CARLETON UNDERGRADUATE
Journal of Science

PURE

Psychology
Undergraduate
Research Event

April 10, 2025

3:00 pm – 4:15 pm

Carleton University | Department of Psychology

CARLETON UNDERGRADUATE Journal of Science

PROGRAM SCHEDULE

3:00 pm – 4:00 pm	**Poster Session**
4:00 pm	**Closing Remarks**

For any questions, please email:
pure@carleton.ca

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LETTER FROM THE UNDERGRADUATE CHAIR

The Psychology Undergraduate Research Event (PURE) began as a way for fourth-year Honours Psychology students in the Department of Psychology at Carleton University to come together and celebrate their research achievements by presenting findings from their Honours Thesis Projects. PURE provides Honours Thesis students with an opportunity to showcase their knowledge, demonstrate their newfound research skills, and discuss their passion and commitment to scholarly inquiry.

Each year, I am both proud and inspired by the richness and diversity of the research presented by our Honours Thesis Projects. Student projects span a wide range of topics in Psychology including those from Forensics, Health, Developmental, Social and Personality, and Cognition. Under the guidance of a faculty member and their labs, thesis students learn to design, implement, analyze, and report on findings from an independent research project. They have opportunities to immerse themselves in literature specific to their theses, engage in data collection (e.g., conduct surveys, work with children, youth, and adults, measure heart rate and eye gaze, lead focus groups, etc.), and put those statistical analysis skills to good use! This is an invaluable experience for our graduating students that rigorously prepares them for success in their post-university careers.

I want to acknowledge the tremendous efforts put forth by the faculty in our department who work tirelessly to provide mentorship and guidance to our dedicated Honours Thesis students. Your support is instrumental to the success of the thesis program, and I can personally see how your efforts have fostered the intellectual growth and research capabilities in our students. Thank you for your commitment to excellence in teaching and supervision.

Finally, I would like to express my gratitude to the Department of Psychology's administrative staff, especially Alexandra Creeden, for her efforts in making this event possible. Their efforts ensure our Honours Thesis students have the opportunity to showcase their research achievements in a celebration that bookends their undergraduate academic careers.

Once again, congratulations to all our Honours Thesis Students! Your dedication and scholarly contributions are truly commendable. I wish you continued success in your academic and professional pursuits.

Sincerely,

Robert J. Coplan, PhD
Chancellor's Professor and Undergraduate Chair
Department of Psychology, Carleton University

Poster Presentations

Please note that this program is not comprehensive and only includes students who provided consent for their name and abstract to be made publicly available.

FROM WALKS TO ACTS OF KINDNESS: EXPLORING THE CONNECTION BETWEEN NATURE RELATEDNESS AND PROSOCIAL BEHAVIOUR

Aisha Abass

Supervisor: Dr. John Zelenski

This study examines the relationship between nature relatedness and prosocial behavior, addressing gaps in previous research, which is largely correlational and inconsistently defines both constructs. Nature relatedness is defined as either a trait or a state, while prosocial behavior is measured in various ways. To address these issues, this study manipulated state nature relatedness with Coughlan et al's. (2022) guided imagery task and measured state nature relatedness (EINS), trait nature relatedness (NRQ), mood (PANAS), and prosocial behaviors across three measures: resource allocation (SVO), prosocial intent (PBIS), and a new Scenario-Based Measure (SBPM). Results showed that the guided imagery task did not significantly increase state nature relatedness or affect mood. However, trait nature relatedness was positively correlated with state nature relatedness ($r(89)=.383$, $p<.001$) and prosociality on prosocial intent ($\rho=.252$, $p=.015$) and the scenario-based measure ($\rho=.335$, $p=.001$). Despite the small sample size, these findings highlight trait nature relatedness's stability and the need for more effective state nature relatedness manipulations.

EXPLORING WHETHER TRAUMA, DIVERSITY, AND INCLUSIVITY TRAINING REDUCES CRIMINAL BEHAVIOR AND ENHANCES CORE CORRECTIONAL PRACTICES AMONG ONTARIO PROBATION OFFICERS: THE MODERATING ROLE OF GENDER AND PROBABLE TRAUMA

Sohaila Abdelhadi

Supervisor: Dr. Shelley Brown

Martinson (1974) argued that Nothing Works in the rehabilitation of justice-impacted individuals. In response, Andrews and Kiesling (1980) developed a set of core correctional practices (CCPs) that could be used by probation and parole officers to enhance correctional outcomes for justice-impacted individuals. More recently, trauma responsive approaches have emerged as another hypothesized effective strategy for dealing with justice-impacted individuals who experience high levels of trauma (Miller & Najavits, 2012). This study investigates the nature and prevalence of probable traumatic experiences among justice-impacted individuals on probation with a focus on gender differences ($N \approx 329$). The study also investigates if probation and parole officers who were recently trained in a model of community supervision that blends trauma responsiveness with core correctional practices (CCPs)–the Ontario Solicitor General's Made-in-Ontario Core Correctional Practices (CCP) Model of Community Supervision are more likely to apply trauma, diversity, and inclusivity (TDI) principles in their interactions with clients after being trained in the Ministry's model. The study uses client case notes prepared by probation and parole officers.

