

Science Atlantic Atlantique

*36th Annual Science Atlantic
Undergraduate Psychology Conference
May 8 - 9, 2012*

Program & Abstracts

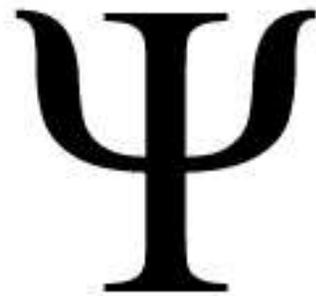
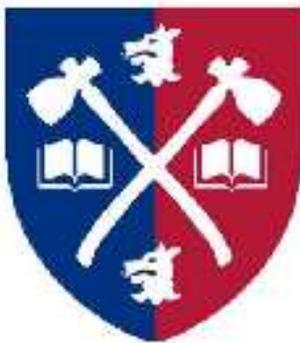


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Organizing Committee

Faculty Organizer

Rick Mehta

Administrative Assistance

Heather Turner

Student Coordinator

Jessica Stewart

Volunteers

Sarah Brown

Catherine Dougan

Sara Ghandeharian

Jim Ghoshdastidar

Nelson Hawkins

Madusha Ranaweera

Nidusha Ranaweera

Amanda Yaworski

Important Conference Locations

Please note that the addresses after the building names correspond to the civic addresses used on the campus map.

- 1) Festival Theatre (504 Main Street)
 - Registration on Tuesday, May 8
- 2) The Axe, Basement of the Student Centre (30 Highland Avenue)
 - Welcome Reception & Pizza Party on Tuesday, May 8
- 3) Wheelock Dining Hall (44 Highland Avenue)
 - Breakfast & lunch on Wednesday, May 9
 - Early morning registration on Wednesday, May 9 (7:45 – 8:30 am)
- 4) Beveridge Arts Centre (10 Highland Avenue)
 - All oral and poster presentations, and all nutrition breaks will be held on the second floor of this building on Wednesday, May 9
- 5) Fountain Learning Commons (26 Crowell Drive)
 - The banquet and keynote address will be held at 7 pm on Wednesday, May 9, on the 2nd floor of this building
- 6) Eaton House (43 University Avenue)
 - Accommodations for students who wish to stay on campus
- 7) Roy Jodrey Hall (39 University Avenue)
 - Accommodations for faculty who wish to stay on campus

Schedule at a Glance

Tuesday, May 7, 2012

3:00 – 5:00 pm

Registration (Festival Theatre)

5:00 – 7:00 pm

Faculty Representatives' Meeting (Festival Theatre)

7:00 – 10:00 pm

Welcome Reception (The Axe, Basement of Student Union Building)

A) Welcoming Remarks from Dr. Peter Williams (Dean of the Faculty of Pure and Applied Science) and Dr. Peter McLeod (Head of the Department of Psychology)

B) Pizza Party and Ice-Breaking Activities

Wednesday, May 8, 2012

7:45 – 8:30 am

Breakfast & Early Morning Registration (Wheelock Dining Hall)

8:55 – 10:30 am

Oral Presentations, Session 1
(Beveridge Arts Centre, Rooms 237 & 239)

10:30 – 10:45 am

Nutrition Break (2nd floor of Beveridge Arts Centre)

10:45 am – 12:00 pm

Oral Presentations, Session 2
(Beveridge Arts Centre, Rooms 237 & 239)

Wednesday, May 8, 2012 continued...

12:00 – 1:15 pm

Lunch (Wheelock Dining Hall)

***** Please note: Meal time is 12:15 to 1 pm *****

1:15 – 2:45 pm

Poster Session 1 (2nd floor of Beveridge Arts Centre)

2:45 – 4:15 pm

Oral Presentations, Session 3

(Beveridge Arts Centre, Rooms 237 & 239)

4:15 – 4:30 pm

Nutrition Break (2nd floor of Beveridge Arts Centre)

4:30 – 6:00 pm

Poster Session 2 (2nd floor of Beveridge Arts Centre)

6:00 – 7:00 pm

Faculty Representatives Meeting

(Beveridge Arts Centre, Room 239)

7:00 – 9:00 pm

Banquet & Keynote Address

(Fountain Learning Common, 2nd Floor)

Message from the Dean of Pure and Applied Science

Dear Psychology Delegates,

On behalf of the University and the Faculty of Pure and Applied Science, I am very pleased to welcome you to Acadia for the 36th annual Science Atlantic Undergraduate Psychology Conference! I wish you all the best in having a productive and enjoyable conference.

I know that this is an important conference for all psychology students from the Atlantic Provinces. I had the great pleasure of attending the 50th Anniversary celebrations of Science Atlantic where several of the speakers spoke very passionately about the impact that attending a Science Atlantic Conference had on them. I am sure you will derive just as much benefit from this one.

Please also take the time to enjoy our campus, and this lovely area in the full bloom of spring.

The members of the Psychology Club have worked hard to develop an interesting conference and I thank them for their work. Finally, thanks to all of you for coming and sharing your work.

Sincerely,

Peter Williams
Dean

Message from the Faculty Organizer

On behalf of Acadia University's Department of Psychology and the Acadia University Psychology Association (AUPA), I am delighted to welcome you to the 36th Annual Science Atlantic Undergraduate Psychology Conference. This year is particularly special because it also marks the 50th Anniversary of Science Atlantic. A core portion of Science Atlantic's mandate is organizing the annual conference that is held within each discipline. These conferences provide students in Atlantic Canada with the opportunity to meet other students in the region, to present their research, to exchange and discuss ideas, and to celebrate their accomplishments. For many students, the Science Atlantic conference is their first opportunity to present their research to peers outside of their home institution and get constructive feedback. I hope that your experience at the Psychology conference and at Acadia University is positive and memorable, and that it helps you in your future career goals.

On a more personal note, one of my favourite reasons for attending the Science Atlantic Psychology Conferences is the banquet and keynote address. Few things in life bring me greater pleasure than a hearty meal. On this front, I hope that you have brought your appetite – in addition to your knowledge about your research. With regard to the keynote address, I am pleased to have Mikaela Vidmar-Perrins as the guest speaker for this conference. I consulted with AUPA, who strongly endorsed Mikaela Vidmar-Perrins based on both her expertise in her area and on her being an engaging speaker. More details about Ms. Vidmar-Perrins' professional credentials are provided on page 9. We are excited to have someone of Ms. Vidmar-Perrins' calibre speak at our conference and we hope that you will find her address both informative and interesting.

It would be impossible to put on a conference without financial support. I am extremely grateful for the generous support from our sponsors. Without their support, this conference would not be held.

Finally, I would like to thank all of the individuals who have helped organize and ensure the smooth running of this conference. I would like to start by thanking Jessica Stewart, the student coordinator, for all of her tireless and enthusiastic work over this past year. In addition, I would like to thank AUPA and all of the student volunteers for their time and dedication to this conference. Within my department, I would like to thank my colleagues for chairing the oral presentations, and Heather Turner for her administrative assistance. Within the Acadia community, I would like to thank Nicole Phipps and Colleen Swail of the Events

and Hospitality Department, both of whom greatly simplified the organization process. Finally, I extend my warm and personal gratitude to Lois Whitehead, Executive Director of Science Atlantic, for all of her guidance and advice over the past year; and to Jern Poulsen for all of his help with the conference web site. With so many people to thank, it would be impossible to personally thank everyone. However, this event could not be held, much less be successful, without the help of the many people who donated their time and expertise.

In closing, I hope that you have a wonderful time at this conference and that it provides you with opportunities for both personal and professional growth.

Sincerely,

Rick Mehta

2012 Science Atlantic Psychology Conference Faculty Organizer

Invited Keynote Speaker

Mikaela Vidmar-Perrins is a clinical and forensic psychologist who works in the Forensic Sexual Behaviours Program at the Valley Regional Hospital in Kentville, Nova Scotia, and also in private practice. On a typical day, she is responsible for meeting with and treating forensic clients and, to a lesser extent, clients from the general clinical population (e.g., clients with depression or anxiety). When working with forensic clients, she conducts risk assessments for sexual offenders and provides treatment for this diverse range of people. Many complex issues arise when treating a population that is heterogeneous. Some of the issues that she must consider are the offender's age (young versus old), gender, and risk for reoffending; these issues, in turn, inform her about what type of treatment might work best and whether the person should be treated individually or in a group setting. In order to make these decisions, Ms. Vidmar-Perrins has to be knowledgeable on recent empirical research. Her work clearly exemplifies the important link between research and practice.

Ms. Vidmar-Perrins is a recognized expert in her field whose knowledge and experience is sought after by both academic and non-academic professionals. In academic settings, she has presented her work at both the Canadian and American Psychological Association conferences, and at Duke University's Law School. Outside of academic settings, she has provided expert testimony at all levels of the court system in Nova Scotia. As well, she consults with both law enforcement agencies (e.g., Metro Halifax Police Department, Royal Canadian Mounted Police) and community groups (e.g., Children's Aid Society) on issues related to sexual offenders.

Conference Awards

NSERC Representatives' Undergraduate Student Award

The NSERC Representatives' Undergraduate Student Award will be offered at each of the annual Science Atlantic-sponsored undergraduate student conferences. The \$400 cash prize will be awarded to the student whose work and presentation (oral or poster) best encompass NSERC's mandate to invest in people, discovery and innovation for the benefit of all Canadians, and demonstrate the student's potential for graduate studies and research. The award may be split into multiple prizes of no less than \$100 at the discretion of the judging committee. For example, the award may be split into two \$200 prizes: one for best oral and one for best poster presentation.

Karen Nicholson Award in Neuropsychology

The Karen Nicholson Award in Neuropsychology is presented annually for the best Neuropsychology undergraduate presentation (oral or poster) at the Science Atlantic Psychology Conference. Preference will be given to presentations dealing with human neuropsychology. The award is a \$100 cash prize. By accepting the prize, the winner agrees to have his or her name, presentation title, and abstract provided to the donor.

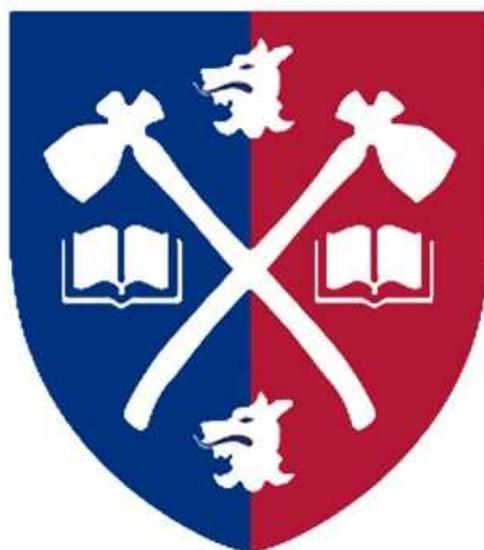
Science Atlantic Undergraduate Science Communication Award

The Science Atlantic Undergraduate Science Communication Award is offered at each of the annual Science Atlantic-sponsored student conferences. The \$100 prize is awarded to the student who is best able to communicate a science topic to the general public. The award may be split into two prizes of \$50 each (one for an oral and one for a poster presentation) at the discretion of the judging committee.

