians and researchers who aim to develop MBCT groups in the future to target pain and sexual difficulties.

## Perceptions and Evaluations of People Living With HIV/AIDS Are a Function of Route of Infection

Tatiana Son & William A. Fisher, Western University

**Rationale:** HIV related stigma is a significant barrier that People Living with HIV/AIDS (PLWHA) encounter, and it leads to impaired health and quality of life. HIV stigma is associated with lower levels of HIV testing and compromised adherence to treatment. Before stigma can be addressed, it is important to investigate what contributes to negative views of PLWHA.

**Hypotheses:** It was expected that PLWHA who became infected through casual sexual contact (CSC) and homosexual contact (HC) would be judged more negatively than PLWHA who became infected in a long-term relationship (LTR) or mother-to-child (MC) transmission. It was further anticipated that males would judge PLWHA more harshly than females, and that the following factors would be correlated with negative judgments towards PLWHA: belief in a just world, limited contact with PLWHAs, erotophobic tendencies, low STI testing history, and a lack of HIV/AIDS knowledge.

**Methods:** 90 males and 189 females completed a questionnaire containing a vignette in which the main character was male or female, and acquired HIV through one of the four possible modes of transmission at focus in this research. Judgments of the main character were assessed using the Social Distance Scale (SDS), Semantic Differential Scale, and Interpersonal Judgment Scale. Participants also completed a Belief in a Just World Scale, Sexual Opinion Survey and an HIV/AIDS quiz.

**Results:** Males had more negative evaluations of PLWHA compared to females,  $p < .001$ . Mode of HIV acquisition had an effect on evaluation of PLWHA,  $p < .001$ . Based on participants scores on the SDS (minimum score = 14, most positive judgments, maximum score=70, most negative judgments), MC transmission was rated most positively ( $M = 25.67$ ,  $SE = 1.24$ ) while CSC was judged more negatively ( $M = 40.56$ ,  $SE = 1.23$ ). Negative judgments were negatively correlated with HIV quiz scores ( $r = -.30$ ,  $p < .01$ ) and positively correlated with belief in a just world ( $r = .23$ ,  $p < .01$ )

**Conclusion:** Judgments of PLWHA depended on mode of transmission, and a lack of knowledge about HIV and belief in a just world are also associated with these negative attitudes.

**Implication:** Making the public aware that they may be differentially discriminating against people based on how they became infected with HIV, their belief in a just world, and their HIV knowledge may promote awareness and help reduce HIV-related stigma.



## **Implicit Measures of Homophobia and Stigmatization in the LGBTQ Community**

Theodora Walsh & Matt Newman, Arizona State University

Exposure to anti-LGBTQ political campaigns has been shown to increase feelings of distress for members of the LGBTQ community. In particular, political movements to restrict the legal rights of LGBTQ people have led to poorer psychological health, including feelings of anti-gay prejudice, feelings of stigmatization, and depression. A current pilot study using self-reports of homophobia and approval ratings of LGBTQ-oriented political ads suggests that participants find these videos to be stigmatizing; however, preliminary findings highlight the need for a more sensitive, subtler measure of people's reactions to media exposure. My proposed study further explores the effect of pro-LGBTQ and anti-LGBTQ political advertisements on people's automatic affective reactions to the LGBTQ community. I will be exploring the effect that pro- and anti-gay advertisements have on LGBTQ individuals, using heterosexuals as a control. In the proposed study, randomly assigned participants will view a series of videos containing neutral and pro- or anti-LGBTQ political advertisements, depending on the condition. Following the advertisements, participants will complete the Affect Misattribution Procedure (AMP) designed to assess implicit emotional reactions to LGBTQ stimuli. The AMP has been shown to be a reliable and effective measure of automatic affective reactions that people have to specific stimuli, often without conscious awareness. Specifically, participants view a series of images that tend to evoke an emotional reaction depending on people's underlying attitudes (e.g., a gun). Each image is paired with a neutral Chinese character that participants are asked to rate based on how pleasant or unpleasant they find the character. Previous research shows that ratings of the characters are influenced by automatic emotional reactions to the images with which the characters are paired. In my proposed study, following the initial exposure to political advertisements, participants will perform several trials of the AMP in which they are presented with LGBTQ-oriented stimuli, such as a picture of a gay couple embracing paired with neutral Chinese characters. Their ratings of the Chinese characters should reflect the positivity or negativity of their emotional reaction to the LGBTQ stimuli. I hypothesize that compared to heterosexuals, LGBTQ participants exposed to anti-gay advertisements will experience more negative emotional reactions to LGBTQ stimuli during the AMP, indicating an internalized negative evaluation of the LGBTQ community. I also predict that compared to the heterosexual control group, LGBTQ participants exposed to pro-gay political ads will report a greater liking of LGBTQ stimuli, reflecting a more positive evaluation of the LGBTQ community.

## Predictors of Extradyadic Sexual Intercourse and Attraction Among University Women

Julia Wreford & Karl Henning, University of Guelph

**Background:** Little is known about what specific relational variables predict extradyadic sexual intercourse, and even less is known about what variables relate to other forms of extradyadic attraction. This study of 107 undergraduate women in long-term (> 3 months) heterosexual relationships examines possible predictors of extradyadic sexual intercourse, and investigates whether these same variables predict other forms of extradyadic intimacy, such as attraction.

Hypotheses: Relationship dissatisfaction, diminished investment and commitment, and higher perceived quality of alternatives will predict (1) extradyadic sexual intercourse and (2) extradyadic attraction (emotional and physical) to close male friends.

**Method:** The Investment Model Scale (Rusbult, Martz & Agnew, 1998) was used to measure the four hypothesized predictor variables. Extradyadic sexual intercourse and attraction to participants' three closest male friends were also assessed. Participants were recruited through their enrollment in a third year undergraduate course at an Ontario university, and completed the survey online for bonus course credit.

**Results:** None of the variables significantly predicted extradyadic sexual intercourse,  $R=.199$ ,  $F(4,105)=1.037$ ,  $p>0.05$ . This may be a result of only three women in long-term relationships disclosing their involvement in extradyadic intercourse. However, higher perceived quality of alternatives significantly predicted physical and emotional attraction to close male friends among women in long-term relationships,  $t(101)=2.379$ ,  $p<0.05$ .

**Conclusion:** The findings of the current study do not support a significant relationship between the investment model predictors and extradyadic sexual intercourse. This might be accounted for by the limited endorsement of extradyadic sexual intercourse (only three women indicated that they had engaged in this behaviour). In contrast, perceived quality of alternatives significantly predicts physical and emotional attraction to close male friends among undergraduate women in long-term relationships.

**Implications:** The significant relationship between perceived quality of alternatives and attraction to close male friends is rather intuitive. However, the current study did not find a similar relationship between quality of alternatives and infidelity. Interestingly, other studies have determined that perceived quality of alternatives does predict propensity to engage in extradyadic sexual activity (McAlister, Pachana & Jackson, 2005). This relationship should be further explored to determine the degree to which perceived relationship alternatives determine ones' likelihood of engaging in infidelity. Moreover, future studies should take into account whether or not extradyadic sexual intercourse is sanctioned in the primary romantic relationship, in order to accurately identify these acts as infidelity.

## Friday

### Are you Game? The Benefits of Sexual Communal Strength

Amy Muise & Emily Impett, University of Toronto

**Background:** Across close relationships, people can vary in the extent to which they feel responsible for meeting a partner's needs. Individual differences in communal motivation within a specific relationship have been referred to as *communal strength* (Mills et al, 2004). Communally motivated people reap important benefits for the self, benefits that are attributed to the desire to provide care and not the desire to receive care in return (Canevello & Crocker, 2010; Kogan et al., 2010). Individual differences in communal strength should be particularly relevant to the sexual domain of relationships. Sexuality is one specific domain of a relationship where partners' needs and interest may differ (see review by Impett & Peplau, 2003), and being motivated to meet a partner's sexual needs may create more positive sexual experiences. Sex columnist Dan Savage coined the term GGG to represent the qualities he thinks makes a good sexual partner: "GGG stands for good, giving, and game. Think good in bed, giving of equal time and equal pleasure, and game for anything—within reason." In the current study we consider how being 'game' to meet a partner's sexual needs (high *sexual communal strength*) is associated with sexual and relational benefits for both partners.

**Hypotheses:** Our central prediction is that being higher in sexual communal strength is associated with sexual and relational benefits for both partners in a long-term relationship.

**Methods and Results:** In a 21-day daily experience study of 44 long-term couples, hierarchical linear modeling (HLM) analyses revealed that individuals higher in sexual communal strength engaged in daily sexual interactions for approach goals, and in turn, reported high levels of daily sexual desire. Sexual communal strength also buffered against declines in sexual desire over a four-month period of time. In addition, the partners of people high in sexual communal strength reported greater partner responsiveness during sex and in turn, felt more satisfied in their relationship and more committed to their partner.

**Conclusions and Implications:** These findings demonstrate the utility of extending theories of communal motivation to the sexual domain of relationships and highlight the personal benefits of being 'game' to meet a partner's sexual needs.

