DEPARTMENT OF

CLINICAL HEALTH PSYCHOLOGY

10th ANNUAL RESEARCH DAY

Thursday, April 18, 2019

Department of Clinical Health Psychology
Max Rady College of Medicine
University of Manitoba
## Schedule at a Glance

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Pamela Holens, PhD

1:03 Brief large-group CBT compared to waitlist for patients awaiting anxiety disorders assessment and treatment

Gillian M. Alcolado, PhD & Patricia Furer, PhD

In healthcare there are often long waits for cognitive-behavioural therapy (CBT). In a tertiary care anxiety clinic, we evaluated the effectiveness of a brief, large-group CBT program (QuickStart) as a stepped care offering. We expected that as compared to a naturalistic control group, patients who received QuickStart would have decreased anxiety symptoms by intake. A chart review was conducted on patients who attended the two sessions of QuickStart (n = 612). We compared them to patients who were not offered this program (Care as Usual, CAU; n = 106). All patients completed the Depression Anxiety Stress Scale (DASS-21) and a patient feedback questionnaire at intake. The two groups did not differ on symptom severity at intake as assessed by independent samples t-tests conducted on the anxiety, depression, and stress subscales of the DASS-21 (all p’s > 0.05). Use of CBT while on the waitlist (as reported on the patient feedback questionnaire) was higher in the QuickStart cohort, t(336) = 2.47, p = .014, d = .37. There was greater attendance at intake for QuickStart patients (80%) as compared to CAU patients (60%). While there were no differences in symptoms, QuickStart encouraged intake attendance and CBT use.

Caitlin Blaney, MA, Ruth Ann Marrie, MD, PhD, Carol A. Hitchon, MD, Corey Mackenzie, PhD, Pamela Holens, PhD, Renée El-Gabalawy, PhD

Anxiety is prevalent in rheumatoid arthritis (RA), and is associated with poorer functional outcomes (i.e., lower employment, increased disability, reduced quality of life). However, the
impact of anxiety in RA is incompletely understood, as is the potential benefit of a mental health intervention targeting anxiety. To understand the mental and physical health impact of an online cognitive-behavioural therapy (CBT) intervention for RA. The target sample (n=38, 89% female) consists of participants recruited from the longitudinal immune-mediated inflammatory disease (IMID) cohort, established in Manitoba, and the Central Canada Early Arthritis Cohort (EAC) Survey, established in Winnipeg. Recruited patients had clinically significant anxiety symptoms at baseline. The intervention, entitled The Worry and Sadness Program, consists of a 6-module online program, completed over the course of ten weeks. A sub-sample (n=22, 86% female) has completed the intervention, thereby providing preliminary pre- and post-intervention data. Feasibility results will be presented. Using within subjects mean comparisons, pre- post-scores on anxiety and depressive symptoms, pain, fatigue, and quality of life will also be discussed. This study will provide preliminary 2019 Clinical Health Psychology Research Day support for a feasible intervention aimed at improving health outcomes in anxious adults with RA.

1:25 A Randomized Controlled Trial of an Online Chronic Pain Treatment for Military, Police, and Veterans

Pamela L. Holens, PhD & Jeremiah Buhler, MA

Chronic pain is a serious health issue in Canada. Individuals who experience chronic pain often find it difficult to attend in-person treatment sessions for a variety of reasons including pain flare-ups, discomfort when travelling, pain-induced avoidant behaviours, and time constraints. Online treatments have the potential to assist individuals who would otherwise have difficulty attending in-person treatment sessions. This study evaluated the efficacy of an online acceptance-based behavioural treatment (ABBT) for chronic pain designed for military, police, and veteran populations. Participants (n = 29) were randomized into either a treatment condition or wait-list control condition, and asked to complete a battery of measures which underscore the key facets of the fear-avoidance model of chronic pain. A series of 2 x 2 mixed model ANOVA’s revealed statistically significant Time x Condition interactions for pain disability, kinesiophobia, and pain acceptance, as well as statistically significant pre- to post-treatment simple main effect contrasts for pain catastrophizing, kinesiophobia, and pain acceptance. For those in the treatment group, no significant changes in scores were found between post-treatment and two-month follow-up, suggesting that treatment gains were maintained over this period of time. Overall, the results support the efficacy of the ABBT treatment for chronic pain for military, police and veterans.

1:36 Association between water fluoride, urinary fluoride, and attention deficit hyperactivity disorder (ADHD) in sample of Canadian youth

Julia Riddell, MA, Ashley Malin, PhD, Hugh McCague, PhD, David Flora, PhD, Christine Till, PhD

Exposure to fluoride has been linked with increased prevalence of attention deficit hyperactivity
disorder (ADHD) in the United States and symptoms of inattention in Mexican children. We examined the association between fluoride exposure and attention outcomes in a nationally representative sample of Canadian children. Participants were ages 6 to 17 years old. As part of the Canadian Health Measures Survey, urinary fluoride concentrations were measured in spot samples and adjusted for specific gravity \((\text{UF}_{SG}, n=1877)\), and water fluoride concentrations were measured in household tap water samples \((n=980)\). Diagnosis of ADHD was significantly associated with the level of tap water fluoride such that a 1 mg/L increase in tap water fluoride increased the odds of diagnosis 5.8 times \((B = 1.76, 95\% \text{ CI for OR} = 1.59 \text{ to } 21.2, p = .008)\). \text{UF}_{SG} predicted an increase on the SDQ-HI such that a 1 mg/L increase in \text{UF}_{SG} was associated with a 0.32 increase in symptoms \((B = 0.32, 95\% \text{ CI} = 0.04 \text{ to } 0.77, p = .03)\). Further, living in a fluoridated region corresponds to an increase of 0.34 on the SDQ-HI, \(B = 0.34, 95\% \text{ CI} = 0.08 \text{ to } 0.61, p = .01\).