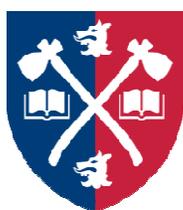
For more detailed information about these awards, please go to <http://scienceatlantic.ca/awards/commaward/>

Sponsors

Major Sponsors



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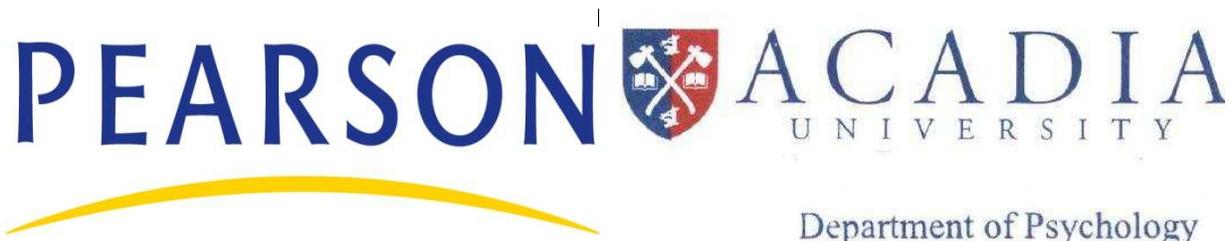


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Department of Psychology



Donors of Prizes



Oral Presentation Sessions

Session 1A, BAC 237: Developmental Psychology and Personality

Chair: Peter McLeod, Acadia University

	8:55	Review of Rules for Presentations	
O-01	9:00	Kiera Kent	MTA
O-02	9:15	Bethany Craig	MTA
O-03	9:30	Sarah Brine	MSVU
O-04	9:45	Megan Lamb & Julia Bremner	STU
O-05	10:00	Aleka MacLellan	MTA
O-06	10:15	Martin Smith	DAL

Session 1B, BAC 239: Applied Psychology

Chair: Darlene Brodeur, Acadia University

	8:55	Review of Rules for Presentations	
O-07	9:00	Renée Matte	UNB-F
O-08	9:15	Sarah Morrison	UNB-F
O-09	9:30	Vanessa Smith, Krystal Lariviere, Davey Chafe, & Bafana Mashingaidze	SMU
O-10	9:45	Heidi Collicott	StFX
O-11	10:00	Brandon Blenkarn	MSVU
O-12	10:15	Rachel Whitney	AU

Session 2A, BAC 237: History, Evolutionary Psychology, and Animal Behaviour

Chair: Karmen Bleile, Acadia University

O-13	10:45	Sarah Brown & Adam Stacey	AU
O-14	11:00	Ian Davidson	STU
O-15	11:15	Suzanne Melanson	SMU
O-16	11:30	Lydia Ottenheimer Carrier	MUN

Session 2B, BAC 239: Social Psychology

Chair: Randy Newman, Acadia University

O-17	10:45	Heather MacArthur	UNB-F
O-18	11:00	Colleen Harrington	STU
O-19	11:15	Jillian Standing	MTA
O-20	11:30	Adam Myatt	SMU
O-21	11:45	Michelle Boutilier	STU

Session 3A, BAC 237: Cognition, Perception, and Neuroscience
 Chair: Susan Potter, Acadia University

O-22	2:45	Daniella DaPonte	STU
O-23	3:00	Emad Talisman	MSVU
O-24	3:15	Emily Tredger	DAL
O-25	3:30	Natasha Dienes	AU
O-26	3:45	Diane Ross	StFX
O-27	4:00	Kevin LeBlanc	MTA

Session 3B, BAC 239: Health & Clinical Psychology
 Chair: Rick Mehta, Acadia University

O-28	2:45	Qianying (Liv) Yao	DAL
O-29	3:00	Sarah M. Leger	MTA
O-30	3:15	Dexter Van Dam	MTA
O-31	3:30	Sara Lutz	StFX
O-32	3:45	Liza Mastikhina	UNB-F
O-33	4:00	Chrissy Macaulay	StFX

Sensitivity to Reward Questionnaire as well as the Prosocial Behaviour subscale and Peer problems subscale of the Strengths and Difficulties Questionnaire. It was predicted that differences in sensitivity to punishment and sensitivity to reward would be evident in performance on the probabilistic learning tasks, that performance on the PLT would predict performance on the CDT, and that performance on the PLT would also be associated with prosocial behaviour (parent rated and sharing). Results indicated that the three- and four-year-olds performed more advantageously on the PLT than the two- year-olds. Participants performed better on tasks which involved finding a stimulus and those who were high loss avoiders shared more of their preferred toys than other participants. Performance on the CDT was predicted by performance on the probabilistic learning tasks. The findings have implications for both typical social development and developmental disorders which involved social problems such as autism and attention deficit disorder (ADHD).

O-03 9:30 Sarah Brine Supervisor: D. Seguin
Does Uninvolved Parenting And Child Temperament Predict Variations In Play Behaviours?

The purpose of this study was to use the goodness of fit model to examine the associations between permissive-uninvolved parenting style and child temperament (high emotionality and activity) in the prediction of child play behaviour. Parents (23 mothers and 4 fathers between the ages of 32-41 years) completed an online survey that included a demographics questionnaire, the Parenting Practices Questionnaire and the EAS Temperamental Survey for Children: Parental Ratings. Teachers completed The Play Behaviour Scale for each child (11 females, 16 males; age=3-5 years). It was predicted that high emotionality and activity would be positively correlated with social and rough play, but the data did not support this prediction. It was also predicted that permissive-uninvolved parenting would be positively correlated with reticent, rough, and solitary-active play behaviours, but this prediction was not supported either. Furthermore, it was hypothesized that the interaction between permissive-uninvolved parenting and difficult temperament (high emotionality and activity) would predict rough and solitary-active child play behaviours, but this was not the case. However, significant associations were found between authoritarian and authoritative parenting styles and perceived temperamental sociability and activity. Potential explanations for the findings, limitations of the methodology (e.g., small sample size and possible confounding variables such as teacher-child relationships), and implications for future research are discussed.

- O-04 9:45 Megan Lamb & Julia Bremner Supervisors: K. Fenwick & S. Prior
Understanding Adolescent Tanning Motivations And Behaviours

The purpose of this study is to examine tanning behavior in adolescents through objectification theory, media influence, perfectionism, and risk-taking.

Objectification theory asserts that as media objectifies the female body, females internalize this standard and begin to objectify their own body. These behaviors are examined in relation to perfectionism and the internalization of media ideals. Two kinds of perfectionism will be examined: self (setting a really high bar for one's self) and socially prescribed (believing other people have high expectations for you). This study will also investigate risk-taking behaviors in adolescents and how an optimistic bias may lead young people to engage in tanning despite knowing the major health risks involved. Adolescent participants were recruited from Leo Hayes High School, Fredericton High School, and Oromocto High School. Through this research we will contribute to our understanding of this increasingly prevalent risk-taking behavior among adolescents.

- O-05 10:00 Aleka MacLellan Supervisor: L. Wasylikiw
Promoting Positive Body Image Through Self-Compassion

Previous research shows that self-compassion is related to women's body image such that high self-compassion predicts fewer body concerns independently of self-esteem (Wasylikiw, MacKinnon, & MacLellan, 2012). Specifically, it was expected that self-compassion would account for unique variance beyond self-esteem in predicting body image measures. The purpose of the current study was to examine the underlying mechanisms of this relationship. In a sample of 138 female undergraduate students, participants completed measures of self-compassion, self-esteem, social comparison, depressed mood, and three measures of body image. Results demonstrated that self-compassion uniquely predicted body image such that increases in self-compassion corresponded to more positive views of one's physical self. Additionally, social comparison was shown to partially mediate the relationship between self-compassion and body image although perceptual accuracy did not. Thus, findings show that self-compassion predicts women's body image concerns due to social comparison processes. Specifically, whereas self-esteem relies on being better than others in order to feel good about oneself, self-compassion does not entail comparisons with others. This research provides further information on the current understanding of women's body image concerns by highlighting that self-compassion may contribute to preventing the development and aiding the treatment of body image concerns.

- O-06 10:15 Martin Smith Supervisor: S. Sherry
Is Neuroticism A Risk Factor For Perfectionistic Discrepancies? A Longitudinal Actor-Partner Interdependence Model

Neuroticism is a higher-order domain of personality believed to underlie and predispose various lower-order facets of personality, including perfectionistic discrepancies. Although cross-sectional research indicates neuroticism and perfectionistic discrepancies correlate positively, no longitudinal studies test if neuroticism is a risk factor for perfectionistic discrepancies. Also, despite compelling evidence that informant reports represent a unique, important source of data and that perfectionists may be biased in their self-reports, past research has relied entirely on the reports of single participants. To address this limitation, self- and informant reports were collected from 226 romantic couples to test the hypothesis that neuroticism is a risk factor for perfectionistic discrepancies. A longitudinal actor partner interdependence model was used to test for actor effects and partner effects. As hypothesized, when using either self- or informant reports, women's past level of neuroticism predicted changes in the women's future level of perfectionistic discrepancies and men's past level of neuroticism predicted changes in the men's future level of perfectionistic discrepancies. Neurotic individuals may be at risk for perfectionistic discrepancies due to their negative interpretation bias and tendency to be hypersensitivity to signs of social rejection. By elucidating the development of perfectionistic discrepancies, the present research has important implications for future assessment and treatment efforts. The present study also constitutes one of only a very small number of perfectionism studies to use informant reports.

Session 1B, BAC 239: Applied Psychology
Chair: Darlene Brodeur, Acadia University

8:55 am Review of rules for presentations

- O-07 9:00 Renée Matte Supervisor: R. Hamilton
Evaluating The Impact Of Motivational, Instructional And Calming Self-Talk Intervention On Performance Of A Timed Dart-Throwing Task

Researchers have demonstrated the performance benefits of positive self-talk across various sport tasks (Tod, Hardy, & Oliver, 2011). However, literature regarding the effectiveness of specific forms of self-talk seems to be lacking. The purpose of this study was to compare the effects of three different positive self-talk interventions (motivational, instructional and calming) on performance of a time limited dart-throwing task. The role of individual expectations regarding the efficacy of each intervention on performance was also examined. Participants were one hundred and four (104) undergraduate students who were randomly assigned to one of three intervention groups or to a control condition. The effectiveness of these interventions in enhancing performance was compared to control participants using an analysis of covariance (ANCOVA). No significant differences in performance were found

between any of the self-talk conditions; however, a positive relationship between expectancy of intervention efficacy and performance was identified. The practical and theoretical implications of these findings are discussed.

- O-08 9:15 Sarah Morrison Supervisor: R. Hamilton
An Examination Of The Veteran Hazing Experiences Of Female Rugby Players

Hazing has been defined as any activity expected of someone joining a group that humiliates, degrades, abuses or endangers, regardless of that person willingness to participate (Hoover, 1999). Hazing has been found to be prevalent across various levels of sport with a host of negative consequences (Allan & Madden, 2008; Finkel, 2002; Hamilton, 2011; Hoover, 1999). Researchers have just begun to uncover the personal and environmental factors that contribute to hazing perpetration (Allan & Madden, 2008; Hamilton, 2011; Hinkle, 2006). The aim of the current study was to qualitatively examine the context of female hazing perpetration in the traditionally masculine sport of rugby. A major focus of the semi-structured interviews was to explore the factors that lead young women athletes to haze incoming teammates. Previous research has found that Bandura's Theory of Moral Disengagement can be used to statistically predict hazing perpetration. Interviews with six women rugby players were conducted and transcribed verbatim and coding was carried out in accordance with thematic analysis. The results of the present investigation supported previous research relating moral disengagement and hazing perpetration as moral disengagement processes were evident in each of the six interviews. Furthermore, a potential ninth mechanism of moral disengagement, redeeming actions, was identified. Additionally, defying gender norms was described as central to success in rugby and may also influence off the field activities such as initiation. Results are discussed in terms of the initiation activities participated in, gender and moral disengagement in relation to hazing perpetration.

- O-09 9:30 Vanessa Smith, Krystal Lariviere, Davey Chafe, & Bafana Mashingaidze
Supervisor: V. Stinson
Perceptions Of Fairness; A Qualitative Study On The Perceived Fairness Of Pro-Se Litigants

This research explored the experiences and perceptions of people who represented themselves in Canadian courts (known as pro se litigants). Little is known about this increasingly large group of people who represent themselves for a variety of reasons. Pro se litigants (N=6) participated in a structured interview. The experience of all of the participants involved traffic matters, and all but one reported a positive outcome to their case. Most deemed the process to be fair and expressed satisfaction with the process and outcome. Additional findings and implications for the results will be discussed.

- O-10 9:45 Heidi Collicott Supervisor: M. Watt
Impact Of Gender And Diagnosis On Mental Health Court Outcomes

A Mental Health Court (MHC) is a program that strives to provide rehabilitation as an alternative to the criminalization of the mentally ill. MHCs are designed to address the needs of clients whose mental illnesses are thought to be a causal factor in the commission of their offence(s). Given the recency of MHC programs and the limited research on these programs to date, the current study's primary goal was to investigate the impacts of gender and diagnosis on MHC outcomes. The Primary Investigator (and an independent rater) attended the Nova Scotia MHC in Dartmouth, NS between January 2012 and March 2012. Observational (e.g., appearance, behaviour) and file-based data (e.g., index offences) was collected on 82 participants (70% men), ranging in age from approximately 20 to 60 (estimated $M_{age} = 34$ years). All observed participants had charges under the Controlled Drug and Substances Act and/or the Criminal Code of Canada. An analysis of index offences revealed that observed MHC participants had an average of seven charges (range: 1 to 34 offences); no differences between men and women. Results are discussed in terms of relations among gender, diagnoses, and MHC outcomes.