## **Developmental Contributors to Wonderful Sexual Experiences**

A. Dana Ménard, Peggy J. Kleinplatz, Nicolas Paradis, Christopher Wannamaker, University of Ottawa; & Meghan Campbell, Shannon Lawless, Independent Practice

**Rationale:** Research on sexual functioning has tended to focus on the developmental contributors to sexual dysfunctions (e.g., sexual abuse, sexual assault) rather than those that might facilitate optimal sexual experiences. However, the identification of events or experiences that contribute to optimal sexual experiences throughout a person's lifespan may be crucial for improved sexual intimacy and for sex therapy interventions.

**Research questions:** The goal of this study was to identify the developmental factors that contribute to optimal sexual experiences, from events in childhood to current choices.

**Methods:** Semi-structured interviews were conducted with 75 individuals who reported having optimal sexual experiences and who have historically been marginalized within sex research, including men and women over the age of 60 who reported having been in long-term relationships of 25 years or longer and self-identified members of sexual minority groups. A phenomenologically-oriented content analysis was performed on interview transcripts to determine the factors that facilitate optimal sexual experiences. A classification system of contributors was developed based on an iterative process of repeated readings, identification of common themes, discussion within the research team and return to the interview transcripts.

**Results:** Six major developmental contributors emerged: Unlearning, letting go, overcoming, deconstructing, relinquishing; practice, seeking, choosing; fortuitous triggers; maturity, personal development, growth, unfolding; relationship, partners, a special person; and openness to experience, paying attention, focusing.

**Conclusions:** Participants stated that a variety of experiences across their lifespans were crucial in order to bring about optimal sexual experiences in their present. They had to let go of destructive messages about sex, sexuality or themselves that were received in childhood, consciously pursue higher quality sexual experiences and be open to possibilities and opportunities along the way. Many said they had been lucky to meet a special person and several identified a pivotal moment in their lives, after which everything changed.

**Implications:** Research on the developmental contributors to optimal sexual experiences might be important to improve sexual relationships and to advance sex therapy interventions. Sex therapists may need to help clients unlearn negative messages, help them cultivate openness to experience and assist them in choosing and refining the types of experiences that will further their personal and interpersonal sexual growth.

## Emotional Versus Sexual Intimacy and Couple Satisfaction: An Attachment Perspective

Cathy Dandurand & Marie-France Lafontaine, University of Ottawa

**Background:** Research has consistently revealed a strong positive association between romantic intimacy and couple functioning (Greefe & Mahlherbe, 2001). However, existing literature is limited by the preponderant focus on emotional intimacy at the expense of overlooking sexual intimacy (Marelich, 2008). Moreover, despite research findings suggesting that emotional intimacy may play a more important role in couple functioning, studies have yet to contrast emotional and sexual facets. In light of this shortcoming, this study sought to incorporate and compare emotional and sexual intimacy and its relation to couple satisfaction. Second, although intimacy is shown to be a dyadic process, research has predominantly focused on the intimacy experience of solely one partner. Accordingly, we aimed to implement a systematic examination of intimacy among both partners of the couple dyad. Third, research demonstrates that the level of intimacy desired in romantic relationships may vary depending on an individual's attachment pattern, with anxiously-attached individuals incessantly seeking greater intimacy and avoidantly-attached individuals placing limits on closeness (Feeney & Noller, 1991). Thus, we sought to explore a novel model exploring romantic attachment as a moderator of the relation between intimacy and couple satisfaction. Finally, the moderating role of gender was examined among all of the aforementioned relations.

**Hypotheses:** First, it was hypothesized that both emotional and sexual intimacy would be related to couple satisfaction, with emotional intimacy demonstrating a stronger relation. Second, it was hypothesized that the positive relation between actor and partner intimacy (emotional and sexual) and actor couple satisfaction would be a) stronger among those with higher attachment anxiety and b) weaker among those with higher attachment avoidance. No a priori hypotheses were put forth for gender effects.

**Method:** A sample of 117 heterosexual couples completed questionnaires assessing intimacy (PAIR), romantic attachment (ECR), and couple satisfaction (DAS-4).

**Results:** Multilevel modeling analyses (using linear mixed models) revealed that: 1) both actor and partner effects of intimacy (emotional and sexual) were related to actor couple satisfaction, with emotional intimacy demonstrating a stronger relation, 2) insecure attachment moderated the relation between actor emotional intimacy and actor couple satisfaction, such that avoidantly-attached individuals demonstrated a weaker relation, 3) gender moderated the relation between sexual intimacy and couple satisfaction, such that women's sexual intimacy demonstrated a stronger relation with men's couple satisfaction.

**Conclusions and Implications:** The findings demonstrate the important role of both emotional and sexual intimacy for couple functioning while simultaneously highlighting the mechanisms by which gender and attachment may impact these relations. Findings have the potential to inform theoretical models and clinical work with couples in a myriad of ways.

## The Object of Sexual Desire: Examining the “What” in “What Do You Desire?”

Kristen Mark, Dennis Fortenberry, Michael Reece, Debby Herbenick, & Stephanie Sanders, Indiana University

**Rationale:** Researchers often ask whether a participant experiences sexual desire on any given day or in any given time period, whether for a particular partner or in general terms. Sexual desire, also described as a person’s “libido” or “sex drive”, is often defined as the interest to engage in sexual activity. However, perhaps the object of sexual desire may not always be directly sexual. Researchers have not yet examined the specifics of exactly *what* people desire when they say they have sexual desire.

**Research Questions:** This online study of couples aimed to examine what exactly women and men in a relationship with one another desire when they say they have sexual desire. Additionally, the current study aimed to examine how differences in *what* each member of a couple desires is related to levels of sexual desire on a dyadic level.

**Methods:** Data were collected from 252 heterosexual couples (504 individuals) in the form of an online survey. Couples were required to be in a relationship for a minimum of 3 years and currently living together to participate. The average relationship length for couples in the sample was 13.2 years (minimum of 3 years, maximum of 37 years). The online survey included demographic questions, questions about sexual and relationship satisfaction, sexual desire, and a measure of the object of sexual desire created for the purposes of the current study.

**Results:** A factor analysis was conducted for men and women separately to identify clusters of the object of sexual desire. The object of sexual desire was not always sexual in nature (e.g., “I desired intimacy” or “I desired excitement” were common responses). This was true for both men and women. Using the Actor Partner Interdependence Model to guide analysis, a hierarchical mixed-model was conducted using HLM in order to examine the partner and actor effects between the object of sexual desire and level of sexual desire within the couple. The nature of what was desired did not significantly impact the level of sexual desire reported on a dyadic level.

**Conclusions and Implications:** Sexual desire does not necessarily equate to desire for sex for both men and women. Future research may benefit from parsing out the object of sexual desire in order to further understand sexual desire. However, the object of sexual desire does not necessarily impact the level of sexual desire expressed.

## **Internet-Facilitated Sexual Offending**

Michael C. Seto, Royal Ottawa Health Care Group

In this talk, I will summarize recent research on the role that the Internet has played in facilitating certain forms of sexual offending, particularly crimes involving child pornography and crimes involving sexual solicitations of legal minors.

## **Why Does It Hurt Down There? Reconceptualizing Provoked Vestibulodynia as a Neuropathic Pain Condition**

Emma Dargie, Caroline Pukall, & Ian Gilron, Queen's University

**Background:** Provoked Vestibulodynia (PVD) is a common form of chronic genital pain, affecting approximately 12% of premenopausal women. Even though knowledge of vulvodynia has been present in the medical field for many years, it was previously thought to be of psychogenic origin and has never been thoroughly investigated for the purpose of pain classification. When investigating any pain condition, one of the most important distinctions to make is whether the pain is neuropathic. Even though this possibility has never been investigated in women with PVD, some claim that PVD pain contains elements of neuropathy, even treating this pain with medication for neuropathic pain (NP) conditions. The purpose of this study was to determine whether PVD has a neuropathic component through the use of validated measures created for NP diagnosis.

### **Research Questions:**

1. Do women with PVD report physical symptoms characteristic of those experiencing NP?
2. Are there differences in psychosocial functioning for women with PVD when compared with women with NP?
3. Does health-related quality of life differ as a function of pain group status?

**Method:** Women with PVD completed an online survey utilizing validated questionnaires to investigate various pain and psychosocial variables. Their responses were compared with those of pain-free controls and women experiencing an established NP condition, post-herpetic neuralgia (PHN).

**Results:** Women with PVD scored above established cut-offs on measures of NP. Further, their pattern of responses was suggestive of sensory abnormalities in the form of evoked pain accompanied by a lack of negative sensory deficits. Women with PVD also had similar psychosocial profiles to those with PHN, although women with PHN reported poorer health-related quality of life.

**Conclusions:** Overall, these results lend support to the argument that PVD is a chronic pain condition that may contain a neuropathic component. Pain-related life disturbances, pain-related cognitions, and patterns of psychological distress were similar among women with PVD and PHN. Because women with PVD were long thought to experience a psychogenic disorder, it is important to note that their characteristics meet those of another established pain condition.

**Implications:** These results indicate that assessment and treatment of PVD should take into account the pain and psychosocial symptoms commonly encountered by those suffering from NP. Further, these results add to the understanding and classification of PVD, justifying further investigation. Overall, the findings in this study provide empirical support for conceptualizing PVD as a chronic pain condition possibly containing elements of neuropathy.