1:47 Multi-Method Adherence Measurement in an Evidence-Based Parenting Program

**Dana Sheshko BA, BEd, Catherine M. Lee PhD, Marie-Hélène Gagné PhD**

Using a multi-method, multi-informant approach, I will present preliminary data from a new self-report measure of adherence in the implementation of the Triple P—Positive Parenting Program. This tool was designed to encourage practitioners to track adherence and modifications to the program’s content and invites them to reflect on the degree to which they promote self-regulation. Fifty-two practitioners from 16 community agencies submitted 370 self-reports; a subset of 25 practitioners submitted 63 recordings to permit ratings by a coding team. Results support the feasibility of using the self-report tool in community settings and suggest adequate reliability and convergent validity in this sample. The comparison of ratings across practitioner self-report and external coders yielded low correlations between informants. This may highlight the different contexts from which informants identify and report on adherence, rather than a measure of reporting accuracy. Examination of these differences may provide a useful springboard to discuss adherence to a parenting program as implemented in community agencies.

1:58 Mental health sequelae in the perioperative period: A preliminary examination of perioperative dissociation, postoperative delirium, and posttraumatic stress

**Jordana Sommer, BA(Hons), Kristin Reynolds, PhD, Corey Mackenzie, PhD, Rakesh Arora, MD, Eric Jacobsohn, MD, Renée El-Gabalawy, PhD**

Surgical patients may experience negative mental health sequelae including perioperative dissociation, postoperative delirium (POD), and postoperative posttraumatic stress (PTS). Perioperative dissociation and POD appear to exhibit similar characteristics and are both established predictors of PTS. The aims of this study are to: (1) identify whether symptom overlap exists between perioperative dissociation and POD and (2) examine how perioperative dissociation and POD are associated with PTS, in a surgical sample of older adults. Participants \((N = 181)\) from the Electroencephalography Guidance of Anesthesia to Alleviate Geriatric Syndromes (ENGAGES-
CANADA) study completed self-report measures of perioperative dissociation (at discharge) and posttraumatic stress (at 30-day follow-up), and trained interviewers assessed POD severity using the confusion assessment method-severity (CAM-S) measure on postoperative days 0-5. Principal components analysis examined statistical overlap between perioperative dissociation and POD at the symptom level and multiple linear regressions examined associations with PTS. Results did not support statistical overlap between perioperative dissociation and POD. In unadjusted models, only perioperative dissociation was positively associated with PTS; however, in the most stringent model, only POD was associated with PTS. Results highlight important differences between perioperative dissociation and POD and their unique associations with PTS.

2:09 Randomized controlled trial of the effectiveness of online treatment for insomnia in cancer survivors and evaluation of treatment-related side-effects

Cheryl Harris, PhD, Norah Vincent, PhD, Keith Wilson, PhD, Jason Tay, PhD, Depeng Jiang, PhD, Trinda Penniston, BA, Alicia Duval, BSc

Cancer is a significant public health problem with more than 500 Canadians diagnosed each day. Although survival rates have been increasing (Canadian Cancer Society, 2013), patients are frequently left with significant insomnia, fatigue, and pain (Hoffman et al., 2007). Studies show that 20 to 28% of cancer survivors report chronic problems with sleep (Savard & Savard, 2007; Savard et al., 2011). From patients’ perspectives, there can be a lack of informed consent regarding the side effects of cancer treatment, including impairments in sleep. This research presents early data on a two-group, randomized, controlled, double-blind trial. The two groups are a 6-week online cognitive behavioral treatment for insomnia and a 6-week online sleep hygiene education treatment. Participants were 55 adults with stage 1-3 cancer and DSM 5 insomnia disorder. The primary endpoint was insomnia complaint as measured using the Insomnia Severity Index (ISI). Measured side-effects included cognitive problems, physical pain, depression, anxiety, and fatigue as measured using online questionnaires. Using a repeated measures analysis of variance, results showed that insomnia severity was not significantly different between the two conditions $F(2, 45) = .34, p = .72$, and that both conditions resulted in significant improvement in sleep $F(2, 45) = 48.00, p < .0001$. Analysis of side-effect profiles showed that side effects of fatigue $F(4, 17) = .38, p = .82$, impaired cognition $F(4, 16) = .96, p = .45$, pain $F(4, 17) = .61, p = .66$, depression $F(4, 16) = 1.89, p = .16$, and anxiety $F(4, 15) = .64, p = .64$ did not differ between the two conditions. Analysis of graphical data showed that there were some temporary disruptions associated with sleep restriction/stimulus control interventions for pain complaints. With low power to detect differences, early data suggests that online insomnia cognitive behavioral interventions are effective in improving sleep among cancer survivors with relatively few and mild side-effects. Temporary fluctuations in pain may be associated with particular CBT-I interventions and individuals would benefit from more information about this. Further data collection is necessary to confirm these findings. This research has the potential to help patients recovering from cancer be informed of this evidence based approach and fully informed about potential side-effects.
2:20  Prospective cohort study examining psychosocial outcomes in individuals who participate in transition-related medical interventions.

Robin Westmacott, PhD, Reece Malone, DHS, MPH, CSES, CST, ACS, Matt Caron Francino, Med

Research is lacking on outcomes (both psychosocial and physical) related to access to medical interventions for gender transition (hormone replacement therapy and transition-related surgeries). Only a handful of studies have examined mental health and quality of life longitudinally after HRT and transition-related surgery. Most of these studies have been conducted in European settings, which often require participants to attend mental health counseling throughout their transition process, thus confounding results. Furthermore, outcome variables chosen have often been indirectly relevant (e.g., measuring quality of life with the SF-36, which is appropriate for medical populations including cancer and chronic pain, but not relevant for gender dysphoria). The proposed project is a prospective cohort study of trans clients in the transgender health program at Klinic Community Health Centre (the sole location in the province for accessing transition-related surgeries). Klinic has a dedicated pre and post-surgical clinic that provides specialized health services to trans adults. The goals of this study are to assess whether and how clients change over time as a result of participating in HRT and transition-related surgery on the following outcomes: gender-related variables (minority stress, gender dysphoria, body image), mental health (depression, anxiety, emotion regulation), and quality of life.