- O-11 10:00 Brandon Blenkarn Supervisor: S. Perrott
Career Versus Volunteer Firefighting: Value Attributions Of Young Adults

Young adults seeking entry into today's job market often first volunteer in their chosen field to enhance their chances of being hired for paid work. This is particularly true in the world of firefighting, where volunteers hoping for career opportunities work side-by-side with their paid counterparts. Following from Deci's (1971) seminal work on intrinsic versus extrinsic motivation, this study examined whether a sample of undergraduates ($N = 113$) could be simultaneously motivated by career-driven and altruistic-focused goals. Using the case of a volunteer firefighter in a hypothetical vignette, the impact of job status (volunteer versus career) and performance orientation (action versus service) on several attributions of worth were assessed. Results showed a positive correlation between career and altruistic-motivated volunteering, and this relationship held at more extreme levels of the distributions. A 2 X 2 ANOVA demonstrated that a service-oriented firefighter was judged to be significantly more competent and safer than one who was action-oriented. Implications for the emerging job market and for the future of volunteerism are discussed.

- O-12 10:15 Rachel Whitney Supervisor: M. Leiter
Fire Service Culture: The Influence Of Interpersonal Behavior On Cohesion And Retention

Growing turnover rates are an identified issue in the volunteer fire service, yet very few studies have examined potential explanations for this phenomenon. Grey

literature has proposed a potential relationship between the unique culture of the fire service and retention outcomes, however no such relationships have been empirically evaluated. This study used a series of regressions to investigate whether rates of workplace civility and incivility could predict workgroup cohesion and turnover intention. Three rationales for uncivil behaviour were also investigated as potential mechanisms for the perpetuation of a culture of incivility. Results supported each prediction with some limitations. The quality of workgroup interactions influenced cohesion and turnover intention, demonstrating the importance of promoting a respectful culture in improving retention.

Session 2A, BAC 237: History, Evolutionary Psychology, and Animal Behaviour
Chair: Karmen Bleile, Acadia University

O-13 10:45 Sarah Brown & Adam Stacey Supervisor: S. Major
History Of Psychology At Acadia

Research and data were collected from the Acadia University Archives as well as extra documents from the psychology department in order to create a document on the history of psychology at Acadia University from the late 1800's up to present. In the early years, prior to the formation of the psychology department in 1929, the philosophy to psychology transition as well as multiple influential individuals, such as George Cutten, played prominent roles in the evolution of psychology at Acadia. Marion Grant and many other faculty members were important to the development of the department post 1929, and enrolment had steeply increased by the 1980's. We discovered important aspects of the department, such as the Huggins Science Seminar and expansion of courses offered, that allowed for the expansion of psychology at Acadia University. Finally, facilities of the department were documented photographed from early facilities like the New Science Hall, to the present day facility, Horton hall.

O-14 11:00 Ian Davidson Supervisor: I. Nicholson
Quantifying The Good Life: Positive Psychology & The Economy

Positive psychology is the 'new science of happiness': an academic endeavour of quantitatively studying our most revered, valued, and desired concepts such as happiness, meaning, joy, and the Good Life. The rising popularity of this field in both academia and the wider culture has prompted much praise and criticism. In this thesis I attempted to understand positive psychology's role in both society and the economy, while comparing some of its views on well-being, happiness, and public policy with select economic and sociological views. The focus of this thesis was Dr. Martin Seligman's most recent book, *Flourish: A Visionary New Understanding of Happiness and Well-being*.

- O-15 11:15 Suzanne Melanson Supervisor: M. Fisher
Perceptions Of Homesickness Among Young Adults

There is little scholarly investigation into homesickness, although the research that does exist indicates that it is very prevalent and experienced by the majority of individuals at least once in their life. Between 50%-80% of the general population will experience some form of homesickness during their lives (Fisher, 1989). There are various definitions to describe homesickness, however, the one that seems to have the most support in the literature is that it is a complex cognitive-motivational-emotional state, involving grieving and preoccupation with home (Fisher & Hood, 1987). Homesickness has been linked to depression, memory lapses, poor concentration and distress (Fisher & Hood, 1987; Burt, 1993). In this current study, we are seeking to explore students' experiences of homesickness, with a secondary goal of investigating coping strategies. We will be asking qualitative as well as quantitative questions due to the fact that this area is so unexplored. This study will provide some insight into why certain people experience homesickness and the potential triggers.

- O-16 11:30 Lydia Ottenheimer Carrier Supervisor: C. Walsh
Personality, Social Behaviour, And Cortisol In Domestic Dogs

The relationships between personality, cortisol and social behaviour in dogs are not well understood. Sixty (60) dogs were recruited at a local dog park, where they were videotaped and sampled for cortisol via saliva. Canine personality was measured using the owner-based Monash Canine Personality Questionnaire (MCPQ-R), in which owners rated their dogs along five personality dimensions (Extraversion, Motivation, Training Focus, Amicability, and Neuroticism). Videotapes were coded for time budget states (time alone, in dyad, in group, with humans, and in mixed groups), and frequency of play signals, aggression, stress behaviours, and mounting. Dogs that visited the park less frequently were found to have higher levels of cortisol ($p = .01$); however, cortisol was not related to either dog behavioural measures or personality scores. Dog park dogs had Extraversion scores that were 13% higher than those reported for a more general sample. Amicability and Training Focus were positively correlated ($p = .00$), while Amicability and Neuroticism correlated negatively ($p = .04$). Neuroticism and Training Focus were also negatively correlated ($p = .04$). Dogs that rated high in Amicability displayed more play signals ($p = .01$). Extraversion scores negatively correlated with time spent in mixed groups ($p = .04$). Total number of changes in time budget activity states were positively associated with Extraversion scores ($p = .00$). Play signal frequency and mounting were positively correlated ($p = .02$). This study suggests that dogs which frequent the dog park demonstrate relationships among personality dimensions and social behaviours which are independent of cortisol levels.

Session 2B, BAC 239: Social Psychology

Chair: Randy Newman, Acadia University

- O-17 10:45 Heather MacArthur Supervisors: C. Poulin & L. Gouliquer
The Everyday Experience Of Female Firefighters: Complications For Women In A Non-Traditional Occupation

The present study is an investigation of the experience of female career firefighters in Canada, and the role that firefighting institutions play in shaping and organising these women's lives. Using Gouliquer and Poulin's (2005) Psychosocial Ethnography of the Commonplace (P-SEC) methodology, interviews with five female firefighters from across Canada sought to answer the following research questions: What is the experience of Canadian female firefighters? How do they perceive the atmosphere in which they work? How do they make sense of their daily experiences and cope with their environments? Analysis of interview transcripts revealed a number of "organisational moments," instances in which the policies or practices of the fire services complicate the lives of women while benefitting the institution. The present thesis focuses on two practices: 1) responding to harassment, and 2) work shift assignment. The schemata and coping strategies used by women to make sense of and deal with these complications were also identified. Schemas drawn on by participants included that of "the old-school firefighter," while coping strategies such as "turning a career into a job" were used. The implications of these findings for female firefighters and fire service policy are discussed.

- O-18 11:00 Colleen Harrington Supervisor: M. Stelzl
Exploring Identity And MOATING From A Qualitative Perspective

When multiple social identities of others are used strategically to enhance the positive image of the ingroup, a social identity strategy labelled MOATING has occurred. The MOATING phenomenon was identified by Stelzl, Janes, and Seligman (2008) in their quantitative, archival study of the Canadian media's portrayal of the Jamaican-born, Canadian sprinter Ben Johnson. The current study used discourse analysis to explore how MOATING tendencies in the media were used to depict Ben Johnson. Specifically, articles from three major Canadian newspapers were analyzed for themes surrounding Ben Johnson's national identity. The qualitative analysis of newspaper articles revealed three main themes. MOATING, CORFing (cutting off reflected failure) and scapegoating were identified as strategies used by the Canadian media to maintain a positive image.

- O-19 11:15 Jillian Standing Supervisor: S. Claxton-Oldfield
Attitudes Toward Transgender University Students

Two hundred and six undergraduate students (92 male and 114 female) read a brief vignette describing a male university student who was described as either cisgender (gender identity matches anatomical sex), transsexual, or a cross-dresser. After reading the description, participants completed a 15-item semantic differential First Impressions Scale and a 16-item Social Distance Scale. Participants in the transsexual condition also completed a 9-item Transsexual Attitudes Scale, which was developed for this study. In addition, all participants also answered a number of questions concerning factors which are known or thought to be predictors of attitudes towards transgender people (e.g., religiosity, level of contact). The results indicated that participants had significantly more negative first impressions of the transsexual student compared to the cross-dressing and cisgender student, but no differences between the three groups were found on the measure of social distance scale. Further analyses revealed that on average, males, those with little or no previous contact with transgender people, and those who believe transsexuality is caused primarily by environmental factors held more negative attitudes toward the transgender targets. These findings support previous research into the causes and correlates of transsexuality and provide new data on the differences in attitudes toward different forms of gender expression. These findings can inform university awareness campaigns, which can make campuses a safer place for trans students.

- O-20 11:30 Adam Myatt Supervisor: J.Cameron
“I Am He”: Male Gender Identity, Conformity To Masculine Norms, And Well Being In Men

The present study examined the relationships between male gender identity, conformity to masculine norms, and well being in a sample of 244 male identified individuals. An assessment of men’s identification with the social group of ‘men’ is used to determine if this identity is associated with well being. Participants were grouped by sexual orientation for analysis (‘straight’ identified and ‘queer’ identified). Results show that straight identified participant’s male identity was positively correlated with their conformity to masculine norms, and their conformity scores were negatively correlated with their life satisfaction ratings. Queer identified participant’s male identities, however, were positively correlated with both their well being and life satisfaction. These results are interpreted through the lens of ‘active’ versus ‘passive’ identities. Straight male identities develop through a passive process, as part of and alongside conformity to masculine norms. In contrast, queer male identities develop through an active process as a response to a different need, as both a means of mobilization and increasing well being.

- O-21 11:45 Michelle Boutilier Supervisor: A. Bolton
Video Game Use During An Incubation Period: Can Creative Video Games Increase Creativity?

The aim of the current study was to determine whether video games that encourage creativity could be used to enhance the player's creative skills. Creativity is defined in many ways, but the process of creative problem solving (Wallas, 1926) has been proposed to enhance creativity through unconscious, associative processes (Hélie & Sun, 2010), which in turn has been proposed to be an underlying factor of creativity (Mednick, 1962). Participants included 32 male and female participants from a small Canadian university. Two games (i.e., one creative-based and one typical game) were given to participants, which they played over an incubation-like period of three days. Three different types of creativity tests (i.e., generative, associative, and insight) were administered before and after playing the given game. It was expected that those who were given the creative-based game would show increased scores of creativity on post-testing. The creative game group showed a significant increase in creativity scores on the associative test, suggesting that the creative game had an impact on increasing associative creativity. Results provide some support for the utility of an incubation period for creative processes and suggest that the creative game could help to increase the associative process of creativity.

Session 3A, BAC 237: Cognition, Perception, and Neuroscience
Chair: Susan Potter, Acadia University

- O-22 2:45 Daniella DaPonte Supervisor: D. Vipond
Investigating Spontaneous Trait Inferences With Proactive And Retroactive Interference

Observing the behaviour of others, we often make unconscious and unintentional inferences about their personal characteristics, referred to as spontaneous trait inferences (STIs). For example, reading that "Lucy trips on the sidewalk," we infer that Lucy is clumsy. We studied STIs using a proactive (PI) and retroactive interference (RI) paradigm. PI occurs when the retention of new items is impeded by previously learned items from the same encoding category. RI occurs when the retention of previously learned items is impeded by new items of the same category. Students were assigned to a PI, PI-release, RI or RI-release condition. In each condition, they were presented with sentence fragments known to elicit STIs. Subjects were expected to recall criterion sentence fragments better in the PI- and RI-release conditions than in the PI and RI condition. Results are discussed in the context of the model that suggests STIs are automatic and occur online at encoding.