## **There Is More to It Than Intercourse: The Sexual Difficulties of Women with Vaginismus**

Rebecca Cherner & Elke D. Reissing, University of Ottawa

**Background:** Vaginismus is categorized as a sexual dysfunction under the sexual pain disorders in the DSM-IV-TR. Yet, descriptive information in the DSM suggests that sexual responses (e.g., desire, orgasm) may not be impaired unless penetration is attempted or anticipated. The research literature provides no clarification of this information, as very limited data are available on the sexual function, response, and behaviour of women with vaginismus. This presentation will report on the first comprehensive study on the sexual health of women with lifelong vaginismus. This study was also designed to investigate maladaptive thoughts during penetration in order to understand how cognitions could impact the sexual experiences of women with vaginismus.

**Hypotheses:** It was expected that women with lifelong vaginismus and lifelong dyspareunia would report compromised sexual function compared to a pain-free control group. In addition, it was hypothesized that the vaginismus group would report more sexual anxiety overall and more negative thoughts during attempted penetration. Women with vaginismus were expected to report a lower propensity towards sexual activation or excitation in line with the Dual Control Model and higher sexual inhibition.

**Methods:** Participants (n = 174) completed an online survey on sexual function, sexual anxiety, cognitions related to penetration, and sexual excitation and inhibition.

**Results:** The women in the vaginismus and dyspareunia groups reported impaired sexual function and increased sexual anxiety. The vaginismus group reported lower perceived control. Both groups endorsed more maladaptive cognitions and fewer positive thoughts than the control group. The symptomatic groups displayed more sexual inhibition and less propensity for sexual activation/excitation.

**Conclusions:** Disconfirming current diagnostic descriptions, the sexual response of women with vaginismus was impaired beyond attempted penetration. Concerns about control distinguished the vaginismus group, but both sexual pain groups reported maladaptive cognitions. Increased sexual inhibition and lower sexual excitation characterized the symptomatic groups.

**Implications:** These results provide insight into the sexual function of women with vaginismus, supporting the need for treatment approaches that are not limited to the technical success of intercourse. Findings confirmed a number of similarities between the two sexual pain disorders; however, differences also emerged, casting further doubt on the proposed re-conceptualization of vaginismus and dyspareunia into one diagnostic category in the DSM-5.

## **Are Friends With Benefits Really That Casual?**

Jocelyn J. Wentland & Elke D. Reissing, University of Ottawa

**Background:** The term Friends with Benefits (FWB) is used to describe a casual sexual relationship (CSR) between two friends who decide to engage in sexual activity but do not consider their relationship romantic. FWB are common among undergraduate students (Bisson & Levine, 2009; Owen, Fincham, & Moore, 2011). However, the 'casual' nature of FWB is poorly understood given that this relationship can be a transition into a committed relationship (Mongeau et al., in press) and often involves explicit discussion regarding the rules of engagement (Wentland & Reissing, 2011). Understanding how the script for FWB differs compares to other casual sexual relationships is an important next step.

**Research Questions:** Specific behaviours (e.g., "These individuals add each other to Facebook," "These individuals discuss the beginning of this relationship") were examined in order to identify the specific nature of the typical FWB script.

**Method:** Undergraduate and community participants ( $N = 899$ ) completed the following: identification of various casual sexual relationship definitions, identification of script behaviours ( $N = 65$ ), the revised Sociosexual Orientation Inventory (Penke, 2010), and other demographic measures (e.g., religiosity measures, safer sex knowledge).

**Results:** Approximately 60% of women and 64% of men reported previous experience with a FWB. Regardless of previous experience with FWB, male and female participants were able to correctly identify the definition of a FWB. A script was identified for FWB that included 24 items endorsed by at least 65% of the total sample. Five items were endorsed by more than 85% in regards to the individuals who: sometimes engage in sexual activity but sometimes just spend time together non-sexually (88%), are friends before engaging in sexual activity (87%), make plans to hang out ahead of time (87%), share personal information (85%), and remain friends post-FWB (85%).

**Conclusions:** FWB represents a unique type of casual sexual relationship due to the pre-existing friendship between the two individuals. This uniqueness is most evident in regards to the discussions that take place throughout the FWB, but most notably at the start and the end of the sexual activity.

**Implications:** Researchers must not neglect to closely examine how various casual sexual relationships are similar and where they differ from one another. This is especially important in regards to FWB, which appears to be the least "casual" compared to other casual sexual relationships due to the pre-existing friendship and discussions that take place between the two individuals.

# **The Roles of Attachment Styles, Attitudes Toward Sexuality, and the Sexual Double Standard in Friends With Benefits Relationships**

Angela Weaver & Angela Taylor, St. Francis Xavier University

**Background:** Friends with benefits relationships (i.e., FWBRs) are non-romantic relationships between friends who participate in sexual activity with one another (Epstein, Calzo, Smiler, & Ward, 2009; Hughes, Morrison, & Asada, 2005). FWBRs are common among university students (Bisson & Levine, 2006; Mongeau et al., 2003), but little is known about what variables predict who participates in these relationships, how positively or negatively FWBRs are perceived, or how young adults view others who are in FWBRs.

**Research Questions:** Attachment style, erotophilia, and implicit endorsement of the sexual double standard (SDS) were examined as potential predictors of young adults' participation in FWBRs, the valence of their FWBR experiences, and their judgment of others who participate in FWBRs.

**Method:** Participants (n =102) completed measures of attachment style, erotophilia, valence of their own FWBR experiences, judgment of others who participate in FWBRs, and the Sexual Double Standard Implicit Association Task (Sakaluk & Milhausen, 2011).

**Results:** Overall, participants reported neutral judgments of others in FWBRs and a slight reverse SDS. On average, those who had experienced FWBRs evaluated those experiences positively. Discriminant analysis revealed 77% correct group classification for FWBR experience; participants reporting FWBR experience were lower in secure attachment, higher in avoidant and anxious/ambivalent attachment, and higher in erotophilia. Erotophilia was the only significant predictor of valence of participants' own FWBR experience, with those higher in erotophilia evaluating those experiences more positively. Simultaneous multiple regression analysis revealed that more erotophilic participants and those who had experienced their own FWBR had more positive judgments of others in FWBRs.

**Conclusions:** Attachment style appears to predict participation in FWBRs, but not necessarily the valence of those experiences, although this will need to be replicated in a larger sample. Young adults with FWBR experiences tend to evaluate those experiences positively. We did not find evidence of a general SDS using an implicit measure (consistent with Sakaluk and Milhausen, 2011) or a FWBR-specific SDS using an explicit measure.

**Implications:** Further research into the predictors of valence of FWBR experiences is needed. Given that the majority of participants are reporting positive experiences, researchers must consider the possibility that these types of non-traditional relationships are serving a role (e.g., learning, exploring) among emerging adults and perhaps educational efforts should be focused on how to improve communication around relationship expectations and safer sex methods.

## **Young Adults' Evaluations of "Friends With Benefits" Relationship Scenarios: Is There Evidence of a Sexual Double Standard?**

Angela Weaver, St. Francis Xavier University; Marvin Claybourn, St-Thomas University; & Kelly MacKeigan, St. Francis Xavier University

**Background:** Friends with Benefits Relationships (FWBRs; recurring sexual activity between friends who do not define the relationship as romantic; Epstein, Calzo, Smiler, & Ward, 2009) are common among university students (Bisson & Levine, 2006). However, little is known about how people in FWBRs are judged by others. Historically, a sexual double standard (SDS) has existed in which women were judged more harshly than men for their casual sexual relationships. Recent studies suggest that this might be evolving, but no research has explored the SDS within FWBRs.

**Research Questions:** Will gender and FWBR experience relate to judgments of characters depicted in fictional FWBR scenarios?

**Method:** University students (n=404) were randomly assigned scenarios describing a FWBR (scenarios varied in terms of the gender and amount of FWBR experience of the main character) and were asked to complete a scale rating the main character on a variety of attributes and a scale predicting the outcome of the fictional relationship. The study was then replicated and expanded (i.e., sexual orientation was examined) in an independent sample (n=325).

**Results:** A majority of participants (53% in Study 1, 51% in Study 2) had experienced a FWBR and, on average, evaluated that experience positively. Female respondents judged characters more negatively than male respondents overall. The results of Study 1 did not support the SDS and, interestingly, a *reverse* SDS (i.e., men were judged more negatively than women) emerged in Study 2. However, the results suggest that participants might *perceive* that a traditional SDS exists, as predictions about relationship outcomes (both studies), estimates of others' judgments, and the need for secrecy (Study 1) were more negative when the character was female. In Study 2, a two-way interaction effect emerged. Heterosexual female characters were anticipated to have less positive relationship outcomes than heterosexual males; whereas, there were no differences in anticipated relationship outcomes for gay and lesbian characters.

**Conclusion:** Although participants in an earlier FWBR study (Weaver, MacKeigan, & MacDonald, 2011) described the perception of a SDS for FWBRs, the current study did not support the existence of the SDS for FWBR participants.

**Implications:** The normative nature of FWBRs among university students (53% and 51% in the current samples) and the generally positive evaluations of their experiences might help to explain the relatively neutral judgments of others in FWBRs.