2:30  Coffee Break & Poster Presentations

Buhler Atrium
Basic Medical Sciences

3:10  Keynote Address:
    Research is a Team Sport: A focus on PTSD & suicide prevention
Dr. Jitender Sareen, B.Sc., M.D., FRCPC
Theatre B, Basic Medical Sciences
#1 Does “Quick Start” give patients a "Head Start" on treating their anxiety? Data from a large group brief CBT psychoeducational program

Gillian M. Alcolado, PhD & Patricia Furer, Ph.D.

Cognitive-behavioral therapy (CBT) is an effective intervention for anxiety disorders in disorder-specific and trans-diagnostic treatments. Stepped care treatments for anxiety decrease wait times, increase recovery rates, and are cost-effective. In our tertiary care anxiety disorders clinic, we investigated whether a CBT stepped care offering, “Quick Start to Overcoming Anxiety” (QS) could be effective for trans-diagnostic anxiety presentations. QS is a large-group 2-session psychoeducational intervention for anxiety offered to patients on our lengthy waiting list. Content includes information on anxiety disorders and an introduction to core CBT strategies. Patients who attended QS between 2011 and 2016 (N = 414) completed the Depression Anxiety Stress Scale (DASS) at QS and again a few months later at their individual diagnostic intake assessment. Preliminary analyses with repeated measures ANOVAs using time (pre- and post-QS) as the independent variable and each of the DASS subscales (anxiety, depression, and stress) as dependent variables are promising. Results revealed significant main effects of time for all three analyses, such that symptoms of anxiety, depression, and stress all decreased over time, F(1, 181) = 111.08, p < .001, F(1, 181) = 17.14, p < .001, and F(1, 181) = 109.93, p < .001, respectively. Interestingly, patients who attended both QS sessions had significantly lower anxiety scores at the diagnostic intake assessment visit than those who only attended one session, t(182) = 2.51, p = .01. Importantly, type of anxiety disorder (the majority had social anxiety [23.8%], generalized anxiety [21.8%] or panic disorder [18.8%] as a primary diagnosis) did not affect outcome, F(11,166) = 1.59, p = .11. Links between self-reported usage of specific CBT strategies and symptom change will also be reviewed. Implications for both the effectiveness and utility of brief CBT for trans-diagnostic anxiety in the context of public health care settings will be discussed.

#2 The importance of importance: Maladaptive beliefs about the importance of memory and their relationship to checking symptoms

Gillian M. Alcolado, PhD & Adam S. Radomsky, PhD

Checking is one of the most common symptoms of obsessive-compulsive disorder (OCD). Distorted cognitions known to contribute to compulsive checking include inflated responsibility, overestimation of threat, and more recently, maladaptive beliefs about one’s memory. Previous psychometric research on the measure used to assess beliefs about memory (the Beliefs about Memory Inventory [BAMI]) revealed that the scale was comprised of two factors: beliefs about memory ability (MA) but also beliefs about the importance of memory (MI). This study examined
MI further in order to better understand its relationship to checking symptoms. Methods: The original BAMI contained only five items pertaining to MI. Therefore, additional potential items pertaining to MI were developed in order to strengthen this factor/subscale. The BAMI with its additional MI items (BAMI-2) was administered to a large sample of undergraduate students (N = 447). Other self-report measures assessing relevant constructs (e.g., OCD symptoms, beliefs including inflated responsibility and overestimation of threat) were also administered. An exploratory factor analysis was conducted to determine the factor structure of the BAMI-2. A hierarchical linear regression was conducted to discover whether MI predicted checking symptoms over and above inflated responsibility/overestimation of threat beliefs. Results: As expected, the BAMI-2 contained the same two factors as previously found, MA and MI, and evidenced strong psychometric properties. Furthermore, as predicted, inflated responsibility/overestimation of threat was predictive of checking symptoms (step 1 of the regression). Importantly, however, MI (step 2 of the regression), predicted checking symptoms over and above these beliefs, ΔR² = 0.1, F(1,444) = 4.40, p = 0.04. The final model accounted for 44% of the variance. Conclusions: Beliefs about the importance of memory are predictive of checking symptoms, even after accounting for inflated responsibility/overestimation of threat beliefs. Implications for the inclusion of MI in theory and treatment of compulsive checking will be discussed.

#3 Development of a group cognitive-behavioral therapy intervention for perinatal anxiety

Patricia Furer, PhD, Gillian Alcolado, PhD, Kristin Reynolds, PhD & Elizabeth Hebert, PhD

Anxiety symptoms are common during pregnancy and the postpartum period but it is only in recent years that there has been much focus in the literature on the issue of anxiety disorders in the perinatal period. However, there is little guidance in how to best treat perinatal anxiety, and only one published study on adapting group cognitive-behavioural therapy (CBT) for anxiety to the perinatal population (Green, Haber, Frey, & McCabe, 2015). The current investigation aimed to develop and evaluate a group perinatal CBT intervention suitable for delivery in a tertiary care anxiety clinic. Session content includes psychoeducation regarding anxiety during the perinatal period, self-care and pregnancy/postpartum, goal-setting, exposure strategies, nurturing the relationship with baby, challenging negative thoughts, and relapse prevention. A workbook has been developed which provides information and homework exercises in each of these areas. Female patients with varied primary symptom presentations, including generalized anxiety, social anxiety, panic, health anxiety and obsessive-compulsive disorder, either pregnant or within 12 months postpartum, were invited to participate. This group consisted of 6 weekly 1.5-hour sessions. Three groups have been run to date (n = 13), with a projected total N of 25. Participants completed the Perinatal Anxiety Stress Scale (PASS) and the Edinburgh Postnatal Depression Scale (EPDS) at the first and last group sessions. A preliminary analysis was conducted using a repeated measures ANOVA with time as the within-subjects independent variable and total PASS scores as the dependent variable. Results revealed a significant main effect of time, such that anxiety scores decreased from pre- to post-group, F(1,12) = 19.54, p = .001, partial eta squared = .62, with mean scores decreasing from the severe range, to the mild-moderate range, for anxiety symptoms. A similar analysis conducted on the EPDS revealed the sample pattern of results, F(1,12) = 8.35, p = .01, partial eta squared = .41. Treatment acceptability was measured using the Treatment
Acceptability/Adherence Scale (TAAS) and administered to a subset of participants. Results revealed that the treatment was highly acceptable. Descriptive feedback on the group experience was also solicited via post-group anonymous feedback questionnaires. Participants expressed that they most appreciated the perinatal focus, and that meeting with other mothers normalized their anxious feelings. Thus, there is good preliminary evidence that patients with mixed-anxiety presentations can have good success in a group setting, and moreover, that this treatment is highly acceptable to patients. Results will be discussed within the context of CBT models of and treatments for perinatal anxiety.