- O-23 3:00 Emad Talisman Supervisor: A. Birt
Mental Time Travel: Is Experience Everything?

According to research on mental time travel, differences between episodic memory and episodic future thought are due to temporal direction (i.e., past vs. future). Recently, it has been suggested that it is familiarity with memories and associated details may affect such differences. Following the recombination methodology of Addis, Pan, Vu, Laiser, and Schacter (2009), participants (N = 27) were asked to recall episodic memories, and to imagine episodic events in the past, present, or future using memory details ranked for level of familiarity collected prior to the experiment. Data on both self-report (e.g., vividness, effortfulness) and objective (e.g., level of detail, coherence) characteristics of the remembered and imagined events were collected. It was predicted that familiarity with memories and associated details, not temporal direction, would account for the differences between episodic memory and future thought. Results did not support this hypothesis, but demonstrated that the variation between episodic memory and episodic future thought is due to the relationship between remembering and imagination. Suggestions are made to (a) change conceptualization of episodic future thought such that the focus is on the process of imagining and not on mental projection into the future, and (b) replicate the current design with a false memory condition to validate and expand upon the findings.

- O-24 3:15 Emily Tredger Supervisors: T. Taylor-Helmick & J. Fawcett
Are Intentionally Forgotten Memories More Susceptible To The Misinformation Effect?

Memory research has shown that memories are subject to updating after they have been initially formed (Loftus, 2005). This can happen in a variety of ways including the misinformation effect and directed forgetting. The misinformation effect occurs when people incorporate erroneous post event information into an original memory. Memories are more susceptible to the misinformation effect if the original memory is weak (Loftus, 2005). One way that memories may become weaker is directed forgetting. This occurs when people intentionally discard information from their memories and are subsequently less able to remember it. In this study, we examined the effect of directed forgetting on susceptibility to the misinformation effect. We used a procedure developed by Cook (2005) to induce misinformation for faces. During the initial presentation of the faces, we included instructions to either remember or forget individual faces. In a later phase of the experiment, participants were exposed to altered versions of some of the faces they initially studied. This misinformation often caused them to later report that they had initially studied the altered face. We expected that the memories for faces that participants attempted to forget would be weaker and thus more susceptible to misinformation. Contrary to our prediction, we found directed forgetting instructions did not have an effect on

the magnitude of the misinformation effect. This suggests that directed forgetting does not have the same effect on memory traces as passive forgetting or weak encoding, which both increase susceptibility to misinformation.

O-25 3:30 Natasha Dienes Supervisor: D. Brodeur
Visual Processing Of Distractors In An Enumeration Task

Although distractors have been found to affect performance in visual attention tasks, little research has examined the nature of processing that distractors undergo. The current experiment investigated the extent to which distractors are processed in an enumeration task. Forty-two university students were asked to enumerate 2-5 target circles (no-switch trials) or 2-5 distractor circles (switch trials) in each array. Display time (470 ms or 200 ms) of the array and percentage of switch trials (20% or 70%) were also manipulated. An analysis of accuracy (percent correct) and reaction time revealed that participants were able to process distractors in the array, but the extent of processing was mediated by all manipulations. Participants were also able to change their visual processing strategy depending on the demands of the task. These results were explained using mechanisms from FINST theory and perceptual hypothesis testing theory.

O-26 3:45 Diane Ross Supervisor: J. McKenna
Cannabinoid Treatment Of Ischemic Brain Injury: Extent Of Tissue Damage And Behavioural Impairments

The endocannabinoid (eCB) system has been proposed as part of an important naturally occurring neuroprotective response following cerebral insult. Emerging evidence has demonstrated that the pharmacological modulation of the eCB system represents a novel therapeutic approach to reduce the cellular damage and behavioural impairments associated with ischemic stroke. The current study utilized the plant-based neurotoxin ouabain to induce stroke-like injuries in 24 male Long Evans rats. Animals then received single or multiple injections of the synthetic cannabinoid WIN-55212-2 or its vehicle. Multiple behavioural measures were collected throughout the 21 days following surgery, and infarct volumes were quantified. WIN-55 administration decreased lesion volumes by 36-40%, however, statistical significance was not achieved. Behavioural findings were largely inconclusive. The reproducibility of this stroke administration technique, the validity of behavioural measures used, and directions for future research will be discussed.

- O-27 4:00 Kevin LeBlanc Supervisor: G. Desmarais
 Direct And Indirect Routes To Action: Converging Evidence From A Priming Paradigm

Past research with familiar objects suggests that visual attributes are sufficient to determine the actions that we do with them. However, research done with novel objects revealed that semantic information may still play a role in action production, especially when object/action associations are novel. The purpose of this study was to provide converging evidence that action production relies more heavily on semantic information when object/action associations are novel compared to when they are more familiar. In the first experiment, participants learned the associations between novel objects, actions, and their non-word labels and were asked to complete speeded naming and action tasks on the first and fifth day of training. Crucially, items to be named/gestured to were preceded by a congruent or incongruent prime. The experiment replicated previous findings that participants gestured faster in response to objects than words, and further demonstrated that gestures were produced faster when stimuli were preceded by a congruent prime. In the second experiment, participants learned a new set of object/action, label associations, albeit the labels were real words. As predicted, semantic similarity mediated the impact of priming on the first day of training when object targets were preceded by word primes, and this mediation disappeared by the fifth day of training. However, no impact of semantic similarity was present on the fifth day of training, even in conditions where it was expected. These results raise a number of questions regarding the influence of semantics on action production.

Session 3B, BAC 239: Health & Clinical Psychology
 Chair: Rick Mehta, Acadia University

- O-28 2:45 Qianying (Liv) Yao Supervisors: P. McGrath & M. Petter
 Investigating The Effect Of Trait Mindfulness On Adolescents' Memory For Pain

Research with adolescents has shown that memory for painful experiences can be distorted in a negatively exaggerated way. This may lead to long-term consequences such as avoidance of future painful procedures. Trait mindfulness is an individual difference variable that is related to both memory and pain. Research with chronic pain patients has shown that higher trait mindfulness predicted lower pain intensity and less negative psychological responses to pain. The current study examined how trait mindfulness was related to memory for a painful event in adolescents. One hundred and twenty-four adolescents between the ages 13 to 18 years were recruited. Participants answered questionnaires measuring trait mindfulness prior to completing an experimental pain task (the Cold Pressor Task). Following that, participants rated their pain intensity and pain anxiety. Two weeks later, they were interviewed via telephone and asked to recall their pain intensity

and pain anxiety. The results of the study showed that trait mindfulness was not a unique predictor of recalled pain intensity and pain anxiety. It was however negatively associated with recalled pain intensity, and that it was also negatively associated with both pain intensity and pain anxiety during the experimental pain task. Limitations of the experimental design, the implications of the research, and directions for future research were discussed.

O-29 3:00 Sarah M. Leger Supervisor: R. Azar
Self-Reports And Biomarkers Of Smoking: Do They Tell The Same Story?

The goal of the present study was to assess the relationship between self-reported smoking behaviour and cotinine, a biomarker of smoking. To address this goal, I used two independent secondary data sets and two methods of analyzing cotinine. In the first data set of a sample of 55 healthy youth, the smoking behaviour was analyzed through self-report and salivary cotinine. In the second data set of a sample of 27 healthy pregnant women, self-reports of smoking and serum cotinine were assessed. I found that smoking self-reports and cotinine concentrations were significantly correlated in youth and pregnant women (moderate to strong correlations). The cut-offs used for salivary and serum cotinine significantly discriminated between smokers and non-smokers in both populations. However, salivary cotinine failed to discriminate between passive and non-smokers in the sample of youth. Based on the current literature, and as a secondary exploratory analysis, I examined body mass index (BMI) as a function of smoking status. BMI was not significantly different in smokers versus non-smokers in either sample. Future research should investigate the differences in the accuracy of self-reports in medical versus research settings in pregnant and general populations. It would also be interesting to longitudinally follow young smokers who continue smoking into adulthood to examine any possible relationship with adulthood obesity.

O-30 3:15 Dexter Van Dam Supervisor: L.D. Hamilton
Psychological Effects Of Prostate Cancer Treatment

Androgen Deprivation Therapy (ADT) is the standard therapy for locally advanced or metastatic prostate cancer. This androgen deprivation in men often results in physical feminizing effects, such as breast development, but less is known about the psychological effects of ADT. The purpose of this study was to examine these reported psychological effects in patients undergoing ADT for the treatment of prostate cancer. Our primary hypotheses were that men currently on ADT would report more negative emotions compared to before they were on ADT (based on retrospective reports) and compared to prostate cancer patients not currently on ADT. A secondary research question was how men on ADT would compare to men not currently on ADT in their relationship satisfaction. The study was completed via an online questionnaire that contained the Profile of Mood States (POMS) and the

Dyadic Adjustment Scale (DAS). POMS scores indicated that patients currently on ADT reported reduced vigor and increased fatigue compared to patients not currently on ADT. ADT patients also reported higher levels of depression, fatigue, confusion, tension, and anger and lower levels of vigor compared to when they were not on ADT. Results on the DAS showed significant differences on the Affectional Expression and Dyadic Satisfaction with participants on ADT rating higher than those not on ADT. These findings indicate that hormone therapy used in the treatment of prostate cancer creates significant psychological effects. These findings further research, which previously focused upon physical effects of prostate cancer treatments.

O-31 3:30 Sara Lutz Supervisor: M. Watt
Art Therapy For Anxiety In Dementia Patients

The relationship between anxiety and cognitive ability in dementia is complex. Research indicates that high levels of anxiety in dementia patients are associated with poorer outcome and quality of life (Seignourel et al., 2008). Art therapy has shown some promise in reducing anxiety and slowing the rate of cognitive decline in dementia populations (e.g., Stuckey & Nobel, 2010), but the research has suffered from lack of controlled studies (Wollen, 2010). The present study was designed to test the effectiveness of art therapy in reducing anxiety via a randomized controlled trial. With the assistance of nursing home staff and identified caregivers, dementia patients were recruited and randomly assigned to a single session, group art therapy class or delayed treatment condition. Art therapy included relaxation and a structured drawing activity (Del Giacco, 2010). Results of the present study indicated a reduction in anxiety levels from clinically significant levels pre-intervention to clinically non-significant levels post-intervention for those participants who engaged in the art therapy program and not in the comparison sample. The present study also demonstrated unforeseen results. In particular, dementia patients with higher (vs. lower) levels of anxiety, and milder (vs. severe) cognitive impairment were more inclined to engage in the art therapy. Results are discussed in terms of the implications for the use of alternative therapies in the treatment and management of anxiety symptoms in this population.

O-32 3:45 Liza Mastikhina Supervisor: D. Clark
Memory Recognition Bias And Cognitive Control Of Disgust Versus Neutral Visual Stimuli

The present study investigated whether it is possible that suppression of thoughts of disgust actually leads to greater feelings of disgust due to enhanced memory bias for disgust stimuli. Introductory Psychology students were randomly assigned to view 75 neutral or disgusting pictures (of injuries, body products, hygiene, food, or animals) and then to either suppress thoughts of the pictures or cognitively reappraise them for 5 minutes. The control group was not given any specific

instructions regarding how to think of the pictures. Afterwards, participants were given a recognition memory test in which they were presented with a list of 75 old and 75 new pictures and asked to identify previously viewed stimuli. Mood ratings (e.g., sadness, fear, disgust) were administered at multiple intervals throughout the study. Disgusting pictures induced the expected mood state $F(1, 118)=83.93, p<.001, \eta_p^2=.416$, with the disgust group ($M=28.25, SE=1.69$) feeling significantly more disgusted than the neutral group ($M=6.17, SE=1.72$). A significant main effect of group, $F(1, 118)=6.621, p<.05, \eta_p^2=.053$, was found, in which the disgust group ($M=62.42, SE=1.02$) recognized significantly more of the old pictures than did the neutral group ($M=58.69, SE=1.04$). The hypothesis regarding the effectiveness of cognitive reappraisal at reducing memory for disgust stimuli was not confirmed and there were no significant differences between the strategy conditions in terms of their ability to recognize previously seen pictures. Implications of the findings on research on emotion regulation strategies for disgust are discussed.