## **Family and Religion: Underlying Mechanisms Behind Ethnic Differences in Sexual Guilt Between Anglo-Canadians and Chinese Canadians**

Émilie Eve Gravel, Marta Young, Andrea M-S Lee, Marcela Olavarria, & Chantal Darzi, University of Ottawa

**Rationale and Background:** Sexual guilt is related to poorer sexual health outcomes. Moreover, studies show that Asian-Canadian men and women report higher sexual guilt (SG) than their Euro-Canadians counterparts (e.g. Woo et al., 2010, 2011), but the mechanisms underlying these differences are seldom examined empirically. A recent study however indicated that sociocultural differences at the level of institutions, such as family and religion, were mechanisms behind ethnic differences in SG. (Gravel et al., 2011). The purpose of this study was thus to determine whether ethnic differences in Anglo-Canadians (AC) men and women of European origin and Chinese-Canadian (CC) men and women were mediated by differences in family and religion.

**Hypotheses:** AC men will report lower SG than Chinese-Canadian (CC) men, this difference will be mediated by the more liberal parental sexual attitudes and lower religiosity in AC men. AC women will report lower SG than CC women, this difference will be mediated by the more liberal parental sexual attitudes and lower religiosity in AC women.

**Method:** Post-secondary students aged 18 to 25 (AC:  $N = 172$ , men:  $N = 73$ , women:  $N = 99$ ; CC:  $N = 100$ , men:  $N = 46$ , women:  $N = 54$ ) completed a questionnaire assessing perceived parental sexual attitudes, religiosity, and SG.

**Results:** AC men reported lower SG than CC men and AC women reported lower SG than CC women. Differences in SG between AC and CC men were mediated by the more liberal parental sexual attitudes in AC men. In AC and CC women, differences in SG were mediated by the more liberal parental sexual attitudes and lower religiosity in AC women.

**Conclusions:** Differences at the level of family and religion significantly account for discrepancies in SG between AC and CC. These results thus highlight the pertinence of examining sociocultural factors as mechanisms underlying ethnic differences in SG. Also underscored is the differential impact of sociocultural factors on men and women's sexuality.

**Implications:** Sexual health models need to integrate the role of family and religion in order to effectively address discrepancies in SG between ethnic groups, but also how these sociocultural factors differentially impact SG in men and women. Cross-cultural sexuality research should also investigate whether sociocultural factors mediate other ethnic differences in sexuality.

## **Marital, Reproductive, and Educational Behaviours Covary with Life Expectancy**

Daniel Krupp, Queen's University & McMaster University

**Rationale:** Theories of life history evolution predict that organisms will evolve to (1) schedule sexual development and reproductive behaviour and (2) invest in current over future reproduction in accordance with life expectancy, because individuals in the past that adjusted their reproductive output to maximize (and balance) the quantity and quality of offspring in the face of time constraints would have had higher Darwinian fitness than individuals that did not do so. Among humans, such theories suggest that individuals might adjust the timing of marital and reproductive behaviour, as well as the likelihood of terminating a marriage or pregnancy and investing in skill development (such as formal education), in response to cues of the locally prevailing level of life expectancy.

**Hypotheses:** Drawing from life history theory, foreshortening life expectancy is hypothesized to lead to hastened marriage and reproduction, whereas lengthening life expectancy is hypothesized to increase the likelihood of marital and reproductive termination (divorce and abortion) and to lead to greater investment in education.

**Methods:** Using data from Statistics Canada, I analyzed covariation between life expectancy and patterns of marriage, reproduction, and educational attainment (controlling for affluence) at two jurisdictional levels in Canada.

**Results:** Controlling for median household and annual personal income, life expectancy was positively correlated with age-specific fertility, age at first marriage, divorce, abortion, conferral of high school and higher education degrees (with the exception of the trades) and mean number of years of schooling.

**Conclusions:** Life expectancy covaried with the scheduling and occurrence of marital and reproductive behaviours—both their initiation and termination—as well as levels of educational attainment and investment, even after controlling for the effects of affluence. These relationships were often strong and highly consistent, suggesting that reproductive decision-making may be mediated by individual “perceptions” of life expectancy.

**Implications:** Decisions to marry, become pregnant, divorce, have an abortion, and seek out higher education may be interconnected by a complex of psychological mechanisms designed by natural selection to gather information about life expectancy and to tailor behaviour accordingly. If so, policy attempting to influence one kind of reproductive decision (say, reducing teen pregnancy rates) may have consequences for other decisions.

## **Which Family Life Variables Prove Most Useful for Predicting Adolescents' First Oral Sex Experiences?**

Brenda Lee, Lucia O'Sullivan, University of New Brunswick; & Justine C. Gibbings, Canadian Research Institute for Social Policy

**Background:** Oral sex is a common behaviour during adolescence (Halpern-Felsher et al., 2005) and typically precedes intercourse as a milestone in sexual development (O'Sullivan et al., 2007). Numerous studies emphasize the value of family life variables for understanding adolescent development, such as eating meals together (Videon & Manning, 2003) and reviewing homework (Murray et al., 2006). The purpose of the current study was to link family life variables to the field of sexual development.

**Research Questions:** Which family life variables predict adolescents' first oral sex experiences, and do variables differ between male and female adolescents?

**Methods:** Participants were 265 Canadian adolescents (66% female; M age 17.0; range = 15-19 years). All were recruited for a longitudinal study from eight high schools in Eastern Canada. SPSS classification tree techniques were used (Kass, 1980), which identifies the smallest set of predictors that contribute maximally to the prediction of an outcome. Adolescents who reported no oral sex experience two years earlier (*ns*=90 male and 119 female participants) comprised the final sample.

**Results:** Nearly half of adolescent girls (42.9%) and boys (48.9%) reported oral sex experience. For girls, how frequently they lied to their parents about their whereabouts best predicted experience. Among the 62 girls who reported not lying to their parents, eating a meal together as a family was the next best predictor of oral sex. For adolescent boys, TV watching was the best predictor with 100% of those who watched 10+ hours a week reporting no oral sex. Among those who watched less, boys whose families ate together every day were less likely to report oral sex.

**Conclusions:** Family life variables are clearly associated with oral sex experience among adolescents. Eating meals together represents a central family activity--one that likely reflects a host of other variables that are relevant to both male and female adolescents. For girls, lying about one's whereabouts also proved important, likely because it reflects struggles to establish autonomy from one's family. High levels of TV viewing might isolate some boys to the point that they do not gain sexual experience common to their peers.

**Implications:** This is the first study to our knowledge that explores the family life variables which best predict adolescents' oral sex experiences. Identifying the developmental trajectory of adolescent sexual behaviours will likely be informative for parents and educators alike.

**Contextualizing Cybersex:  
An Examination of Heterosexual Adults' Cybersex Experience With Three Types of Partners**

Krystelle Shaughnessy & E. Sandra Byers, University of New Brunswick

Cybersex involves at least two people, sexually interacting in real-time through a device connected to the Internet (Shaughnessy, Byers, & Thornton, 2011). People may participate in cybersex with a primary committed partner, someone they know who is not a partner (i.e., known non-partner), or a stranger. However, a review of the research revealed no studies that examined cybersex with a partner or known non-partner. We expected that more people would report having engaged in cybersex as well as a greater variety of cybersex activities, and more frequent cybersex with a partner compared to with a known non-partner or a stranger. Additionally, the traditional sexual script is permissive towards male sexual expression with all types of partners but permissive towards female sexual expression only in the context of a relationship (Weideman, 2005). Thus, we expected that men would report more cybersex experience with a stranger, but that men and women would not differ in cybersex with a partner or known non-partner.

Participants were 111 heterosexual men and 275 heterosexual women recruited to a study about sexuality and intimacy on the Internet who reported at least one lifetime experience with cybersex. Participants completed a background measure and, for each partner type, the Lifetime Cybersex Experience Questionnaire (which measures incidence as well as variety of cybersex activities), and the Frequency of Cybersex Experience Questionnaire. As predicted, significantly more participants reported experience with a partner (81.1%) followed by a known non-partner (44.3%) and a stranger (36.3%;  $p < .05$ ). This pattern was repeated for variety of cybersex experience ( $M = 4.13, 2.06, \text{ and } 1.52$ , respectively,  $p < .01$ ). Participants reported more frequent cybersex with a partner than with a known non-partner or a stranger, which did not differ ( $M = 1.96, 1.46, \text{ and } 1.33$ , respectively). As predicted, significantly more men than women reported cybersex with a stranger (47.7% and 31.6%, respectively;  $\chi^2 = 8.88, p < .01$ ) and did so more frequently (2.34 and 1.63, respectively;  $F(2, 140) = 7.90, p < .01$ ). There were no other gender differences. We will also present descriptive information on cybersex activities with each type of partner. The results suggest that it is important to examine the context of cybersex in order to fully understand people's cybersex experiences. Contextualizing cybersex experience within partner types opens opportunities to link this behavioural phenomenon with broader theoretical frameworks in human sexuality.



## Development of the Asexuality Identification Scale (AIS)

Morag Yule, Lori A. Brotto, & Boris B. Gorzalka, University of British Columbia

**Rationale:** Asexuality research has thus far identified asexual individuals using criteria such as self-identification or agreement with a statement such as “I have never felt sexually attracted to anyone at all”. Due to limitations in recruiting sufficiently powered local samples, the majority of studies have relied on recruiting via online web-communities of asexuals. These methods are problematic as they limit the sample to those recruited through asexuality networks/communities, or that the definition provided (e.g., “lack of sexual attraction”) may be ambiguous. Asexual individuals belonging to web-communities may be a distinct group of asexuals, as they have acknowledged their asexuality as an identity. It is possible that motivations for joining an online community (such as distress) may have inflated previous findings, such as increased psychopathology scores among asexuals. This highlights the importance of finding a way to access a more representative group of asexuals. Research conducted on asexuals using the current method can only claim to represent online communities of asexual individuals, and not asexuals in general. It follows that conclusions based on these studies may not take us any closer to fully understanding asexuality. Without some sort of objective measure of asexuality that can identify a lifelong lack of sexual attraction in those individuals who have not heard the term asexuality, it has thus far not been possible to study a representative sample of asexuals.