#4 Examining the Mental Health of Mild Cognitive Impairment and Dementia Caregivers

Brooke Beatie, MA, Corey Mackenzie, PhD, Lesley Koven, PhD & Kristin Reynolds, PhD

Family members and friends providing care for people with mild cognitive impairment (MCI) have a high risk of becoming dementia caregivers. Despite this association, there is a dearth of studies focusing on caregivers’ mental health at different cognitive impairment stages. The aims of this study were (1) to compare mental health outcomes among MCI caregivers, dementia caregivers, and a control group and (2) to examine factors that help explain differences in mental health between the caregiver groups. We analyzed secondary data from a hospital-based memory clinic in Winnipeg, Manitoba, Canada. This dataset includes information on n= 25 MCI caregivers, n= 58 dementia caregivers, and n= 17 controls (family members/friends of individuals who were assessed without evidence of memory impairment). Participants completed a battery of self-report questionnaires assessing depression and anxiety (depression and anxiety subscales; Depression Anxiety Stress Scale 21), caregiver burden (Zarit Burden Inventory), perceived memory and behaviour problems of the care-recipient (MBPs; Revised Memory and Behaviour Problems Checklist-reaction scale), and relationship satisfaction (Relationship Satisfaction Scale). We used MANOVAs to examine the mental health profiles across the three groups (i.e., control, MCI, dementia) and mediation analyses to examine factors that affect differences in mental health between MCI and dementia caregivers. There was a significant multivariate effect of group on the mental health outcomes (i.e., depression, anxiety, and caregiver burden) and significant group differences emerged for each outcome (Pillai’s Trace = .35, F(8, 188) = 5.06, p < .001; partial η² =.18). Post hoc analyses revealed no statically significant differences in mental health between the control group and MCI caregiver group. Statistically significant (p < .05) differences emerged in anxiety, depression, and caregiver burden in the control group compared to the dementia caregivers’ group. There were also statistically significant differences in anxiety and caregiver burden in MCI caregivers compared to dementia caregivers. Findings from mediation analyses suggest that MBPs (path ab = 4.24, CI = 1.54, 7.54) and relationship satisfaction (path ab = 3.28, CI= 0.84, 6.16) mediate the relationship between caregiver type (MCI vs dementia) and caregiver burden. MBPs and relationship satisfaction did not mediate the relationship between caregiver type and depression or anxiety. Progressively from MCI caregiver to dementia caregiver, there is an increase in anxiety and caregiver burden; caregiver burden may worsen because of increasing MBPs of the care recipient as well as a reduction in relationship satisfaction. This information contributes to researchers and clinicians understanding of the evolution of burden and additional negative mental health outcomes in individuals transitioning from MCI to dementia caregiver.
#5 Choice, Coercion, and/or Muddling Through: An Exploration of Older Manitobans’ Experiences Seeking Psychological Care

Lindsay (Huska) Berard, MA, Corey MacKenzie, PhD, Kristin Reynolds, PhD, Lesley Koven, PhD, Genevieve Thompson, PhD & Brooke Beatie, MA

Although decades of research have been devoted to help-seeking behaviors, reasons why many older adults with mental health problems do not seek professional help are not fully understood. The Network Episode Model (NEM) (Pescosolido et al., 1998) suggests three unique pathways into treatment: choice (willingness), coercion (force/pressure) or muddling through (‘drifting around,’ or having someone take-over). The current study examined two objectives: 1) classifying older Manitobans’ pathways into treatment using the NEM, and 2) exploring whether the pathways are distinct treatment journeys, or if they are best conceptualized as co-occurring (i.e., choice, coercion, AND muddling through). Secondary qualitative data (N = 35) was analyzed with content analysis. Findings highlight the majority entered care choicefully. The remaining participants (40%) entered care through muddling. No participants were coerced. For objective two, findings demonstrated that few participants (28.6%) had a help-seeking journey representative of one pathway type. A period of muddling through was included in all but two participants’ journeys to care and muddling often preceded choice. These findings demonstrate that help-seeking is not always a direct pathway to treatment. For clinicians, having an effective way to describe pathways to treatment could provide beneficial information in understanding clients and developing treatment conceptualizations.

#6 Suicide and Quality of Life in Co-occurring Generalized Anxiety Disorder and Chronic Pain Conditions

Caitlin Blaney, MA, Jordana Sommer, BA (Hons) & Renée El-Gabalawy, PhD

Despite the prevalent co-occurrence of generalized anxiety disorder (GAD) and chronic pain conditions, there is a dearth of literature dedicated to mental health related correlates in this comorbidity. To examine suicidality and quality of life in comorbid GAD and chronic pain conditions. We analyzed data from the 2012 Canadian Community Health Survey-Mental Health supplement (CCHS-MH; N = 25,113). Past year GAD was assessed using a structured clinical interview and chronic pain conditions (i.e., arthritis, migraine, back pain) were determined through participants’ self-report, as was suicidality (i.e., thoughts, plans, attempts) in the past year and mental and physical health related quality of life (HR-QOL). Multiple regression models examined associations between comorbid GAD and chronic pain conditions. In the most stringent models, compared to GAD alone, comorbid GAD and migraine was associated with increased odds of suicide ideation and plans (adjusted odds ratio (AOR) range: 1.29-1.39, p < .05), whereas comorbid GAD and arthritis was associated with increased odds of suicide attempts (AOR = 4.10, 95% CI [1.05-16.01], p < .05). Additionally, comorbid GAD and chronic pain was associated with reduced physical HR-QOL (unstandardized beta (b) range: -0.35 - -0.63, p < .01), whereas only comorbid GAD and migraine was associated with reduced mental HR-QOL (b = -0.39, 95% CI [-0.64 - -0.14],
2019 Clinical Health Psychology Research Day $p < .01$), compared to GAD alone. Idiosyncratic differences in the consequences of comorbid chronic pain for those with GAD were supported.