O-33 4:00 Chrissy Macaulay Supervisor: M. Watt
A Test Of Mindfulness Meditation Versus Hatha Yoga For Reducing Anxiety Sensitivity

Anxiety sensitivity (AS: the specific fear of anxiety-related arousal sensations) is a known risk factor for anxiety and related disorders (Olatunji & Wolitzky-Taylor, 2009). The present study evaluated the effectiveness of two brief mindfulness-based interventions for the reduction of AS. Twenty-one high AS female undergraduates were assigned to either mindful yoga (MY, $n=7$) mindfulness meditation (MM, $n=7$), or a health education control (HEC, $n=7$) group. All groups met for three weekly one-hour sessions. The MY and MM groups received psychoeducation and training in basic hatha yoga or mindfulness meditation. The HEC group received general instruction on nutrition, exercise, and rest. Immediately prior to and following the intervention, and again at four-week follow-up, participants completed measures of AS, mindfulness, anxiety, and positive and negative affect. Results showed a clinically meaningful trend for reduced AS in both active intervention groups. Improvements extended to follow-up. MM participants also showed a significantly greater increase in mindfulness from baseline to follow-up, compared to control participants. Findings suggest that mindfulness techniques remain a promising intervention for the reduction of AS.

Poster Presentation Sessions

Session 1, 2nd Floor of BAC, 1:15 – 2:45 pm
Neuroscience, Cognition, and Social Psychology (Part 1)

Neuroscience

P-01	Rebecca Angel	MUN
P-03	Brittany Jensen	MUN
P-05	Amanda Cranford	MUN
P-07	Melissa Lannon	MUN
P-09	Kayla McKnight	MUN
P-11	Samantha McRae	MUN
P-13	Megan Quinlan	MUN
P-15	Melanie MacGillivray & Jocelyn Fotso	UNB-F

Cognition

P-17	Melanie M. Madden	MTA
P-19	Nicole Webb	SMU
P-21	Mahmoud Hashish	DAL
P-23	Ashley Jollie	SMU
P-25	Samantha Burns	UdeM
P-27	Vivian Eng	DAL
P-29	Frédéric Downing-Doucet	UdeM
P-31	Sébastien Lagacé	UdeM
P-33	Alison Petten	MUN
P-35	Ralph Redden	DAL
P-37	Erica Rudolph	MSVU

Social Psychology (Part 1)

P-39	Sara Ghandeharian	AU
P-41	Nicole Shea	MUN
P-43	Kendra J. McLaughlin	UNB-F

Session 2, 2nd Floor of BAC, 4:30 – 6:00 pm

Clinical Psychology, Applied Psychology, and Social Psychology (Part 2)

Clinical Psychology

P-02	Shawn Seeley	MTA
P-04	Lindsay Sherwood	MTA
P-06	Erin Bursey	MUN
P-08	Sarah Oates	MUN
P-10	Sebastian Pacey-Smith	UNB-F
P-12	Kathryn Malcolm	UNB-F
P-14	Nicole Power	MUN
P-16	Chantal Gautreau	DAL
P-18	Timothy Wingate	MTA
P-20	Tomi Gbeleyi	UNB-F

Applied Psychology

P-22	Dayna Bell	MSVU
P-24	Katelynn Carter-Rogers	SMU
P-26	Carissa Collins	MUN
P-28	Sarah Fanning	MSVU
P-30	Stephanie Hennessey	CBU
P-32	Kathleen Kennedy	MTA
P-34	Erin Lynch	MUN
P-36	Erin Sheppard	SMU

Social Psychology (Part 2)

P-38	Shelagh Abriel	MSVU
P-40	Venus Bali	MSVU
P-42	Marie-Louise Donohoe	MSVU

Abstracts: Poster Presentations

(Session 1)

Neuroscience

- P-01 Rebecca Angel Supervisor: J. Blundell
 The Effect Of Rapamycin On Hyperarousal And Anxiety-Like Behavior In Predator Stressed Rats
- Post traumatic stress disorder (PTSD) is manifested by symptoms of fear, hyperarousal, re-experiencing the trauma, and persistent avoidance of cues related to the trauma (American Psychiatric Association, 2000). Using fear conditioning to model PTSD, previous research has shown that consolidation of shock-induced associative fear memory is dependent of the mammalian target of rapamycin (mTOR) pathway. However, it is unknown whether rapamycin attenuates non-associative fear memories, such as stress-induced hyperarousal and anxiety. The goal of the present study was to evaluate the effect of rapamycin, a potent inhibitor of the mTOR pathway, on anxiety-like behavior and hyperarousal using the predator stress animal model of PTSD. Rapamycin, injected 30 minutes prior to cat exposure, attenuated predator stress-induced hyperarousal, along with several anxiety-like behaviors as measured in the elevated plus maze, hole board. Indeed, rapamycin's block of predator stress-induced hyperarousal lasted at least 3 weeks. Furthermore, rapamycin blocked predator stress-induced associative fear memories. These data, combined with past research, suggest that mTOR plays a critical role in acquisition/consolidation of associative and non-associative fear memories. Rapamycin may therefore be an excellent candidate as a potential therapeutic intervention for PTSD.
- P-03 Brittany Jensen Supervisor: J. Blundell
 Acute Inhibition Of mTOR Kinase Via Systemic Rapamycin Blocks Weight Gain And Food Intake In Rats Under Normal Dietary Conditions
- The present study examined the effects of a single, systemic injection of rapamycin (RAP), a potent inhibitor of the mammalian target of rapamycin (mTOR) pathway, on body weight gain and food intake in rats under normal dietary conditions. In Experiment 1, rats received a single injection of one of three doses of RAP (10.0, 1.0, or 0.1 mg/kg) or vehicle solution. RAP produced a long-lasting reduction in body weight gain (the 10 mg/kg RAP group remained significantly lower than the vehicle group on day 60 post-injection). RAP also produced a dose-dependent reduction in food intake and food efficiency lasting for approximately five days. Importantly,

these initial reductions in food intake and food efficiency were not followed by compensatory increases. Experiment 2 consisted of a conditioned taste avoidance test. Rats received either 10 mg/kg RAP or vehicle followed by exposure to a novel taste (saccharin). On two subsequent days rats were tested for saccharin preference. There was no difference in saccharin preference between the two groups on either test day, indicating that 10 mg/kg RAP does not induce visceral illness. Together, the results suggest that a single injection of RAP can produce a dose-dependent, long-lasting change in body weight gain and food intake and the effect cannot be attributed to RAP-induced illness or malaise. This study has important implications for understanding the role of mTOR in regulating energy balance. In the future, mTOR may be an appropriate target for obesity treatment.

P-05 Amanda Cranford Supervisor: M. Hirasawa
The Effect Of Repeated Exposure To Palatable Food: The Development Of Food Preference In The Lateral Hypothalamus

The mechanism underlying the development of food preference involving the brain's feeding regulatory mechanisms is currently incompletely understood. The goal of the present study was to elucidate how preference for palatable food develops within the lateral hypothalamus and how repeated exposure to a palatable diet influences the brain's food suppression mechanisms. When rats were repeatedly exposed to *ad libitum* sugar pellets once per week for nine weeks, they demonstrated a greater rate of increase in consumption of sugar pellets than that of regular rodent chow. This result indicates that animals with repeated exposure to sugar demonstrate a preference for sugar. Secondly, this study attempted to examine the effect of Nociceptin/Orphanin FQ (N/OFQ), an opioid peptide, on sugar intake in the same rodents that were repeatedly given sugar pellets. In previous studies, local injection of N/OFQ into the lateral hypothalamus effectively inhibited palatable feeding in rats through inhibition of orexigenic neurons within this brain area. However, results from this study suggest that the inhibitory effect of N/OFQ on palatable feeding is attenuated in animals that have developed a sugar preference. The results of this study suggest that repeated feeding has the capacity to induce preference for palatable foods and modify neural regulatory mechanisms for food intake. These results also implicate the lateral hypothalamus and N/OFQ in having a unique role in the development of food preference. This diet-induced neural change may be a contributor to the increasing incidence of overeating and diet-induced obesity and provide a potential target for therapeutic inventions aimed at treating obesity.

- P-07 Melissa Lannon Supervisor: S. Walling
Analysis Of Neuronal Degeneration In The Rodent Hippocampus Following Chronic Inhibition Of Norepinephrine Reuptake And Status Epilepticus

Temporal lobe epilepsy (TLE) is the most common form of epilepsy in humans. It is characterized by spontaneous recurrent seizures and specific patterns of damage in the temporal lobe, to hippocampus in particular. The neurotransmitter norepinephrine (NE) is thought to prevent damage in TLE. Desipramine (DMI), a selective norepinephrine reuptake inhibitor (SNRI) was used to increase noradrenergic tone in the rodent hippocampus. The amount of neuronal degeneration in hippocampus in a pilocarpine rodent model of TLE was assessed. Rats chronically administered DMI in a moderate dose (3.0 mg/kg/day) did have decreased levels of neuronal degeneration as measured by Fluoro-Jade B (FJB) staining. This effect was only observed in CA3 region of hippocampus, a result consistent with the idea that CA3 receives the highest density of NE input within the hippocampus from locus coeruleus. These results provide evidence against the common hypothesis in clinical practice that upregulating NE in the central nervous system can increase damage through pro-convulsant and pro-inflammatory effects.

- P-09 Kayla McKnight Supervisor: S. Walling
Effects Of Norepinephrine On Glycogen Phosphorylase Following Pilocarpine-Induced *Status Epilepticus*

Status Epilepticus (SE) is a life-threatening condition in which the brain is in a state of prolonged epileptic seizure. A seizure is a period of heightened excitability in which there is a constant state of firing neurons. During a seizure the energy demands of the brain are greatly increased in order to maintain this constant state of firing. Astrocytes are glial cells that provide energy substrates to the neurons from their large internal glycogen stores. This energy is released through the breakdown of glycogen phosphorylase (GP). In this study levels of NE were chronically up-regulated by administration of the norepinephrine reuptake inhibitor (NRI), desipramine (DMI) and the effects of this treatment on *total* GP immunoreactivity in the hippocampus following pilocarpine-induced SE were observed. One week post-SE *total* GP levels were increased in the dentate gyrus (DG), subgranular zone (SGZ), hilus, outer molecular layer (OML), CA1 pyramidal, CA1 oriens, and CA3 (except lacunosum). Some evidence suggests that chronic administration of DMI prior to SE prevents this increase. In animals not exposed to SE, chronic administration of DMI decreased *total* GP in a dose-dependent manner in the SGZ, hilus, molecular layers, and CA1 (except lacunosum). In conclusion, these results suggest that chronic administration of DMI prior to pilocarpine-induced SE may prevent the increase in *total* GP observed in animals not exposed to DMI. This study also suggests that DMI alone, in the absence of seizures, decreases *total* GP in a dose-dependent manner.

P-11 Samantha McRae

Supervisor: S. Walling

Directional Heading, Not Location Cues, Underlies Successful Goal Location

Animals use one of three methods of navigation, path integration, piloting and beacon homing. An animal must be sensitive to directional information in order to path integrate and to pilot. The current study tested rats' capability to use their sense of direction when solving a spatial problem. Rats were trained to leave from one of two start locations and locate a platform in a Morris Water Maze. The rats could use start location cues, goal location cues, start orientation or the direction the platform was located to solve the spatial problem. The rats were tested in the dark with auditory and olfactory cues masked after training was completed. The group with a direction solution available successfully maintained their performance while the group that did not have a direction solution available had to relearn the problem. This suggests that direction of the platform relative to the start location, rather than start location, goal location or start orientation cues, underlies place learning. These results also reveal that rats can successfully use directional information to locate a goal when no visual cues are present. These results are consistent with previous research which indicated that place learning depends on an animal's sensitivity to direction.