**Research Question:** The aim of this study was to develop a self-report questionnaire that assesses asexuality, in order to identify asexual individuals who have yet to come across the term asexuality and/or online asexual communities. This questionnaire was developed to differentiate asexual individuals from sexual individuals, to attain more representative samples of asexuals, so that researchers can more fully and effectively investigate asexuality.

**Method:** Questionnaire development occurred in several stages, including: development and administration of eight open-ended items ( $n$ 's=139 asexual and 66 sexual); development, administration ( $n$ 's=172 asexual, 755 sexual), and analysis of resulting 111 multiple choice items; administration ( $n$ 's=317 asexual, 927 sexual) and analysis of 33 retained items; reliability and validity analysis of final 10 items ( $n$ 's=393 asexual, 111 sexual participants meeting HSDD diagnostic criteria).

**Results:** The resulting 10-item Asexuality Identification Scale (AIS) is a brief, valid, and reliable self-report instrument for assessing asexuality. It is psychometrically sound, easy to administer, and discriminates between sexual and asexual individuals.

**Conclusions:** The AIS was developed to access a wider range of recruiting avenues than previously possible. This may lead to more representative samples of asexuals, allowing us to further increase our understanding of asexuality.

**Implications:** This measure has the potential to significantly improve the quality of asexuality research in the future.

## **To Vibe or Not to Vibe? Investigating the Experiences, Perceptions, and Concerns Surrounding Vibrator use Among Men and Women**

Claire Salisbury & Taylor Kohut, Western University

**Rationale:** Vibrating devices are known to enhance sexual arousal and latency to orgasm in both women and men. Even though vibrators have been recommended by sexual health professionals for the treatment of both male and female sexual dysfunction (including anorgasmia, female sexual arousal disorder, and erectile dysfunction), little is known about the frequency of their use, perceptions surrounding their use, and how users differ from non-users when examining both women and men, especially within a Canadian context.

**Research Question:** This aims of this exploratory and descriptive study were to investigate the experiences, perceptions, and concerns surrounding vibrator use among a large sample of adult men and women, who were predominantly Canadian.

**Method:** A concurrent mixed-methods research approach was utilized in the form of the administration of an online questionnaire containing both open- and close-ended questions pertaining to vibrator use in a sexual context. Complete online survey data was obtained from 715 participants (367 males, *M* age = 22.4; 348 females, *M* age = 21.9) who were recruited from either undergraduate psychology courses or the online social networking site, Facebook. Descriptive data relative to the research questions at hand are currently in the process of being analyzed and will be completed by the time of the conference.

**Results:** A total of 33.2% of males and 52.0% of females reported at least some experience with a vibrator for sexual purposes. Further results to be communicated will focus on the following topics: (1) comfort levels associated with vibrator use on the self and sexual partner, as well as comfort levels surrounding communication regarding vibrator use; (2) beliefs surrounding why someone would or would not want to use a vibrator, and the possible positive and negative outcomes of vibrator use; (3) the perceived social acceptability of vibrator use; (4) characteristics of vibrator users versus non-users; and (5) the frequency and context of vibrator use on both the self and relationship partner. Results will be presented separately for men and women.

**Conclusions:** Descriptive conclusions will be drawn once data analysis is complete.

**Implications:** Given the benefits of employing vibrators to help treat sexual dysfunction in both men and women, this exploratory study will provide a wealth of information for sexual health professionals to draw upon when considering reasons for reticence versus openness to vibrator use.

## **Saturday**

### **The Sexual Orientation of Rapists: Essential Features and Nosology**

Grant T. Harris, Waypoint Center for Mental Health Care; Martin L. Lalumière, University of Lethbridge;  
& Michael C. Seto, Royal Ottawa Health Care Group

This presentation will examine the findings of the two previous papers in the context of sexual conflict theory and the revisions to the DSM section on the paraphilias. Specific questions to be addressed include:

Is it likely that biastophilia, or even sexual sadism, is simply a manifestation of much more general antisociality? How could the present findings help refine the definition of sexual sadism? If a sexual interest in any form or amount of suffering (physical or psychological) were defined as sexual sadism, how could sadism be distinguished from biastophilia? Is a relative sexual preference for active nonconsent (or violence and injury) empirically or conceptually distinguishable from an indifference to the same cues? Is it likely that biastophilia and sexual sadism comprise two parts of a single continuum or is it more likely they are somewhat independent (though possibly “comorbid”) phenomena? If biastophilia is an empirically and conceptually cogent sexual orientation, what are its operative features—active refusal, humiliation and disgust, or sexual dominance and submission; and how could this be investigated? If biastophilia is an empirically and conceptually cogent sexual orientation, is it likely to be a paraphilia, where paraphilias are understood to be sexual disorders? What evidence and theory would permit some determination as whether an established sexual orientation was a sexual disorder? If biastophilia is an empirically and conceptually cogent sexual orientation, is it likely to vary as a function of context and life history? Could biastophilia form part of a life history strategy for a few men all the time, or many men some of the time?

## Victim-Perpetrator Sexual Intercourse Following Sexual Assault: The Effect of Relationship Status

Megan L. Sawatsky, Samantha J. Dawson, & Martin L. Lalumière, University of Lethbridge

**Background:** It has been suggested that rape may function as an alternative mating tactic whereby some perpetrators may secure not only short-term, but also long-term reproductive opportunities with the female victim. Consistent with this hypothesis, some victims report having consensual intercourse with their perpetrator subsequent to rape. More specifically, subsequent intercourse appears to be more likely following completed rape (i.e., involving intercourse) than incompleting rape (i.e., not involving intercourse). Some researchers have postulated that there is something significant about completed rape (e.g., the risk of pregnancy) that increases the likelihood of subsequent intercourse. A more parsimonious explanation may be that completed rape is more likely to occur within intimate relationships, and these intimate victim-perpetrator relationships increase the likelihood of subsequent intercourse.

**Hypotheses:** Our first aim was to replicate previous research that subsequent intercourse is more likely following completed than incompleting rape. Secondly, we predicted that completed rape and subsequent intercourse would be more likely to occur if the victim and perpetrator had an intimate relationship prior to the rape rather than if the perpetrator was a non-intimate.

**Methods:** A total of 965 women participated in an online survey, of which 49.1% indicated that they had experienced some form of sexual victimization since the age of 14.

**Results:** Replicating previous research, the odds of subsequent intercourse with the perpetrator were significantly higher for victims of completed rape than incompleting rape ( $OR = 1.54$ , 95% CI [1.05, 2.27]). When victims and perpetrators had an intimate relationship prior to the assault, the odds of completed rape were significantly increased compared to when they had a non-intimate relationship ( $OR = 1.53$ ). Prior intimacy also significantly increased the odds of subsequent intercourse following both completed rape ( $OR = 5.61$ ) and incompleting rape ( $OR = 6.77$ ). In fact, the majority of victims had subsequent intercourse with perpetrators who were intimate partners. Previous victimization within the relationship also significantly increased the likelihood of having subsequent intercourse following both completed rape ( $OR = 2.37$ ) and incompleting rape ( $OR = 2.30$ ).

**Conclusions:** This study was the first to explain why victims of completed rape are more likely to have subsequent intercourse with their perpetrator than victims of incompleting rape. Subsequent intercourse is most often a continuation of the pre-established victim-perpetrator relationship.

**Implications:** These findings emphasize the need for prevention and risk reduction programs to take into account victim-perpetrator relationships. Future research should attempt to understand why some relationships continue following intimate partner rape while others dissolve.

# **The Role of Negative Affectivity, Sexual Abuse Identification, and Threat-Related Attention Bias on Sexual Satisfaction in Undergraduate Women Reporting Severe Unwanted Sexual Experiences**

Chelsea Kilimnik, Paul Trapnell, & Stephen Smith, University of Winnipeg

**Rationale:** Previous research has identified several external factors influencing whether unwanted sexual experiences are identified by the victim as sexual abuse or not, including, severity of abuse, age at abuse onset, duration of abuse, and relationship to perpetrator. There has been considerably less research, however, on internal factors associated with likelihood of identifying these experiences as abuse. Identifying relatively enduring psychological differences between the identified sexual abuse survivors (ISAS) and the non-identified sexual abuse survivors (NSAS) could help to illuminate psychological factors in abuse event construal and emotional reactivity and resilience in the long-term effects of sexual abuse.

**Objective:** The aim of the current study was to examine the effects of sexual abuse survivor self-identification on attention biases and sexual satisfaction, and the potential mediating role of individual differences in negative affectivity on abuse identification, and the association between unwanted sexual experiences and sexual satisfaction.

**Hypotheses:** 1.) ISAS and NSAS were predicted to show no significant differences in threat related attention bias. 2.) Threat related attention biases were predicted to mediate a significant proportion of sexual satisfaction mean differences between ISAS and NSAS and controls. 3.) Individual differences in negative affectivity were predicted to explain a significant proportion the association between both abuse identification and abuse status and sexual satisfaction.