### #7 The Impact of a DBT Skills Group for Military and Veterans with PTSD and Borderline Personality Traits

**Pamela Holens, PhD, Jeremiah Buhler, MA, Adair Libbrecht, Alyssa Romaniuk, & Kristen Klassen, PhD**

Eighteen individuals with a military background who were diagnosed with Posttraumatic Stress Disorder (PTSD) and borderline personality traits participated in Dialectical Behavior Therapy Skills Groups (DBT-SG) at an outpatient clinic. The purpose of the current study was to examine outcomes of this treatment using both quantitative and qualitative data. Quantitative data was collected using the Borderline Evaluation of Severity over Time (BEST) questionnaire, which was administered at pre-treatment and post-treatment. Qualitative data was collected using an open-ended questionnaire designed for the purpose of this study. Paired samples t-tests indicated that participants engaged in significantly more positive coping behaviors at post-treatment compared to pre-treatment, and increases in positive coping behaviors were correlated with decreases in negative thoughts and feelings among participants, despite no change in negative coping behaviors. Qualitative data reflected a general sense that participants found the program to be beneficial and intended to continue using the skills they had learned. This small sample study lends support to the idea that DBT-SG may be an efficacious treatment for military personnel with PTSD and borderline personality traits.

### #8 Predictors of Completion of an Online Chronic Pain Management Program for Military and Police

**Pamela Holens, PhD, Kristen Klassen, PhD, Jeremiah Buhler, MA & Michelle Paluszek, BA**

Chronic pain is a serious health issue in Canada, and an even greater issue in military populations. Individuals who experience chronic pain often find it difficult to attend in-person treatment sessions for a variety of reasons including pain flare-ups, discomfort when travelling, and pain-related avoidance behaviours. These factors serve as a detriment to the individual’s functioning by maintaining the pain cycle and preventing the individual from engaging in previously enjoyed activities. The purpose of this study was to discern the characteristics of treatment non-completion in clients who participated in an online acceptance-based behavioural treatment (ABBT) for chronic pain designed specifically for military, police (RCMP), and veterans of these forces. 57 participants engaged in the online component of the program. Of these, 34 completed at least 5 of the 8 online modules. Demographic data, pre-treatment scores on symptom measures of posttraumatic stress, depression, and chronic pain, as well as treatment format were entered into a hierarchical logistic regression analysis. Participants who were older and who attended optional group sessions were more likely to complete the program. Implications of these findings and future directions for research are discussed.
A Patient-informed Qualitative Program Evaluation of an Internet-based Chronic Pain Treatment.

Pamela Holens, PhD, Adair Libbrecht, Michelle Paluszek, BA, Alyssa Romaniuk, Brent Joyal, Jeremiah Buhler, MA & Luigi Imbrogno, BSc

An innovative, Internet-based chronic pain treatment tailored to a military and police population was developed using Acceptance and Commitment Therapy (ACT) as a model. The treatment was recently evaluated in randomized controlled trial and found to be superior to treatment as usual in terms of increasing patients’ levels of pain acceptance, decreasing their pain-related catastrophizing, and decreasing their levels of kinesiophobia. In an effort to further increase the efficacy of the treatment, we enlisted patient feedback about the program through a series of focus groups. Participants who had previously completed the online treatment were recruited to participate in a series of focus groups designed to qualitatively evaluate the treatment and offer suggestions for improvements for future versions of the program. Participatory Action Research methodology was used to conduct this study and data were examined using interpretive thematic analysis. Three main themes arose: suggestions for improving the technological “friendliness” of the online program, suggestions for improving the sequencing of content, and suggestions for greater tailoring of the content to the sensitivities of the target population. As an example of the latter, participants suggested removal of the “attending your own funeral” exercise from the values module due to sensitivities around death and dying. Future directions, based on patient feedback, are outlined.

Efficacy of an Online Chronic Pain Treatment for Military and Police: A Randomized Controlled Trial

Pamela Holens, PhD, Jeremiah Buhler, MA, Adair Libbrecht, Brent Joyal, Luigi Imbrogno, BSc & Alyssa Romaniuk

Chronic pain is a serious health issue in Canada. Individuals who experience chronic pain often find it difficult to attend in-person treatment sessions for a variety of reasons including pain flare-ups, discomfort when travelling, pain-induced avoidant behaviours, and time constraints. These factors, if not addressed through appropriate treatment, serve as a detriment to the individual’s functioning by maintaining the pain cycle and preventing the individual from engaging in previously enjoyed activities. Online treatments have the potential to assist individuals who would otherwise have difficulty attending in-person treatment sessions. This study evaluated the efficacy of an online acceptance-based behavioural treatment for chronic pain designed for military, police, and veteran populations. Participants (n = 29) were randomized into either a treatment condition or wait-list control condition, and asked to complete a battery of measures which underscore the key facets of the fear-avoidance model of chronic pain. A series of 2 x 2 mixed model ANOVA’s revealed statistically significant Time x Condition interactions for pain disability, kinesiophobia, and pain acceptance, as well as statistically significant pre- to post-treatment simple main effect contrasts for pain catastrophizing, kinesiophobia, and pain acceptance. Preliminary analyses
showed that of the four dependent variables, only pain acceptance levels were maintained at the 3-month follow up period. Issues with this finding are discussed further. PTSD and depression scores at baseline were found to be significant predictors of change scores for pain acceptance. Overall, the results support the efficacy of the ABBT treatment for chronic pain for military, police and veterans.