P-13 Megan Quinlan

Supervisor: S. Walling

Immunohistochemical Analysis Of The Effect Of Norepinephrine Reuptake Inhibition And *Status Epilepticus* On Microgliosis In The Rodent Hippocampus

Epilepsy affects 0.6% of Canadians, with approximately 15 000 individuals diagnosed annually. Individuals afflicted with this neurological disorder experience recurrent seizure activity and are susceptible to increases in levels of neuroinflammation, which have been correlated with neuronal degeneration and cellular reorganization. The most common form of human epilepsy is temporal lobe epilepsy (TLE), with seizures originating from medial temporal limbic structures. This experiment used a rodent model of medial TLE, utilizing the chemoconvulsant pilocarpine, to induce status epilepticus (SE). It also employed a norepinephrine (NE) reuptake inhibitor, desipramine (DMI) to test the effects of NE upregulation on neuroinflammation, indexed by markers of microglia in the hippocampus of seized and non-seized animals. Recent data suggests that the neurotransmitter NE possesses anti-inflammatory properties and may be anti-convulsant in nature, thus making it a potential candidate to reduce the inflammation leading to neuronal cell loss after severe seizures. This is the first study to examine the effects of chronic administration of a NRI on the expression of microglial cells in the hippocampus. The results demonstrated a trend toward reduced levels of immunoreactivity as the dosage of DMI was increased in control, saline-injected subjects. Thus the highest dose of DMI displayed the lowest levels of microglial expression. Increased immunoreactivity was observed in rats with increased NE tone prior to seizure exposure and current theory suggests the NE may be contributing to the release of anti-inflammatory substances. The results are thus consistent with the bulk of research suggesting NE has anti-inflammatory properties.

- P-15 Melanie MacGillivray & Jocelyn Fotso Supervisor: T. Harker
The Methodology Of Event-Related Potentials (ERPs)

An event-related potential (ERP) is any measured brain response that is directly related to a thought or perception. More formally, it is the electrophysiological response of the brain to internal and external stimuli. ERPs can be reliably measured using electroencephalography (EEG) recordings. This non-invasive procedure measures electrical activity of the brain through electrodes placed on the scalp. This present poster will highlight the basic methodology of ERP recordings by describing the nature of the electrical brain signal being recorded and the several transforms that are applied to this signal as one derives ERP components from the raw EEG. Typical data transforms used in ERP methodology will be presented and explained along with visual examples of their effects where applicable. These transforms include the use of epochs, filters, artifact rejection, baseline correction, sorting and averaging of the electrical signal. In addition the poster presentation will discuss how this methodology can be applied to the study of brain-behaviour relationships, as well as the advantages and disadvantages of this methodology relative to other functional brain imaging methods.

Cognition

- P-17 Melanie M. Madden Supervisor: G. Ouellette
To Succeed When We Read, Must We Excel When We Spell: Do Partial Orthographic Representations Suffice When Reading?

This study evaluates the relationship between the quality of orthographic representations as indexed by spelling accuracy and reading speed. Participants read a series of words, and reading rate was recorded for each one. Participants later spelt the target words in order to assess spelling consistency and accuracy, and consequently quality of the orthographic representation. The results indicated that the less accurate the spelling, the slower the word was read. Words that were never spelt correctly were read slower than words that were spelt correctly some of the time, both of which were read slower than words that were spelt correctly all of the time. These findings support the contention that more complete, accurate orthographic representations are more rapidly accessed and retrieved from memory during oral reading.

- P-19 Nicole Webb Supervisor: N. Conrad
Orthographic Knowledge: The Route Through Which Implicit Learning Relates To Reading Skill?

High quality memory representations of recurring letter patterns and combinations are necessary for skilled and fluent reading (Ehri, 2005). Children typically acquire this orthographic knowledge incidentally through reading and spelling. However, if

children have difficulties with implicit learning, this would impair their ability to establish the necessary orthographic representations. Conflicting results abound in the literature regarding the relation between implicit learning and reading skill. Although several studies illustrate that such a relation exists, few suggestions have been made regarding why this relation may exist. The present study examines whether or not this relation is mediated through orthographic knowledge. If children have difficulties with implicit learning, this would impair their ability to acquire orthographic knowledge, which in turn would impair their reading skills. Children in Grades 2 and 3 completed two measures of implicit learning, two measures of orthographic knowledge, and several measures of reading skill. Regression analyses following the mediation model of Barron and Kenney (1986), will determine whether or not a relation exists between different types of implicit learning and reading skill and if this relation exists, whether or not it is mediated through orthographic knowledge. Some data collection is on-going. Results will contribute to our theoretical understanding of implicit learning, orthographic learning and contribute to a more comprehensive understanding of how skilled reading develops.

- P-21 Mahmoud Hashish Supervisor: R. Klein
Speed-Accuracy Trade-Offs In Inhibition Of Return During Active Oculomotor Inhibition

Inhibition of return (IOR) refers to the phenomenon of increased response times (RTs) to targets at previously cued locations when the interval between a to-be-ignored spatial cue and a probe target exceeds ~ 300 ms. Recent work has revealed that this phenomenon can be expressed differentially depending on the extent to which the oculomotor system is active during a task, resulting in either a perceptual/attentional "flavour" or a motoric "flavour" of the IOR effect. There are several studies with results consistent with the motoric "flavour" of IOR (a speed-accuracy trade-off) in which the eye movement system was not explicitly engaged (but may not have been actively inhibited either). The purpose of this investigation was to repeat one of these experiments (Ivanoff & Klein, 2001) while ensuring that the eye movement system was actively inhibited. In this project, eye movement was monitored through the usage of eye tracking equipment and software. If the motoric patterns reported by Ivanoff and Klein (2001) were generated because they did not monitor eye movements and their participants were not actively inhibiting the oculomotor system, then when we did encourage such active inhibition, a perceptual/attentional flavour of IOR should be obtained (i.e., the speed-accuracy trade-off will be eliminated). This is precisely what we found.

- P-23 Ashley Jollie Supervisor: J. Ivanoff
Endogenous Inhibition Of Attention?

Nonpredictive peripheral cues elicit performance benefits from the exogenous form of attention at short cue-target onset asynchronies (CTOAs) and costs from inhibition of return (IOR) at long CTOAs. Predictive central cues, on the other

hand, only evoke the endogenous form of attention. Here we explore whether regions of space can be inhibited when they are unlikely to contain the target. Our results suggest that regions of space can be endogenously inhibited, and that this effect is unlikely to be completely explained by endogenous attentional biases.

P-25 Samantha Burns Supervisor: K. Guérard
The Effect Of Predictability On Spatial Memory

Several factors are known to influence short term retention of spatially distributed information. Notably, spatial complexity, defined as the number of path crossings during a sequential presentation of dots, reduces recall performance. Parmentier and Andrés (2006) suggested that the effect of spatial complexity could be explained by the predictability of the location of the upcoming stimulus. For instance, locations in simple sequences would be more predictable than locations in complex sequences. The objective of the present study was to investigate the effect of predictability on spatial memory. Participants were required to recall a series of seven dots presented in different spatial locations on a computer screen in the same order in which they had appeared. In half the trials, an arrow appeared in each dot indicating the location of the next item to be presented, whereas in the other half no arrow appeared within the dots. Results showed that when to-be-remembered locations were predictable, spatial memory was improved.

P-27 Vivian Eng Supervisor: A. Newman
Frequency Effects On Free Recall Of Four-Character Sequences In Mandarin Chinese

With the advent of corpus linguistics and increasingly accessible computing power, it is now possible to examine frequency counts from large corpora and to use that as a basis for modeling probabilistic language learning. However, there is a gap in current body of research with using free recall paradigms to look at frequency effects in non-Indo-European languages such as Mandarin Chinese. Using frequency data from a web corpus, we examined the frequency effects on immediate free recall. We hypothesized that high frequency four-character sequences would predict better recall, and that there would be a serial position effect based on observations from previous free recall paradigms. 10 native Mandarin Chinese speakers were recruited to undergo an experiment following procedures used by Tremblay and Baayen (2010), but with Chinese stimuli instead. Verbal responses were coded as binomial "correct" vs. "incorrect", and linear mixed-effects regression with a logistic link function was used to model position, block and logit frequencies on probability of recall. Contrary to our hypothesis, no significant main effect of logit frequency on recall was found, nor were we able to demonstrate a primacy effect, although a highly significant recency effect was present in our best-fitting model. We suggest future directions for data analysis to use generalized additive mixed-effects modeling to account for possible non-linear relationships.

unmanipulable objects however, was equally disrupted by articulatory suppression. These results suggest that verbal rehearsal is a critical mechanism in object memory and is involved to the same extent during the retention of both manipulable and unmanipulable objects.

- P-33 Alison Petten Supervisor: M. Courage
Individual Differences In Media Multitasking Among University Students

Media multitasking is an increasingly common occurrence that is currently being studied extensively. This has been defined by Ophir, Nass and Wagner (2009) as a person's consumption of more than one item or stream of content, at a time. Previous research suggested that focusing one's attention on more than one task resulted in lowered performance on at least one of the tasks. The present study examined the frequency of media use and media multitasking among 49 students at Memorial University and gave each student a multimedia index score. Each student's index was compared to their academic average. The results showed that the higher media multitaskers reported higher academic averages.

- P-35 Ralph Redden Supervisor: R. Klein
Safe Or Out: Does The Law Of Prior Entry Affect Judgments At First Base?

This project investigated the law of prior entry in a practical real-world setting. We examined close plays at first base in baseball, a scenario in which accurate performance demands that the umpire monitor two events simultaneously – both the ball's arrival at the glove and the runner's arrival at the base. However, umpires are trained to attend the ball when making calls at first base, risking potential bias. To explore this scenario empirically, we placed participants in the role of an umpire while watching video clips of close plays at first base taken from MLB games during the 2007 and 2008 seasons. Further, different groups of participants were provided different focus instructions: some were instructed to attend the ball/glove, some were instructed to attend the runner/base and others were not provided any focus instructions. ANOVA resulted in no significant difference between conditions for point of subjective simultaneity (PSS) [$F(2, 30) = 0.615, p = 0.547$] or just-noticeable difference (JND) [$F(2, 30) = 0.416, p = 0.664$]. Allik & Kreegipuu (1998) suggest that prior entry effects could be more difficult to detect by presenting stimuli in motion. Future research is implored to also consider Spence's (2007) unity assumption as an implication for the effect of prior entry in real-world scenarios.

- P-37 Erica Rudolph Supervisor: M. Eskritt
The Influence Of Data Structures On Problem Solving Performance

This study investigated the influence that different data structures have on problem solving performance. Undergraduate students ($N=33$) explored the multiple layers that represent a problem using three data structures: the stack, the queue, and the array. They completed each structure three times, and the same type of algorithms needed to be performed on each data structure: searching and sorting the numbers from one to ten. The purpose of this study was to (a) determine if some data structures are easier to solve initially compared to others, and (b) assess the rate of improvement across all structures. The stack was found to be the most difficult structure, followed by the queue and then the array. The time taken to complete each trial significantly increased across all three structures; however, no effect was found for number of turns. Implications of these findings and directions for future research are discussed.

Social Psychology (Part 1)

- P-39 Sara Ghandeharian Supervisor: K. Bleile
Physical Appearance And Personality: Differences Of Gender On The Perception Of Personality Based On Physical Attractiveness

Physical appearance can have an effect on how an individual's personality is perceived. Three variables will be assessed in the present study: attractiveness of target, gender of target, and gender of participant. Attractiveness of target and gender of the target will be within-subject variables and gender of the participant (male or female) will be between subjects; a mixed three way factorial Analysis of Variance (ANOVA) was used in order to analyse the data. There was only one significant main effect which was attractiveness of the target, $F(1, 28) = 55.704$, $p < .001$, with attractive targets ($M = 16.667$) having more positive characteristics attributed to them versus unattractive targets ($M = 12.383$). The only significant two way was attractiveness of the target and gender of the target. The three way interaction (gender of participant x gender of the target x attractiveness of the target) was not significant. Simple effects were calculated for further analysis of the interaction of gender of target and attractiveness. Results shows that the difference in attractiveness was significant for male targets, $F(1, 28) = 79.26$, $p < .0001$; the difference in attractiveness for female targets was not significant, $F(1, 28) = .189$, $p > .05$. The results do not fully support the hypothesis all participants, both male and female, will give more positive characteristics for both genders of the attractive targets compared to the unattractive targets. However gender of the participant will vary in regards to the amount of positive personality characteristics they give towards the attractive targets with male participants giving female targets the highest overall score vs. the scores given by female participants. Therefore male

participants will associate even more positive characteristics for those female attractive targets.