HUMOR AND GOAL PROGRESS

Yomna Abou-Ismail

Supervisor: Dr. Marina Milyavskaya

Despite extensive research on humor's role in resilience and coping, its direct relationship with goal progress remains underexplored. This study aims to examine whether humor facilitates or hinders goal progress. Using the SONA participant pool, we recruited (current N = 214) Carleton students who completed measures of trait humour using the Sense of Humor Scale, and state humour, using a daily diary approach capturing humour related to goal-directed self-talk. In addition, participants completed measures of goal progress on a personal academic goal each evening. We expect that laughter, verbal humor, and coping would be positively related to goal progress mediated by humorous self talk, while the rest remains uncertain. The study will explore how different subfacets of humor, such as laughter and verbal humor, relate to goal progress, with humorous self-talk potentially serving as a mediator. Although results are still forthcoming, this study seeks to clarify humor's hypothesized dual role in either supporting or impeding goal achievement. The findings may offer valuable insights into how humor can be strategically incorporated into the academic achievement processes.

FROM PSYCHOLOGICAL NEEDS TO SUBJECTIVE VITALITY AND THE MODERATING ROLE OF SELF-COMPASSION

Ahmed Al-Zehhawi

Supervisor: Dr. Rachel Burns

Basic psychological needs (Deci & Ryan, 2000) contribute to well-being, which includes feelings of subjective vitality, defined as a reflection of both psychological and physiological functioning (Ryan & Frederick, 1997). Specifically, frustration of psychological needs is associated with less vitality. However, little is known about whether self-compassion (Neff, 2003) attenuates this association, despite self-compassion's role in attenuating the consequences of poor psychological health. Thus, the current study will investigate this effect using data collected from university students, with the final sample size of n = 149. Data used consisted of moment observations, nightly diary surveys, and a baseline survey. Two hierarchical multiple regression models were built for each satisfying of and frustration of needs in the prediction of vitality, along with the predictor self-compassion and age and gender covariates. Findings suggest independence of needs from self-compassion in the prediction of vitality, justifying a further need for an elaborate investigation of this relationship.

PERSONALITY AND LIFE GOALS. WHICH GOAL IS MOST IMPORTANT TO YOU?

Nicole Arbic

Supervisor: Dr. Kira McCabe

People have major life goals throughout their lives, which can change as they get older. However, ceiling effects are common. For example, "having a career" or "having children" have an average well over 4 when the maximum scale value is 5. Ceiling effects limit the ability to measure a construct well. I tested alternative measures, including avoidance major life goals, a top 5 goals item, and forced-choice goal measure. Undergraduate students (N = 268) completed a survey that included personality variables, these major life goal measures, and other individual difference measures (personality traits, vocational interests, trait affect, and approach-avoidance temperament). The established measures had similar findings in previous research. The ranked goal item was also similar, but there were several differences. In both measures, avoidance goals were also ranked highly, not solving this ceiling effect issue. Finally, the forced-choice measure had very different results from these other measures.

INVOLVEMENT IN EDUCATION AMONG PARENTS WITH ADHD SYMPTOMS: AN EXPLORATION OF MOTIVATIONS AND BEHAVIORS

Danika Aubry

Supervisors: Dr. Maria Rogers & Ashlyn Carwana

Objective: The study examines parental involvement (PI) in education among families with elevated symptoms of attention-deficit hyperactivity disorder (ADHD). ADHD is a neurodevelopmental disorder impacting both children and adults which often leads to challenges in academic achievement, parenting, and family functioning. Despite its prevalence, research on PI for parents with ADHD symptoms is scarce. This study aims to fill this gap by utilizing the Hoover-Dempsey and Sandler model of PI to explore differences in PI motivations and behaviors between parents with elevated ADHD symptoms and those without. **Method:** Secondary, cross-sectional data was collected during the spring of 2021. Parental respondents completed self-report and parent-report measures related to PI behaviors and motivations. We hypothesized that parents with ADHD symptoms would report lower PI motivations, less frequent involvement behaviors, and lower engagement in certain parenting behaviors. **Results:** A multivariate analysis of variance (MANOVA) revealed significant differences between groups across eight of nine outcome variables. Contrary to previous findings, parents with ADHD symptoms reported higher motivations and frequency of involvement than parents without ADHD, with p-values ranging from $p = .001$ to $p < .001$ and small to moderate effect sizes ranging from $\eta^2 = .045$ to $.095$. **Conclusion:** Parents with elevated ADHD symptoms perceived themselves as having greater motivation and involvement behaviors in their children's education compared to parents without ADHD symptoms.