**Methods:** Participants were 97 female Introductory Psychology students from the University of Winnipeg. As part of an annual Fall mass testing for introductory students, all participants completed a range of personality measures that included measures of neuroticism, negative affectivity, and depression. Five months later, participants were recruited for a study of “attention and emotion.” Participants completed a measure of sexual satisfaction (Meston & Trapnell, 2005) and unwanted sexual experiences (Koss et al., 2007) prior to completing an emotion induced attentional-blink task involving a rapid serial visual presentation (RSVP; Smith, Most, Newsome, and Zald, 2006).

**Results:** Emotional blink scores did not differ significantly between groups (ISAS, NSAS, and controls). ISAS did not differ from NSAS on any sexual satisfaction subscales, but both significantly differed from controls on three of the five SSS subscales, perceived sexual compatibility, relational concerns, and personal concerns, especially the latter two subscales. ISAS and NSAS scored significantly higher than controls on all negative affectivity indicators except self-esteem. Negative affectivity did not mediate the association between sexual abuse status and sexual satisfaction.

**Conclusions:** Non-significant results for the emotional blink data may indicate no enduring differences in post-event threat sensitivity between abused and non-abused women, insensitivity of this task for detection of such differences, or unknown shortcomings with the experimental procedure. Abuse identification and negative affectivity does not explain associations between abuse experiences and current sexual satisfaction.

**Implications:** Negative affectivity appears to have a robust association with and both abuse identification and sexual abuse experiences, yet does not explain effect of sexual abuse experiences on sexual functioning.

## **Integration and Psychosocial Adjustment Among Men Receiving Outpatient Services for Problematic Sexual Behaviours**

Natasha Knack, Pamela Prince, Susan Curry, & Paul Fedoroff, University of Ottawa Institute of Mental Health Research

**Rationale:** Currently, there is little information about the nature or extent of community integration among sexual offenders or people with problematic sexual interests. Furthermore, little is known about how their psychosocial adjustment relates to different aspects of community integration such as completing day-to-day physical activities, engaging with neighbours or their sense of community belonging (i.e., psychological integration). Adding a 'client-centered' dimension to conventional risk assessment offers a balanced perspective that supports both the interests of the individual and those of public safety. This client-centered dimension is also an important aspect of planning specialized treatment programs that are efficient and effective for this population.

**Research Questions:** The current study explored the extent of physical, social and psychological integration in a sample of men attending an outpatient sexual behaviours clinic. In addition, relationships between community integration and psychosocial variables were examined.

**Method:** 52 adult men receiving outpatient services from a sexual behaviours clinic completed subjective rating scales (i.e., physical, social and psychological integration, social support, positive and negative affect, perceived stigma, self-esteem, perceived stress, and symptom distress). The Multnomah Community Ability Scale and the Short Dynamic Risk Scale were completed by a clinician most familiar with the client. Participants had been living in the community continuously for at least six months.

**Results:** Preliminary results showed physical integration to be positively correlated with perceived social support, psychosocial functioning and self-esteem, and inversely related to perceived stigma. Social integration was correlated with perceived social support and self-esteem and psychological integration was related to psychosocial functioning. Perceptions of social support were related to perceived stress, self-esteem, perceived stigma, symptom distress, and subjective well-being.

**Conclusions:** Within this sample, perceptions of social support appear to be important for all aspects of community integration. Positive affect and self-esteem appear to be factors for both physical and social integration and psychosocial functioning is implicated in physical and psychological integration. Expanding the sample size would allow multivariate analysis of the relationships identified.

**Implications:** The extent to which individuals experience social support may influence, or be influenced by, their level of physical integration in their communities. Both perceived social support and self-esteem are similarly related to social integration. Further investigation of the relationships identified here may inform risk assessment and treatment programming for men with problematic sexual interests or who have been convicted of a sexual offence.

**The Puzzle of Women's Sexual Response:  
The Proximal and the Distal in the Specificity of Sexual Arousal**

Meredith L. Chivers, Queen's University

Over the past decade, research on the specificity of women's sexual arousal has explored counter-intuitive results suggesting women's genital responses are disconnected from their sexual interests, particularly for heterosexual women. I will provide an overview of this ongoing research program, highlighting the proximal and distal factors thought to bear on women's patterns of sexual response and discuss the implications for understanding the phenomenology of women's sexual orientation and sexual functioning.

## **Heterosexual and Homosexual Behaviour Among Female Japanese Macaques at Arashiyama, Japan: Patterns of Bisexuality Over a Seventeen Year Period**

Jean-Baptiste Leca, Noëlle Gunst, University of Lethbridge; Keiko Shimizu, Aru Toyoda, Okayama University of Science; Alisa Chalmers, Kyoto University; Shinsuke Asaba, Shinya Tamada, Iwatayama Monkey Park; & Ryan Mallard, Paul L. Vasey, University of Lethbridge

**Rationale or Background:** Bisexuality is a sexual orientation involving more than incidental sexual attraction and arousal to both males and females. Bisexuality can manifest behaviourally in terms of sexual interactions with both males and females. Although recent research revealed that bisexual behaviour occurred commonly in various animal taxa, including humans, the existence of bisexual attraction remains controversial and poorly understood.

**Research Questions:** We determined the prevalence and frequency of bisexual patterns of behaviour in a group of Japanese macaques. We described temporal patterns of female sexual preference for males and females, within and across mating seasons.

**Methods:** The Japanese macaques (*Macaca fuscata*) living in the Arashiyama-E group, a free-ranging provisioned troop of monkeys situated just outside of Kyoto, Japan, are an ideal non-human primate population for studying bisexuality because females in this group routinely exhibit heterosexual and homosexual behaviour over their lifespans. We conducted a longitudinal analysis of sexual solicitations (N = 4,039), heterosexual consortships (N = 4,280), and female homosexual consortships (N = 4,090) in 119 females from this group, over 17 consecutive mating seasons (1995-2012) and a total of 1,994 days of observation.

**Results:** The vast majority of the sampled females (N = 102, i.e. 86%) showed bisexual orientation, whereas the remaining minority only exhibited heterosexual behaviour (N = 17, i.e. 14%). The percentages of females showing homosexual and bisexual behaviour across several mating seasons were 87% and 67%, respectively. The percentages of females showing multiple homosexual and bisexual behaviours within a given mating season were 82% and 60%, respectively. The percentage of females showing exclusively homosexual behaviour during at least one mating season was 76%.

**Conclusions:** Bisexual patterns of behaviour were highly prevalent and frequent in our study group, with a considerable inter-individual variability sexual preference for males and females, within and across mating seasons. We further examined the role of different variables (e.g., dominance, age, reproductive success) in such long-term trends. We also examined whether a possible 'matriline effect' in female homosexual behavior exists, with female homosexual behaviour clustering within certain matriline.

**Implications:** We address our results in the light of sexual fluidity in females and we discuss their possible implications for the evolution of human bisexuality.



## Male Homosexuality in the Ancestral Past: An Ethnological Analysis

Doug VanderLaan & Paul L. Vasey, University of Lethbridge

**Background:** How do genes for male homosexuality persist over evolutionary time? The kin selection hypothesis suggests homosexual males pass their genes indirectly by allocating increased investment toward kin, thereby increasing kin's reproduction. This hypothesis has been supported among Samoan transgendered same-sex oriented males, but not among non-transgendered homosexual males in other cultures. Thus, for the kin selection hypothesis to be viable, ancestral sociocultural environments, which were characterized by small-scale hunter-foragers with egalitarian sociopolitical systems and animistic religious belief systems, had to be conducive to the development of transgendered male homosexuality. Furthermore, ancestral sociocultural environments had to facilitate investments in kin by homosexual males.

**Research Questions:** Do contemporary societies in which male transgenderism is exhibited also show greater presence of ancestral sociocultural conditions? If so, do the sociocultural characteristics of such societies also facilitate opportunities to invest in kin by homosexual males?

**Methods:** The Standard Cross-Cultural Sample (SCCS) provides ethnographic information on a set of relatively culturally independent indigenous societies. From this set, we compared 46 societies in which male transgenderism existed (i.e., transgendered societies) to 146 societies in which it did not (i.e., non-transgendered societies). SCCS variables examined to assay the presence of ancestral sociocultural conditions pertained to: group size, subsistence type, religious belief system, and sociopolitical system. SCCS variables examined to assay opportunities to invest in kin pertained to: descent system, patterns of residence following marriage, compactness of community, and attitude toward homosexuality.

**Results:** Ancestral sociocultural conditions were represented by a single factor based on principal components analysis. The presence of such conditions was significantly greater among transgendered societies. Also, transgendered societies were more likely to employ descent systems that would facilitate investment in kin, and were significantly unlikely to hold negative attitudes toward homosexuality.

**Conclusions:** This ethnological analysis indicates that ancestral sociocultural conditions were likely conducive to the expression of transgendered male homosexuality. In addition, transgendered societies tend to afford homosexual males with opportunities to invest in kin.

**Implications:** The kin selection hypothesis is a viable explanation for the evolution of male homosexuality. Given that the expression of elevated kin-directed altruism among homosexual males is contingent on transgenderism, and that transgenderism was likely the form of male homosexuality expressed in the ancestral past, it is likely homosexual males exhibited such altruism in the evolutionary past. Furthermore, transgendered societies afford homosexual males opportunities to invest in kin.