#11  Effectiveness of Large-Scale Psychotherapy Skills Interventions in a Crisis Population: The Final Results

Jessa Hogarth, MA, Brenna Henrikson, MA  James Bolton, MD, You Liang, PhD, Christine Henriksen, PhD  Maxine Holmqvist, PhD, Jitender Sareen, MD & Natalie Mota, PhD

Individuals undergoing a mental health crisis often lack rapid access to pertinent mental health resources. The present study evaluated the effectiveness of two large-scale group psychotherapy classes in reducing symptoms of anxiety, depression, and emotion dysregulation among individuals presenting to a mental health crisis center. Each psychotherapy program aimed to address notable presenting concerns of crisis center patients. Cognitive Behavior Therapy with mindfulness (CBTm) is a 4-week program used to target maladaptive beliefs, unhelpful behaviors, and goal-setting, while Managing Difficult Emotions is an 8-week program adapted from Dialectical Behavior Therapy (DBT) targeting increased distress tolerance and emotion regulation. The present study utilized a pre-post design to analyze the effectiveness of these interventions in reducing patients’ symptomatology on four dimensions: (1) general psychological distress (DSM V Cross-cutting Measure; APA, 2013); (2) anxiety (Generalized Anxiety Disorder 7-Item Scale; Spitzer et al., 2006); (3) depression (Patient Health Questionnaire – 9; Kroenke & Spitzer, 2002); and (4) emotion regulation (Difficulties in Emotion Regulation Scale; Gratz & Roemer, 2004). Preliminary results illustrate that both psychotherapy classes were effective in reducing all four categories of patient symptomatology over the course of the programs. Program completion was associated with greater improvements in patient symptomatology, with each program exhibiting notable strengths. This research provides preliminary empirical support for the utilization of large-scale psychotherapy skills classes to reduce mental health symptoms among individuals who have undergone a recent mental health crisis. Upon replication, these results can be used to inform mental health programming for crisis populations.

#12  Implementation of Dialectical Behavioral Therapy-inspired Skills Class in Rural Manitoba

Jonathan Jetté, PhD, Jolene Kinley, PhD, Sandra Thompson, PhD & Natalie Mota, PhD

Dialectical Behavioral Therapy is the leading treatment approach for borderline personality disorder. Recently, DBT skills have been used for treatment of many other mental health concerns with positive outcomes. This poster presents an adaptation of the Dialectical Behavioral Therapy skills offered in a class setting to individuals with diverse mental health concerns. Managing Difficult Emotions is an eight-week class based on DBT skills. It has been offered four times in a community mental health program in rural Manitoba since 2014. The presentation will outline the main components of the intervention and symptom change. Symptom measures that were
collected pre and post classes include the Difficulties in Emotion Regulation Scale (DERS), DSM-5 self-rated level 1 cross cutting symptom measure, Patient Health Questionnaire (PHQ-9), and Generalized Anxiety Disorder 7 (GAD-7). Results will be discussed in terms of future implications for policy and service delivery in the context of the class-based format, diverse mental health concerns, and in rural settings.

#13 Impact of Intensive Care Unit (ICU) diary on delirium occurrence in the ICU and prevalence of distressing and delusional memories one week following discharge

Maia Kredentser, PhD, Jitender Sareen, MD, Joe Bienvenu, MD, PhD, Nicole Marten, RN, Marcus Blouw, MD, MHA, Rakesh Arora, MD, PhD & Kendiss Olafson, MD, MPH

To examine whether caregiver use of diaries during an Intensive Care Unit (ICU) admission modifies patient delirium or self-reported distressing and delusional memories at 7 days post-ICU discharge. Using data collected in a previously published pilot randomized controlled trial of ICU diaries and psychoeducation, we compared the prevalence of distressing and delusional memories at one-week post ICU discharge using the ICU Memory Tool (ICU-MT). In the diary intervention, families and staff contributed to the diary, then the diary was offered to patients 30-days post-ICU discharge. Delirium was assessed twice per day using the Confusion Assessment Method- ICU. We used chi-square analysis to compare the presence of delirium in patients receiving the diary intervention vs. those who did not, and the relationship between presence of delirium and distressing and/or delusional memories. A p-value of <0.05 was consider significant. Forty-five of the 58 randomized participants survived their ICU admission and completed the ICU-MT; 27 randomized to a diary and 18 randomized to no diary. Overall 75% (34/45) participants experienced ICU delirium for a mean of 3.8 days (SD 3.5) with delirium prevalence in 67% of diary participants compared to 89% of participants not receiving diary intervention (p=0.09). At one-week post ICU discharge, almost all participants (95.6%) recalled some aspect of their ICU stay, while 91% reported distressing memories. Presence of ICU delirium was not associated with difference in self-reported distressing memories (delirium 91.2% vs no delirium 90.9%, p=1.0) or delusional memories (delirium 55.9% vs no delirium 36.4%, p=0.3). There was also no difference between diary and non-diary participants in self-reported distressing memories (diary 88.9% vs non-diary 94.4%, p = 0.5) or delusional memories (diary 55.6% vs non-diary 44.4%, p=0.5). Caregiver participation in ICU diaries does not appear to impact ICU delirium occurrence or the prevalence of distressing and/or delusional memories in patients one week following ICU discharge.