- P-41 Nicole Shea Supervisor: M. Grant
Judgments About Political Candidates As A Function Of Their Attractiveness, Age, And Gender

This study examines the influence of the physical attractiveness of candidates as well as their age and gender on people's voting decisions. Participants in Phase 1 rated the physical attractiveness or estimated the age of candidates who ran in the 2011 Canadian Federal Election. In Phase 2, different participants saw candidate pictures, grouped by political riding. For each riding, some participants were asked to select the candidates they would be most and least likely to vote for while others were asked to select those who they thought received the most and fewest votes. Results supported a physical attractiveness stereotype; participants preferred and predicted greater success for attractive candidates. Older candidates as well as male candidates were thought to have received the most votes but age and gender did not influence participants' preferences. Both preferences and predictions accurately reflected the percentages of votes that candidates received in the election.

- P-43 Kendra J. McLaughlin Supervisor: E. Perunovic
What Is Love? Content Analysis Of Fairy Tales In Two Cultures

Fairy tales are assumed to entail the relational values and morals of the culture in which they were written (Brislin, 1980). Love has been found to be a crossculturally universal emotion and sentiment (Jankowiak & Fisher, 1992). In the present study, we examined cultural differences and similarities in their historical representations of fantasy love, in order to comprehend how contemporary patterns in love relationships may have been influenced by these cultural products. Specifically, we utilised a sample of fairy tales as a cultural product to examine themes of Happily Ever After, and analysed the Eastern and Western representations of love, romantic relationships and marriage. An open-ended content analysis was used to explore the presence and frequency of various aspects of love. Results highlight cultural influences on the initiation, progression, influences on, and demonstrations of love. Several cultural differences were found, though not always in the predicted directions, particularly in terms of the temporal orientations of the tales. Implications of the findings are discussed.

Abstracts: Poster Presentations

(Session 2)

Clinical Psychology

- P-02 Shawn Seeley Supervisor: L.D. Hamilton
Assessing The Effects Of Cognitive Distraction On Psychological And Genital Arousal Concordance In Men

Men without sexual difficulties have been found to have high concordance rates between psychological and genital measures of sexual arousal (Abrahamson, Barlow, & Abrahamson, 1989) that can be decreased by introducing cognitive distraction (Van Lankveld, & Van den Hout, 2004). The present study aimed to examine concordance rates for genital and psychological arousal and the modification of this relationship by the introduction of cognitive distraction. Participants were 23 sexually functional males recruited from the community. Following random assignment to no distraction, low distraction, and high distraction conditions, participants were presented with visual sexual stimuli and their genital and psychological arousal levels were recorded. Distraction was induced by means of an auditory distraction task that was presented concurrently with the sexual stimuli. The high distraction condition successfully reduced concordance rates, while the low distraction condition increased concordance rates. These results indicate that for sexually functional males, there exists an optimal level of cognitive distraction, rather than an effect that is entirely deleterious.

- P-04 Lindsay Sherwood Supervisor: L.D. Hamilton
Effects Of Sexual Excitation And Inhibition On Arousal With And Without Distraction

The SIS/SES scale measures an individual's propensity to become sexually aroused based on a dual processes model of inhibitory and excitatory neurophysiological systems. The present study aimed to examine how different SIS/SES scores influence physiological and psychological arousal in response to erotic videos in both control and distraction conditions. Participants completed the SIS/SES questionnaire and then watched an erotic video. During the erotic video, participants were either exposed to a distracting task or not (control group). Corresponding arousal was measured using penile/ vaginal plethysmographs (genital arousal) and an arousometer (psychological arousal). As predicted, results showed a significant negative relationship between SIS2, however no significant results were yielded for the SIS1. The SES was positively correlated with arousal in the control condition, but contrary to the hypotheses, actually changed to negatively

correlated with arousal in the distraction condition. These results demonstrate support for the inhibition portion of the scale but brings important questions about the excitation portion into question. The limitations of this study, particularly its' low power, could be responsible for the lack of significance of SIS1 findings and the interesting findings about the SES.

- P-06 Erin Bursey Supervisor: S.E. Francis
The Roles Of Parental Anxiety Sensitivity, Communication, And Affective Responsiveness In Child Anxiety Sensitivity

Anxiety sensitivity (AS) refers to the fear of the symptoms of anxiety, whether it is the belief that these symptoms will have physical, psychological, or social consequences. Etiological research has shown that AS has both an individual and an environmental component. In terms of environmental influences, there appears to be a relationship between parent AS and child AS. In the present study, the goal was to examine the role of two aspects of parenting that could be influencing that relationship: communication and affective responsiveness. AS was assessed in a non-clinical sample consisting of 6 male and female children (ages 8-15), and their parent(s). The Family Assessment Device was also administered to the parents to obtain measures of parent communication, and affective responsiveness. Inconsistent with the expected results, parent AS does not appear to be related to child AS in the sample. There also appears to be no relationship between parental communication and affective responsiveness and child AS. Possible reasons for these results (including methodological issues with the present sample) are discussed.

- P-08 Sarah Oates Supervisor: P. Mezo
How Does Social Phobia And Social Interaction Anxiety Differ When Compared In A Virtual Reality Exposure Therapy Paradigm?

Social anxiety is a persistent fear of social situations in which the individual is exposed to unfamiliar people, or possible scrutiny by others (American Psychiatric Association [APA], 2000). It is thought to consist of two dimensions of anxiety: social phobia, or fear of being scrutinized, and social interaction anxiety, or the distress one may feel when meeting and talking with others (Mattick & Clarke, 1998). While social anxiety has been related to group size (Latane & Harkins, 1976), limited research has analyzed whether social phobia and interaction anxiety are differentially elicited during public speaking, depending on group size. The present study addressed this question using a multimethod approach, and a virtual reality (VR) paradigm was used to implement exposure. Participants also completed the SPS, SAIS, and SPIN inventories (SPS and SAIS; Mattick & Clarke, 1998, SPIN; Connor et al, 2000) in order to assess for social anxiety and its related dimensions. Physiological measurements (Blood Volume Pulse and Skin Conductance) were also taken. Results suggested that in general, there was greater physiological arousal when speaking in front of a larger group ($t = 2.29, p = .048$). However more

specifically, individuals high in social phobia were more anxious in the large group. For individuals high in social interaction anxiety, there was no significant difference in their levels of physiological arousal in the large versus small group. This study provides further insight into the relationship between social anxiety and group size, as well as increases our understanding of VR exposure interventions for specific anxieties during clinical practice.

- P-10 Sebastian Pacey-Smith Supervisor: B. D'Entremont
Modelling Interventions For Improving Play Skills In Preschoolers With Autism Spectrum Disorders

This study used a multiple baseline design to compare the effectiveness of live modelling versus video modelling for improving pretend play skills in four pre-school aged boys with autism. This study also compared the effectiveness of using a single modelling exemplar versus multiple modelling exemplars to improve pretend play skills. Participants viewed both live and videotaped play scenarios of the same adult model playing with a toy set. All children showed an increase in modelled actions and comments during the treatment phase for both modelling conditions, compared to baseline levels. Results suggest that live modelling may be more effective at promoting toy generalizations; however, both modelling conditions were inconsistent at showing setting generalization and maintenance of the acquired skills. There were also no conclusive findings differentiating the effectiveness of the number of exemplars used. Allowing for mastery of modelled play skills and limiting all external distractions may be used to further increase pretend play skills.

- P-12 Kathryn Malcolm Supervisor: S. Ronis
Association Of The Quality Of Social Support For Parents And Youth Adaptive Functioning

Research examining the association between perceived social support of parents and youth adaptive functioning has mainly focused on the development of young children, rather than adolescents (Assel et al., 2002; Crnic & Low, 2002). The present exploratory study examined the associations between adaptive functioning of 16 adolescents and the perceived levels of emotional and practical social support for parents from friends, as well as from family. Parents of these adolescents completed self-reports on emotional distress and social support, as well as rating measures on their adolescents' emotional and behavioural adjustments (e.g., adaptive skills, social skills, emotional bonding with peers, functional communication skills). Adolescents completed self-reports on emotional and behavioural adjustments (e.g., relations with parents, emotional bonding with peers, self-esteem, self-reliance). Bivariate correlation results revealed that there was a positive relationship between practical support from friends for parents and adolescent reports of emotional bonding with peers. The results also showed that there was a positive relationship between emotional support for parents from family

and adolescent functional communication and social skills. Hierarchical regression results revealed that perceived levels of practical and emotional social support for parents from family were significant predictors of social skills in adolescents. Findings from this study contribute to our understanding of possible parental mediating factors associated with youth adaptive functioning.

- P-14 Nicole Power Supervisor: K. Fowler
The Moderating Effect Of Social Support Types On The Psychological Well Being Of Individuals At High Risk For Eating Disorders

A better understanding of the precise mechanisms by which social support exerts its influence on health and well-being is important in the pursuit of a more efficacious treatment of eating disorders. The current study examined the effects of 4 subtypes of social support (tangible, affective, positive social interaction and emotional or informational support) and age on the well-being of individuals at high risk for eating disorders within the general adult Canadian population. Data were collected from the Canadian Community Health Survey (CCHS; Statistics Canada, 2002). Six hundred and fifty-one participants who expressed or displayed symptoms or ill concerns associated with eating attitudes and behaviours, according to the Eating Attitudes Test (EAT), were included in this study. The results indicate that, overall, increases in age, emotional/ informational support and positive social interaction significantly predicted increases in well-being. Increased levels of tangible support were related to significant decreases in well-being. The potential implications of these findings, in addition to suggestions for future research are discussed.

- P-16 Chantal Gautreau Supervisor: S. Stewart
Daily Diary Study: Moderating Effect Of Enhancement Drinking On Within-Person Associations Between Positively Aroused Mood And Drinking Behaviour

The revised model of drinking motives consists of five factors referring to reasons people consume alcohol: social, enhancement, coping-depression, coping-anxiety, and conformity. Alcohol consumption in enhancement motivated (EM) drinkers is positively associated with positive affect, but directionality of this relationship is unknown in EM drinkers' daily lives. Moreover, it has not been determined whether highly aroused positive affect is more strongly associated with alcohol consumption for EM drinkers than low arousal positive affect. This distinction would be predicted given findings that EM drinkers are more sensation seeking. The present study examined potential moderating effects of EM on within-person associations of daily affect and daily drinking behaviour. We hypothesized that EM would moderate the effects of high arousal positive mood on daily alcohol consumption. 104 University students (mean age = 20.56 years; 74% female) participated in a daily diary study for 21 days, answering 8 daily surveys, measuring daily affect and daily alcohol consumption using palm pilots. Using Hierarchical Linear Modeling analyses, EM were a marginally significant ($\gamma_{23} = 0.038$, $SE = 0.023$, $p = 0.090$) positive moderator of

the relation of daily high arousal positive moods and daily drinking, but not a significant moderator of the relation of daily low arousal positive moods and daily drinking ($\beta_{23} = -0.012$, $SE = 0.016$, $p = 0.440$). This ongoing study will test if this moderating effect becomes significant with a larger sample and/or when controlling for day-of-the-week effects. These results help further characterize EM drinkers, and could be incorporated into targeted treatments and prevention programs for alcohol problems in EM drinkers.

- P-18 Timothy Wingate Supervisor: J. Tomes
A Multivariate Prediction Of Academic Performance

Understanding the determinants of academic achievement has implications for psychologists, teachers, and students alike. The current study aimed to identify some of these determinants, and to grade their value. Undergraduate students completed online questionnaires that assessed verbal aptitude (as a proxy for intelligence), personality, and study strategies. Results suggested that, of the factors considered, motivation, cognitive aptitude, and test strategies best determined academic performance.