## Facial Masculinity Preferences Among the Sisters of Samoan *Fa'afafine*: Implications for the Sexually Antagonistic Gene Hypothesis

Deanna Forrester, University of Lethbridge; Barnaby J. Dixon, Victoria University of Wellington; Doug VanderLaan, University of Lethbridge; Anthony C. Little, University of Stirling; & Jessica L. Parker, Paul L. Vasey, University of Lethbridge

**Background:** In Samoa, same-sex attracted males are referred to as *fa'afafine*, an alternative gender role category that is distinct from the categories of “man” and “woman.” *Fa'afafine* translates to mean “in the manner of a woman.” Most *fa'afafine* self-identify, and are identified by other Samoans, as *fa'afafine* and not as “men” or “women.” *Fa'afafine* tend to be effeminate as children and as adults, and some are so feminine that they could pass as women to the naïve observer. How the genes for male same-sex attraction are maintained in the population despite a significant reduction in reproduction represents a Darwinian paradox. The sexually antagonistic gene hypothesis suggests that the reproductive costs of genes for male same-sex attraction may be offset by the reproductive benefits that occur if the same genes result in increased reproductive success in females who inherit the same genes. Consistent with this hypothesis, the female relatives of *fa'afafine* exhibit elevated fecundity compared to the female relatives of opposite-sex oriented Samoan men. One mechanism driving this fecundity difference may be a heightened sexual preference for masculine males. Research indicates masculine men are viewed as higher quality mates and are more sexually active. Consequently, women who prefer such men may be more likely to become pregnant and may produce more viable offspring.

**Hypotheses/Prediction:** We predicted that the sisters of *fa'afafine* would show heightened preference for facial masculinity compared to women with no *fa'afafine* relatives.

**Methods:** We tested this prediction in Samoa (a high fertility population) by asking women in these two groups to rate the attractiveness of standardized composite Samoan male faces that were: (1) transformed to be either more masculine or feminine in shape, and (2) with skin tone lightened (feminine) or darkened (masculine).

**Results:** No significant group differences were found for preferences for facial masculinity. However, group differences were found for preferences for facial femininity. Females with *fa'afafine* brothers rated both feminized male faces and lightened male faces as significantly less attractive than did females with no *fa'afafine* relatives.

**Conclusions:** These results suggest that the sisters of androphilic males are averse to feminine male mates, and potentially more discriminating when selecting mates.

**Implications:** These results lend support to the sexually antagonistic gene hypothesis and may help resolve the Darwinian paradox of male same-sex sexual attraction.

## **What Makes an Image Pornographic?** **The Family Resemblance Approach Applied to the Concept of Pornography**

Taylor Kohut, Western University

**Background:** Despite nearly 40 years of research concerning the effects of pornography exposure, it is still not clear why some media are considered more pornographic than others.

**Research Questions:** The primary concern of this research involves the identification of objectively observable features, or cues, found in media that can be used to differentiate pornographic images from non-pornographic images. Individual difference factors of gender, and previous experience with sexual media were also examined to determine if they may influence the types of cues that are associated with pornography ratings.

**Methods:** Initially, 80 male and female undergraduate students with either high or low experience with sexual media evaluated 50 sexual and nonsexual images along several dimensions, including their “pornographicness”. A second independent sample of 80 participants reviewed a subset of 20 images to generate a list of features that were “common to and characteristic of different kinds of pictures”. Following the methods of Rosch and Mervis (1975), numerical “feature scores” were calculated for each image, based on the presence of the features listed by the participants.

**Results:** As anticipated, the “feature scores” derived from the second independent sample were found to be highly correlated with pornographicness ratings of the pictures collected in the first sample ( $r = .88$ ). An examination of the content of the features that underlie these scores revealed that both expected features (e.g. nude body parts, etc.), as well as unexpected features (e.g. age and body shape of performers, heavy makeup use, etc.), were associated with pornographicness ratings. At this time, the influence of individual difference factors have yet to be fully examined, but are expected to have little impact, as pornographicness ratings for each image show remarkable stability across the individual difference groups (all  $r > .90$ ).

**Conclusions:** The current method successfully identified a relatively small number of objectively verifiable content features that can be used to reliably distinguish pornographic from non-pornographic images.

**Implications:** It seems particularly noteworthy that the features identified using this method fall loosely into two groups, those that presumably elicit sexual arousal (e.g. nudity, etc), and those that elicit negative affect (e.g. older or overweight performers, etc), as these dimensions of sexual stimuli have previously been found to be highly correlated with pornographicness ratings (see Amoroso, et al., 1973). Further work is needed to examine this connection.

**School Girls and Soccer Moms:  
A Content Analysis of Free “Teen” and “MILF” Online Pornography**

Sarah A. Vannier, Anna B. Currie & Lucia F. O’Sullivan, University of New Brunswick

**Rationale:** Viewing Internet pornography is a common behaviour, partly due to the increased availability of free video streaming websites (Ogas & Gaddam, 2011). However, little is known about the content of these videos. Much of the research analysing the content of pornography is outdated and focuses on either printed materials or purchased videos (Rimm, 1995). Moreover, although many of the studies analyze power relations as a function of gender (Brosius et al., 1993), none consider power relations as a function of actor age. The current study examined the content of two of the most popular categories of free online pornography: “Teen” or “Mom” (“MILF”) (Ogas & Gaddam, 2011).

**Research Questions:** What are the characteristics of Teen and MILF pornography available on free online video streaming sites? Are there differences in women’s access to power (e.g., initiation, control of pace, occupation, exploitation) depicted in Teen or MILF pornographic videos?

**Methods:** One-hundred videos were randomly sampled from the Teen or MILF categories on ten popular free pornography websites. Video content was coded by two independent raters using a formal coding scheme developed for this study (agreement = 90.3%).

**Results:** Vaginal intercourse (88%) and fellatio (88%) occurred in the majority of videos. Other common behaviour included male (56%) and female (54%) masturbation, visible ejaculation (54%), and cunnilingus (43%). Behaviours such as spanking (27%), anal intercourse (15%), paraphilias (3%), and condom use (2%) were less common. Frequency of sexual behaviours was the same for Teen and MILF videos. MILF women were depicted as having more power than Teen women. That is, they were more likely to initiate sexual activity, control the pace of activity, and have a higher occupational status. They were also less likely to be the victims of sexual exploitation.

**Conclusions:** The similarities between the behavioural features of the Teen and MILF videos suggest that they follow a common sexual script in which penile-vaginal intercourse and fellatio are predominant. However, there are noticeable differences in the content of the Teen and MILF videos in terms of portrayed female access to power. The popularity of the Teen and MILF categories of free Internet pornography may be a result of the contrasting power relations present in these videos.

**Implications:** These findings provide new insights into the content of online pornography, characterize two of the most popular pornographic categories, and have implications for both researchers and sexuality educators.

# **Does Pornography Maintain Patriarchy?**

## **An Empirical Examination of Radical Feminist Claims Regarding Pornography**

Jodie Baer, Brendan Watts, & Taylor Kohut, Western University

**Background:** According to radical feminists, pornography serves to further the subordination of women by training its users, both males and females alike, to view women as sex objects over whom men should have complete control. Unfortunately, proponents of this perspective often fail to provide empirical support for their positions.

**Hypotheses:** According to the radical feminist view, one should expect to find relationships between pornography use and a host of beliefs and attitudes that are consistent with maintaining gender inequality at home, in the workplace and in politics. Using data from the General Social Survey, analyses were run to determine if consumption of pornography was associated with holding patriarchal beliefs and attitudes.

**Methods:** The General Social Survey is a large scale sociological survey of American males and females (N = 56,000), which has assessed attitudes and demographic information since 1973. Variables pertaining to pornography use (e.g. "Have you seen an X-rated film in the last year?"), as well as beliefs and attitudes concerning gender (in)equality (e.g. "It is not good if the man stays at home and cares for the children and the woman goes out to work.") were analyzed for this study.

**Results:** On most variables considered, people who had viewed an x-rated film in the last year were no more likely to hold misogynistic beliefs or non-egalitarian attitudes than people who had not viewed an x-rated film. Furthermore, in several cases, those who had viewed an x-rated film were actually more likely to express egalitarian beliefs and attitudes than those who had not. For example, people who had seen an x-rated film were more likely to support abortion ( $p < .05$ ), and were also more likely to disagree that men should work while women should look after the family ( $p < .05$ ), than people who had not seen an x-rated film.

**Conclusions:** The current study revealed very little empirical evidence that is consistent with notion that pornography reinforces the subordination of women. To the contrary in fact, the current results suggest that men and women with more experience with pornography are more likely to hold certain egalitarian beliefs and attitudes than people without such experience.

**Implications:** The results of the current study may serve as a reminder of the importance of subjecting politically charged opinions concerning the effects of pornography exposure to systematic empirical scrutiny.

## **Reflections on a Partner Support Group for Asperger's Syndrome**

Laurie Betito & Stephanie Mitelman, Montreal General Hospital

**Rationale:** There is very little discussion about adults who have an Autism Spectrum Disorder. There is even less discussion about the partners who love them, and support them. At times, partners receive very little acknowledgment and support for their roles, and the unusual behaviours they sometimes live with. Traditional counseling may be difficult where there is not an understanding of ASD and its impact on the intimacy.