#14 Cyberbullying in Canada: Prevalence, Risk & Protective Factors, and Evidence-Based Interventions

Julia Riddell, MA, Debra Pepler, PhD & Wendy Craig, PhD

Cyberbullying is a significant problem in Canada, with high prevalence rates that have remained stable over the past decade. Further, efforts to prevent cyberbullying are not consistent across Canada, partly due to the fact that there is still much to learn about this important social problem.
We conducted a thorough literature review on the prevalence of cyberbullying and cybervictimization in Canada, as well as known risk and protective factors. We also assessed the state of the evidence on cyberbullying prevention and intervention programs in Canada. We discuss the links between traditional bullying and cyberbullying; and suggest that the most effective strategy to address cyberbullying is to focus on creating healthy relationships with peers, teachers, family members and neighbors. Results of this review have multiple implications for researchers, including areas for future study and suggestions on how to reduce methodological differences between studies. Further, we highlight the need for researchers and educators to develop standardized assessment and regular monitoring of cyberbullying in order to advance research and support children who may be vulnerable. This research is essential in developing effective prevention and intervention programs for cyberbullying, and to continue developing effective legislation.

#15 The risky behavior PTSD symptom: Associated maladaptive behaviors and psychiatric correlates in a nationally representative sample

Jordana Sommer, MA, Renée El-Gabalawy, PhD, Ateka Contractor, PhD, Nicole Weiss, PhD & Natalie Mota, PhD

Trauma exposure and posttraumatic stress disorder (PTSD) are associated with a variety of risky or maladaptive behaviors (e.g., substance misuse, risky sexual behaviors, overeating). In recognition of this association, a new PTSD criterion was added to DSM-5, “reckless or self-destructive behavior” (criterion E2); however, previous research has questioned its validity and utility. The aims of this study are to examine associations between (1) maladaptive behaviors and criterion E2 endorsement and (2) criterion E2 endorsement and psychiatric conditions, in a nationally representative sample of trauma-exposed adults. We analyzed data from the 2012-2013 National Epidemiologic Survey on Alcohol and Related Conditions (N = 36,309). Participants self-reported on traumatic lifetime events and 11 maladaptive behaviors. The Alcohol Use Disorder and Associated Disabilities Interview Schedule (AUDADIS-5) assessed lifetime DSM-5 psychiatric diagnoses. Among trauma-exposed participants (n = 23,936; 68.6%), multiple logistic regressions examined associations between (1) maladaptive behaviors and criterion E2 endorsement, and (2) criterion E2 endorsement and psychiatric conditions, in a nationally representative sample of trauma-exposed adults. We analyzed data from the 2012-2013 National Epidemiologic Survey on Alcohol and Related Conditions (N = 36,309). Participants self-reported on traumatic lifetime events and 11 maladaptive behaviors. The Alcohol Use Disorder and Associated Disabilities Interview Schedule (AUDADIS-5) assessed lifetime DSM-5 psychiatric diagnoses. Among trauma-exposed participants (n = 23,936; 68.6%), multiple logistic regressions examined associations between (1) maladaptive behaviors and criterion E2 endorsement, and (2) criterion E2 endorsement and psychiatric conditions. All regressions were adjusted for sociodemographics and number of PTSD symptoms (excluding E2), and regressions examining psychiatric conditions also adjusted for other psychiatric conditions. Among trauma-exposed adults, 5.7% endorsed criterion E2. After adjustment, those who engaged in any of the maladaptive behaviors (e.g., risky driving, substance use, reckless spending/gambling, risky sexual behaviors, self-harm, suicide attempt; reference = no engagement in that risky behavior) had increased odds of endorsing criterion E2 (adjusted odds ratio (AOR) range: 1.22-4.42), with the exception of binge eating (AOR = 1.22, 95% CI [0.94-1.57], p = .129), and the strongest effect for substance use (AOR = 4.42, 95% CI [3.80-5.15], p < .001). In addition, in the fully adjusted model, those who endorsed criterion E2 (reference = no endorsement) had increased odds of PTSD (AOR = 2.06, 95% CI [1.61-2.63], p < .001), substance use disorders (AOR = 2.71, 95% CI [2.25-3.25], p < .001), and personality disorders (AOR = 1.73, 95% CI [1.47-2.04], p < .001). Endorsement of criterion E2 is associated with a range of maladaptive behaviors and specific psychiatric conditions. These results support the validity and utility of this newly added PTSD criterion.
Acceptance and commitment therapy (ACT) postulates that human suffering results when efforts to avoid distressing thoughts, feelings, memories, and physical sensations, such as pain, fail to provide long-lasting relief. ACT aims to facilitate the development of psychological flexibility (i.e., the ability to notice interfering thoughts, emotions, and bodily sensations and choosing not to struggle with them in the service of living consistently with one’s personally chosen values) using mindfulness and acceptance-based strategies and the principle of “successful working.” The Group ACT for chronic pain program began in early 2015 and since then, 75 patients have attended treatment as a part of 11 groups. Group treatment is offered over 8 weekly sessions, with follow-up sessions at 6- and 12-weeks, post-treatment. Primary outcomes include pain disability, depression, and both physical and mental health quality of life. Early evidence suggests that this program results in significant pre-to post-treatment improvements on all primary outcomes, with the observed improvements being maintained, and possibly enhanced, throughout both follow-up periods. The implications of these findings will be discussed, considering their limitations, as well as future directions for enhancing assessment and ongoing program development.

Acceptance and Commitment Therapy (ACT) is fundamentally guided by the Relational Frame Theory and the Psychological Flexibility Model (PFM). The PFM consists of 6 interrelated processes: acceptance and cognitive defusion (Openness), contact with the present moment and self as context (Awareness), and connecting with personal values and willingness and commitment (Engagement). There has been a general movement toward process-based cognitive behavioral therapy assessment and treatment, including the measurement of PFM processes within the field of contextual behavioral science. This study investigated PFM processes (i.e., acceptance, cognitive defusion, contact with the present moment (mindfulness), valued living, and committed action) in an open trial/pilot study of group ACT for chronic pain. In addition, another process variable, self-compassion, was studied. The results of this study indicated that pain acceptance, mindfulness, and valued living scores improved significantly over the course of treatment. During the follow-up assessments, positive changes in cognitive defusion and self-compassion were also observed. Further, several significant associations were found between pre- to post-treatment improvements in psychological flexibility (i.e., pain acceptance, cognitive defusion, and committed action) and pre-treatment to follow-up improvements in primary outcome variables (i.e., pain disability, depression, and physical and mental health quality of life). The implications of these findings, the limitations of the study, and areas for future investigation will be considered.
#18 Feasibility and Effectiveness of Breathe Easy: A program for Positive Airway Pressure (PAP) Adherence in Obstructive Sleep Apnea