- P-20 Tomi Gbeleyi Supervisors: E. Perunovic & J. Schriver
Personality & Discrimination: The Role Of Self-Control

Previous research (Perunovic, Wilson & Perunovic, 2009) shows that big-five conscientiousness is positively associated with prejudice against people with stigmas perceived to be controllable (e.g., overweight people or students with poor grades), but not associated with prejudice towards people with uncontrollable stigmas (e.g. different racial groups). In addition, the association between conscientiousness and prejudice towards stigmas perceived as controllable was mediated by the perceived self-control of the persons being judged. This study extends previous research by experimentally manipulating state self-control using a self-regulation depletion task, to assess its effect on discrimination against controllable stigma groups. Results showed that self-regulation depletion resulted in significantly less discrimination towards the controllable stigma groups, significantly more discrimination towards the uncontrollable stigma group, and no difference in discrimination towards the stigma irrelevant groups.

Applied Psychology

- P-22 Dayna Bell Supervisor: A. Birt
Emotional Impact Of Media Violence

The “Exploring Humanitarian Law” program is a series of teaching modules designed for junior high and high school students by The International Committee of the Red Cross. The media (i.e., photos, videos) shown in the teaching modules is graphic, violent, and emotional, and has not been tested for emotional impact. The

goal of the study was to test the immediate and potential long-lasting emotional impact of the photos and videos as well as test for characteristics of specific individuals who are more likely to be sensitive/desensitized to the media shown in these modules. The study was completed in two parts: (1) participants viewed both a photo collage and a video, rated how they felt, and answered questions pertaining to variables that have been found to be associated with level of sensitivity to media violence (e.g., anxiety, misconduct, bullying, abuse, etc.); (2) Approximately 2 weeks later participants completed questions online about how they continued to feel about the photos and video. The results indicated that the video media had a more significant impact than the photo collage. Furthermore, those who thought about the video more frequently from Time 1 to Time 2 found the media more emotionally arousing two weeks later than those who rarely thought about it. Females were more sensitive to the media, while those with histories of fighting and physical abuse were desensitized. Further testing needs to be conducted on the materials used in these teaching modules and special attention should be paid to individuals who are likely to be most and least affected by the content.

P-24 Katelynn Carter-Rogers Supervisors: M. Prosser & S. Smith
 Innocence In My Eyes From The Impression Of Your Face: Make It Or Break It
 Decisions

Studies show that first impressions can influence subsequent evaluations. These kinds of evaluations have predicted the outcomes of U.S. congressional elections in 2000, 2002, and 2004 (Todorov, Mandisodza, Goren, & Hall, 2005). Although they measured impressions on a variety of traits including attractiveness, trustworthiness, and likability, the trait that predicted the election outcome was competence. This finding suggests that a person's attributes that are important for specific decisions are inferred from facial appearance and influences decisions. The purpose of this study is to determine whether similar evaluations can successfully predict jury decisions in real-life trials. Specifically, we hypothesize that judgments of competence and trustworthiness will correlate with the real-world jury decisions in the absence of evidence. 129 participants were presented with photographs: first the photographs were presented individually. They were again presented side by side and asked to rate trustworthiness, competence, attractiveness, and whether the person was guilty of a crime. After attractiveness was controlled, results showed that participants accurately predicted the outcomes of the innocent photographs from their impression of trustworthiness and competence in the faces of those photographed. These results can increase our knowledge of ways in which first impressions guide important decisions, specifically jury decisions. Given the fact that first impressions in a lab setting demonstrates that people will make snap judgments about other that are based on non-relevant variables before hearing the evidence in a case.

- P-26 Carissa Collins Supervisor: B. Snook
Examining The Effectiveness Of A Modified Liverpool Protocol

The study investigated the effectiveness of a modified Liverpool interview protocol as a potential short interview method for frontline police officers. Twenty university students (mean age = 22.40 years) viewed a short video and were then interviewed with either the original Liverpool interview protocol or a version modified by the researchers to see how much information they could remember. Analysis showed no significant differences between the two groups of participants, $t_{(18)} = 1.88$, $p = 0.08$. However, there was a moderate effect size, $d = 0.49$ suggesting that the original Liverpool interview protocol is better in a practical setting. The largest effect was seen for action variables, $d = 1.00$, with the location variables producing a moderate effect, $d = -0.74$, showing that the modified version produced more recall of these variables. The limitations of the current study, along with implications for policing practices, are discussed.

- P-28 Sarah Fanning Supervisors: D. Seguin & D. Thompson
Overcoming Emotional Obstacles: The Effects Of Neuroticism And Emotionality On Eyewitness Memory

Being in a negative emotional state prior to witnessing a crime has been found to enhance eyewitness memory. This is in accordance with the theory of emotional congruence, which asserts that information is easiest to remember when it elicits an emotional response similar to our current state of emotionality (Storbeck & Clore, 2011; Rusting, 1999). Few studies have examined the circumstances under which these mood-congruent effects are overcome by other factors. This study is an examination of the idea that scoring high in a certain personality trait that is more inclined towards pessimism (namely, neuroticism) may overcome the detrimental effects of mood-incongruency and improve performance on a recognition memory task. Emotion was elicited using an imagination-emotion-induction technique and memory for an image depicting criminal activity was measured with a multiple-choice recognition test. Results indicated that neither emotional state nor neuroticism affected memory accuracy. These findings are surprising considering the existing literature; methodological limitations and implications for further research are discussed.

- P-30 Stephanie Hennessey Supervisor: K. Covell
Gender Constancy And Genital Knowledge In Children Aged 3 To 7 Years

Understanding the ways in which children develop, categorize, and conserve gender is integral to their development and functioning in their respective environments. Considerable debate pertains to the age at which children acquire the ability to identify and conserve gender based on surface transformations and on biological

knowledge. Interviews with 23 children, aged 3 to 7 years, were conducted using modified gender constancy and genital knowledge questions from Slaby & Frey (1975) and Bem (1989). No significant relationship was found between age and results on Slaby & Frey's (1975) gender constancy measure ($r = 0.12$, $n = 23$, $p = 0.20$). 74% of participants scored an 81% or higher on the gender constancy measure, indicating that children as young as 3 years old displayed the ability to conserve their own gender. Gender constancy scores for female participants were not significantly different from the scores of male participants ($t(21) = 0.12$, $p = 0.87$).

P-32 Kathleen Kennedy Supervisor: N. Garon
Cooperation And Behavioural Inhibition In Preschoolers

Previous research has shown that during the preschool years, children develop the ability to cooperate with others. According to Kochanska (1994) if the child's temperament has allowed for the proper development of conscience the child will be able to control the aggressive behaviour, using behavioural inhibitory control and instead engage in a more prosocial behaviour such as cooperation. The present study aimed to investigate the development of cooperation across preschool using a turn-taking task. The study also examined whether or not increasing the attractiveness of the task would have an effect on response-potency of the children. The final goal was to determine if there was an association between performance on the turn-taking task and scores on the Behavioural Inhibition Scale. The tasks were performed on preschoolers ages 2, 3 and 4. The results revealed a main effect of age, which demonstrated cooperation increasing across the preschool years. A second main effect of task-type was also found and indicated that as the attractiveness of the task increased the participants' ability to cooperate decreased. No significant difference was found between performance on both the low and high inhibition turn-taking task and the scores on the Behavioural Inhibition Scale.

P-34 Erin Lynch Supervisor: C. Peterson
Childhood Amnesia: A Longitudinal Study

This study is part of a small number of studies investigating childhood amnesia in children. The current study is an extension of prior research in which children were asked for their three earliest memories. Participants consisted of three age groups (4-5, 6-7 and 8-9 year old at time of initial interview) of ten children each, and they were asked for their six earliest memories. Older children (6-7 and 8-9 year olds) were more likely to spontaneously provide memories that were given in prior interviews than younger children (4-5 year olds). Moreover, older children were also more likely to recognize memories they gave in the prior 2 interviews than the younger children.

- P-36 Erin Sheppard Supervisor: C. Holmvall
Examining Coping As A Moderator Of The Relationship Between Customer
Mistreatment And Employee Well Being

Mistreatment is an ongoing issue within the organizational domain that has been explored by academics over the past few decades (Boswell & Olson-Buchanan, 2004; Frone, 2000; Harlos & Axelrod, 2005; Skarlicki, Jaarsveld & Walker, 2008; Sliter & Jex, 2011). Mistreatment is a broad category that includes bullying, incivility, social undermining, mobbing, aggression, emotional abuse, victimization, interpersonal conflict, and abusive supervision (Barling, Kelloway, & Frone, 2005; Hershcovis, 2010). Recently, workplace aggression and incivility research has expanded to include organizational outsiders (e.g., customers) and has examined the experiences of employees within the service industry (Ben-Zur & Yagil, 2005; Grandey, Dickter, & Sin, 2004; Jex, Sliter, Wolford, & McInnerney, 2010). Customer-service employees report experiencing greater mistreatment from customers than from co-workers or supervisors (Grandey et. al, 2007). Moreover, both customer aggression and incivility have been linked to negative outcomes including greater absenteeism, lower job satisfaction, greater emotional exhaustion, and burnout (Yagil, 2008). Thus far, little is known about how employees cope with customer mistreatment. The current study examined coping styles as a potential moderator of the relationship between customer mistreatment (aggression and incivility) and employee psychological strain. Specifically, we examined active coping and planning (subsets of problem-focused coping), seeking social support for emotional reasons and positive reinterpretation (subsets of emotion-focused coping) and rumination. We expected that problem-focused coping, and to a lesser extent emotion-focused coping, would lessen the relationship between mistreatment and strain, and that rumination would worsen this relationship. Only partial support for our hypotheses was found.

Social Psychology (Part 2)

- P-38 Shelagh Abriel Supervisors: D. Seguin & D. Thompson
Mindfulness, Attitudes, And Willingness To Sacrifice For The Environment

The failure of attitudes to align with actual pro-environmental behaviour is an important issue in today's need for sustainable lifestyles. One potential bridge for this attitude-behaviour gap is an individual's willingness to sacrifice for the environment (WTS). The current study investigated this concept and its relation to three known predictors of pro-environmental behaviour (PEB): mindfulness (MIND), and the pro-environmental attitudes of ecocentrism (ECO) and anthropocentrism (ANTHRO). Participants ($N=50$) completed an online questionnaire measuring MIND, ECO, ANTHRO, WTS, and PEB. Correlational analyses revealed no relationship between MIND and WTS or PEB; no relationship between ANTHRO and WTS or PEB; no relationship between ECO and PEB; but a strong relationship

between ECO and WTS, and between WTS and PEB. Hierarchical multiple regression analysis indicated that ECO accounted for an increase of 27.2% total variance of WTS, over ANTHRO alone. An effect of age may have resulted in underscoring of PEB. MIND is thought to be more important to PEB than to WTS, though WTS is also important to PEB. Attitudes such as ECO may have more influence on WTS than cognitive processing aids such as MIND. Further research should focus on specific mediation models of WTS, as well as potential generational effects of consumer culture on today's youth and their PEB.

- P-40 Venus Bali Supervisors: D. Seguin & D. Thompson
Assessing Social Conformity On Individual Decision Making Tasks Under Time Pressure

Do people make decisions differently based on the presence of authority figures and time pressure? The influence of social conformity and presence of an authority figure were explored in the context of time pressure. It was hypothesized that participants under time pressure would conform based on authority figure influence more often than those not under time pressure, since those under time pressure would not have adequate time to weigh out all their options. Participants were 51 undergraduate students who read 10 statements and answered associated questions. Of the 10 statements, only 3 were of interest (i.e., they were of a moral/ethical nature and had no correct answer); the other seven served as distractor statements. Results indicated no significant effect of time pressure or authority presence on performance. Methodological limitations and avenues for future research are discussed.

- P-42 Marie-Louise Donohoe Supervisors: D. Seguin & D. Thompson
Relationship Between Dance, Seating Position, And Self-Esteem

The effects of dance type and seating position on self-consciousness were examined. Previous research has treated dance largely as a homogenous group; therefore, potential differences between different types of dance instruction (ballet vs. hip-hop) were explored. It was hypothesized that ballet would elicit higher self-consciousness after dance instruction than would hip-hop, and front seating positions would elicit less self-consciousness than would middle and back positions. Participants ($N=33$) were randomly assigned to the ballet or hip-hop condition and chose their seating positions during instruction. Self-consciousness was measured before and after dance instruction using the Revised Self-Consciousness Scale (Sheier & Carver, 1985). Results indicated a significant interaction between dance type and pre- and post-dance instruction such that the effects of dance type on self-consciousness changed before and after dance instruction. Limitations about the study and future directions for research are discussed.