While all relationships have their challenges, many partners of those with an ASD experience increased levels of anxiety, confusion, and even depression at times.

Social connection and support by those who share similar experiences can help the individuals in these relationships, as well as teach more positive strategies to improve the quality of their interactions.

**Summary of key points that will be highlighted:** This presentation will focus on an overall description of the clinical issues faced by the group members, the design and implementation of a support group for such partners, as well as an evaluation of the efficacy of this treatment modality.

**Conclusion/Implications:** Traditional marital therapy may not be effective, and may even be damaging with couples where one partner is on the Autism Spectrum. Additionally, it is often the partner without Asperger's syndrome that may be more responsible for change in the relationship, as they may be more neurologically able. The initiation of a support group for partners to help with tools and strategies may be the best course of action for these individuals who want to keep their families together. Clinicians need to be aware of these issues, and the use of a partner support group as a form of preferred therapy.

## **Transitioning, Transphobia, and Gender Expression in Transsexuals**

Heather Montgomery, Johanna Peetz, & Leslie Helmus, Carleton University

**Rationale:** Typically, psychological masculinity and femininity are understood as corresponding to physical sex differences, and are therefore framed as relatively stable in individuals. Transsexuals (those whose gender identity does not match their biological sex) challenge assumptions of masculinity and femininity. Feelings of masculinity and femininity may not be stable in male-to-female (MtF) transsexuals (those who are biologically male but identify as women) and female-to-male (FtM) transsexuals (those who are biologically female but identify as men) as they transition from one gender to the other, or adopt a multi-sexual identity. Transsexuals often encounter gender policing - ways that people tell them how to express gender - including through the medical system and when experiencing transphobia (harassment and discrimination because of their trans status).

**Hypothesis:** It is hypothesized that the closer a transsexual is to their desired body and presentation, the less extreme they will enact their transitioned-to gender as they are under less medical surveillance and thus less gender policing. For example, MtF transsexuals late in transitioning will report lower femininity than MtF transsexuals who are in earlier stages and FtM transsexuals late in transitioning will report lower masculinity than FtM transsexuals who are earlier in transitioning. As transphobia can also be gender policing, it is hypothesized that as the number of transphobic experiences and stress reduce, the less extreme gender expression will become. Furthermore, it is hypothesized that those who do not identify within the gender binary, such as those that identify as genderqueer or androgyne, will not demonstrate the same trends.

**Results:** A full analysis is still in progress.

**Methods:** The present research recruited an international sample of 219 trans-identified individuals (mean age = 27.02, MtF n=157, FtM n=29, Gender Binary Non-Conforming n=33) who were currently or had been undergoing transition from one sex to another. Participants were recruited through an online questionnaire and reported felt masculinity and femininity (Bem Sex Role Inventory), the extent of transitioning including number of surgical procedures undergone and desired, and the level of transphobia the participant has experienced in the last year, over their lifetime, and how stressful it was.

**Implications:** This research is unique in that both MtF and FtM transsexuals were recruited, as well as those that do not identify as either men or women. This research will help describe a more complex relationship between transsexuality and gender expression over the course of transitioning.

## **The Relationship Between Sexual and Emotional Attraction and Symptoms of Depression in Self-Identified Heterosexual, Lesbian, and Bisexual Women**

Tonje J. Persson & Jim Pfaus, Concordia University

**Rationale:** Self-identified bisexual women have been found to have poorer mental health than heterosexual and lesbian women, including increased risk of depression and anxiety. However, there is a general lack of information regarding the underlying risk factors that lead to this phenomenon, and few theories why bisexual women may fare worse than other women in terms of mental health.

**Hypothesis:** We hypothesized that women who report mainly emotional attraction to one gender but mainly sexual attraction to another gender (non-concordance) may differ from women who report the same ratio of sexual and emotional attraction to men versus women (concordance). The aim of this study was to investigate 1) symptoms of depression in bisexual compared to heterosexual and lesbian women, and 2) how concordance versus non-concordance is related to symptoms of depression.

**Method:** Women were recruited through the community and the participant pool at Concordia University (32%). Participants ( $N = 117$ ) answered a two-hour online survey. As per self-definition, the sample (Mean age = 25,  $SD = 6.47$ , Range = 18-59) included 37 heterosexual, 17 mostly heterosexual, 21 bisexual, 13 mostly lesbian, 25 lesbian, and 5 “unsure” women. Non-concordance was defined as a score discrepancy of 3 or greater between the 7-point Kinsey romantic, sexual, and fantasy scales, and the author’s 7-point Kinsey-style emotional attraction scale.

**Results:** Approximately 26% of women were non-concordant. Bisexual woman had higher depression scores than lesbian and heterosexual women, as measured by the Beck Depression Scale II (both  $p < .05$ ). Non-concordant woman had higher depression scores compared to concordant women ( $p < .05$ ). Nonconcordance rates were higher for bisexuals compared to heterosexuals and lesbians: Over 40% of bisexuals were non-concordant compared to 14% of heterosexuals and .04% of lesbians.

**Conclusions:** Those data indicate that bisexual women who are sexually and emotionally non-concordant experience more symptoms of depression than lesbian and heterosexual women in general, and more than bisexual women who are concordant. Thus, the experience of gender nonconcordance between sexual and emotional attraction, an inability to feel fulfilled by being with just a man or just a woman, is likely an underlying factor in the etiology of depression in bisexual women.

**Implications:** These data may help to develop prevention and intervention strategies to understand the unique mental health needs of women who report bisexual attractions.



## **Intimacy Needs in Long-Term Care Facilities for Older Adults: What We Know and Where to Go From Here**

Anne-Rose Bouaziz, Elke D. Reissing, & Suzanne Bell, University of Ottawa

**Rationale:** There is a general consensus that interest in, and expression of sexuality is a basic human right, which greatly contributes to a person's identity and quality of life. Research shows that sexual and intimacy needs are present throughout the lifespan. Yet, there is evidence that those needs are often overlooked in older adults, particularly in long-term care settings.

**Summary of key points:** This review will present the existing empirical data on the sexual activity of older residents in long-term care facilities. Furthermore, it will offer insights on the diverse challenges, which underlie the expression of sexual and intimacy needs in those settings. Such challenges include, but are not limited to, biological and health-related factors, environmental constraints to privacy, shortage of available partners, as well as staff and family members' negative attitudes towards the residents' sexuality. Finally, it will address some of the methodological shortcomings found in the existing literature and propose potential directions for future research.

**Conclusions:** The topic of sexual and intimacy of older adults in long-term care is complex, and goes well beyond the scope of the individual alone. Baby boomers are aging; they are more culturally diverse and generally hold more liberal sexual attitudes than past cohorts of older adults. Sexuality in the later decades of one's life is no longer considered taboo but rather, a sign of vitality. Thus, increasing our understanding of intimacy needs and the changing attitudes in residents, caretakers and family members is essential in designing long-term care environments conducive to expressing all aspects of life, including sexuality. Understanding the barriers to such efforts on part of all stakeholders presents a particular caveat.

**Implications:** This research is the beginning of a dialogue highlighting a relatively neglected aspect of universal Human Rights as expressed by the WHO, the right to express one's sexuality – broadly defined, regardless of age.

## **A Research Program in Perinatal Sexuality: Results From the First Phase Studies**

Viola Polomeno, University of Ottawa

**Background:** The average length of marriage in Canada is 14.5 years. Most divorces occur in the first seven years of marriage and most children arrive in the same time period. About 18% of parents separate and divorce within four years of the arrival of their first child. The emotional divorce often starts with women's marital dissatisfaction including sexual dissatisfaction after the birth of her first child. There appears to be a conflict between partnership and parenthood. The transition to parenthood is fraught with many changes for the woman, her partner and for their relationship. Intimacy is the dimension that is the most affected within this transition, especially its sexual expression. A research program in perinatal sexuality was developed to focus on the intimacy of the parenting couple and on women's and men's perceptions regarding their sexual changes.

### **Research Questions:**

1. What are women's perceptions regarding sexual changes during the perinatal period?
2. What are men's perceptions regarding sexual changes during the perinatal period?
3. What are the similarities and the differences in the perceptions between women and men regarding the sexual changes during the perinatal period?

**Methods:** The interpersonal perceptual framework is at the heart of the studies. A mixed methods approach was used in a series of 5 studies involving perinatal sexuality. The samples involved couples assisting (N=520) at prenatal classes or in the perinatal health system and grandparents (N=35) in the Montréal region. The questionnaires used were on stress, dyadic adjustment, support behaviors, and emotional support. Qualitative data were gathered about perceptions of sexual changes. Descriptive statistics, correlations, t-paired tests and multiple regressions were used as well as content analyses.

**Results:** Conjugal and family intimacy change during each stage of the transition to parenthood. Even with a moderate to high level of emotional intimacy, women and men differ regarding their perceptions of the sexual changes. Women were less understanding of the sexual changes that the men were experiencing. Men were fearful of hurting their partner for first postnatal sexual intercourse, while the women were avoiding physical contact due to their same fear. The most significant results occurred at the third similarity level of understanding.

**Conclusion:** A second phase of the research program containing 5 studies involves the assessment of training workshops for health care professionals in perinatal sexuality and couples' needs during the perinatal period.