Norah Vincent, PhD, Jessica Bernston, MA & Trinda Penniston, BA

Obstructive Sleep Apnea (OSA) is a health condition affecting large numbers of people. In Canada, 5.4 million (22%) adults report either being diagnosed with sleep apnea (3%) or report symptoms indicating they are at high risk of having undetected sleep apnea (19%) (Canadian Community Health Survey, 2009). PAP is an effective treatment for OSA and the more frequently and consistently patients use PAP, the more benefits they can typically expect. However, estimates suggest that only 65-80% of patients use the treatment for a desirable amount of time per night. In addition, studies have found that 8-15% of adults completely refuse to engage in treatment. Thus, difficulties initiating and maintaining PAP use are common. The aims of this pilot study were to determine the feasibility and effectiveness of a 6-week cognitive behavioral program (Breathe Easy) in increasing adherence to positive airway pressure (PAP) among those with sleep apnea hypopnea disorder. The primary end point in this case series design was PAP usage obtained directly from patient’s PAP machine and through a self-report PAP log. Drops in pressure > 5 cm of the preset therapeutic pressure and lasting longer than 10 seconds will be documented as a mask-off event. Adherence was calculated as the mean nightly use during the period of study. Results from two adult outpatients who completed the protocol illustrated an improvement in adherence from baseline, with reduced claustrophobia and improved nocturnal sleep. These results are encouraging and suggest further exploration into Breathe Easy.

#19 Follow-up on Efficacy of Sleeping Without Pills (SWOP), an Online Drug Tapering Program

Norah Vincent, PhD, Janelle Quintana, BSc & Trinda Penniston, BA

Insomnia disorder is a problem of significant magnitude, impacting 10% of the population. One of the treatments for this condition is pharmacotherapy which is intended to be a very short-term intervention. Regrettably, many of those with insomnia use hypnotics for a lengthy period of time to treat this problem which leads to a variety of deleterious outcomes. Tapering from such medications is most effective using CBT and prescribed tapering. This research provides longer-term follow-up data examining the efficacy of an online program, Sleeping without Pills (SWOP), in reducing hypnotic usage, improving sleep and daytime function. This was investigated in a six-week two group randomized controlled trial. The sample comprised of 58 adults with chronic insomnia. One group received online CBT with drug tapering (SWOP), while the other group received treatment as usual (self-monitoring using a sleep diary). The primary endpoints were mean reduction in hypnotic dosage and % abstinence, while the secondary endpoints were improvements in sleep and daytime fatigue. Using a linear mixed model analysis, results showed that those in receipt of SWOP did not significantly reduce their drug dosages from the pre-treatment to follow-up period $F(2, 27)=2.30$, $P=.12$ ($M_{SWOP_{fu}}=.27$ mg, $SE=.14$, $M_{TAU_{fu}}=.19$mg, $SE=.14$) although there was a trend in this direction. Results reflect an increase in usage in the SWOP group from post treatment to follow-up period. At follow-up, there was no significant
difference between the groups in terms of abstinence from medication (43% of SWOP participants and 67% of controls were abstinent \( X^2 (1,56)=.74, P> .05 \). More support to maintain drug withdrawal may be necessary for online CBT.

#20 Narrative Identity in Learning-disabled University Students and its Relation to Self-compassion and Acceptance

David Willoughby, PhD & MaryAnn Evans, PhD

University students with an LD represent a growing fraction of the student population. While past research has focused on cognitive aspects of living with an LD, less has focused on social-emotional factors, how individuals reflect on their LD experiences, and the roles these may play in students’ ability to regulate their learning. This study investigated the relations between self-compassion, self-acceptance of an LD, self-regulated learning, and narrative identity in 20 university students who self-identified with possessing an LD. All participants completed an online self-report questionnaire and a life story interview which was coded for themes of disability acceptance, agency, and meaning-making; and high, low, and turning point events. Academic events were most prominent in the narratives. Self-regulated learning was uncorrelated with any of the life story themes. However, self-compassion positively correlated with themes of disability acceptance and meaning making and self-acceptance of disability correlated negatively with agency themes.
Keynote Address

Dr. Jitender Sareen, B.Sc., M.D., FRCPC
Professor and Head, Department of Psychiatry
Max Rady College of Medicine
University of Manitoba

Research is a Team Sport: A focus on PTSD & suicide prevention
3:10 – 4:30 pm
Theatre B, Basic Medical Sciences

Learning Objectives:
• To learn the importance of building high quality interdisciplinary teams to develop & conduct research
• To learn about traumatic stress and PTSD research
• To learn about suicide risk and prevention strategies

Dr. Sareen is the Head of the Department of Psychiatry at the University of Manitoba, Medical Director for the Winnipeg Regional Health Authority (WRHA) Mental Health Program and Provincial Co-Lead of the Mental Health Addictions Team for Shared Health. Dr. Sareen has been supported by numerous national and local peer-reviewed grants in the areas of military mental health, indigenous suicide, and homelessness. He currently holds the Canadian Institutes of Health Research Foundation Grant (2015-2022) on Defining the Longitudinal Course, Outcomes, and Treatment Needs of Vulnerable Canadians with Posttraumatic Stress Disorder. Dr. Sareen has published over 350 peer-reviewed publications in the areas of traumatic stress, anxiety disorders, indigenous suicide, psychiatric neuroimaging, and military mental health. He has received several awards for excellence in clinical research (Canadian Psychiatric Association, Canadian Institutes of Military and Veterans Health Research Forum and the Academy of Cognitive Therapy).