STRIVING FOR PERFECTION OR EXCELLENCE? IMPLICATIONS FOR ACADEMIC SELF-TALK AND GOAL PROGRESS

Mehru Baig

Supervisors: Dr. Marina Milyavskaya & Tyler Thorne

Perfectionism is categorized by self-criticism and unrealistic standards which harms academic achievement, while excellencism is characterized by ambitious and healthy goals, striving, and higher academic achievement. These relationships may occur due to how these dispositions influence self-talk styles. Positive self-talk is associated with higher GPA compared to negative self-talk, which may explain links between excellencism/perfectionism and academic goal progress, but this has not been explicitly tested. This study investigated how perfectionism and excellencism influenced students' self-talk and its impact on goal progress. Carleton students (current $N = 214$) completed measures of excellencism/perfectionism and reported on their daily goal-directed self-talk and academic goal progress for one week. We predict that higher excellencism predicts greater positive self-talk (H_{1a}), which predicts greater goal progress (H_{2a}). While perfectionism predicts greater negative self-talk (H_{1b}), which predicts less goal progress (H_{2b}). Results will help clarify mechanisms through which dispositions towards excellencism and perfectionism impact academic goals.

EXAMINING THE OUTGROUP EMPATHY BIAS: WHEN DOES PERCEIVED SIMILARITY MATTER?

Mackenzie Barnard

Supervisor: Dr. Chad Danyluck

Empathy is a social skill that can increase prosocial behaviour and reduce prejudice. However, there is an observable empathy gap in cross-group contexts. Bridging this gap is critical at a time when group identity is a contributing factor to social polarization. Attempts to bridge this gap have found that perceived similarity may facilitate empathy. The current study extends past work by manipulating similarity across both personal and group identity to understand the nuanced relationship between similarity and outgroup empathy. A sample of university students completed an online study that manipulated perceptions of similarity and dissimilarity with an imagined outgroup member across intergroup and interpersonal dimensions. Outgroup empathy was evaluated following the manipulation. Results found that outgroup empathy did not significantly differ between different combinations of similarity and dissimilarity at the intergroup and interpersonal levels.

EXPLORING EXPERIENCES OF AUTISTIC PARENTS

Alannah Bergeret

Supervisor: Dr. Vivian Lee

Background: Autistic parents face unique challenges related to their diagnostic experiences, parenting, and disclosure of their diagnosis to family, friends and service care providers. Despite growing knowledge of neurodiversity, little research has explored their adult diagnostic experiences, parenting journeys and disclosure decisions. Understanding these aspects from their perspective can inform more inclusive policies and the development of autism-focused services. **Methods:** Ten Autistic parents were recruited through Autism-focused community groups and online forums. Data was collected via surveys and one-on-one interviews to provide insight into their lived experiences. Qualitative analyses are ongoing to identify key themes. **Contributions:** By highlighting Autistic perspectives of their diagnostic and parenting experiences, this research contributes to the growing body of literature on neurodiverse parenting by empowering Autistic parents. Findings may inform policies and services that better support Autistic parents, promote the creation of tailored parenting resources and improve collaboration with service care providers.

CARE TO SHARE: EMOTIONAL LANGUAGE USE AS A FUNCTION OF PSYCHOPATHIC TRAITS IN VIOLENT YOUTH OFFENDERS

Sarah Blakey

Supervisor: Dr. Adelle Forth

Psychopathy is a personality disorder characterized by interpersonal, affective, behavioural, and antisocial characteristics. Notably, a lack of empathy and perceived deficits in emotion. As language is considered to be a habitual and reliable way in which emotion is expressed (Tausczik & Pennebaker, 2010), assessing emotional language use as a function of psychopathic traits can highlight differences in how emotion-related words are used by this population. In a sample of male incarcerated violent youth offenders assessed for psychopathy using the Psychopathy Checklist: Youth Version (Forth et al., 2003), the frequency, intensity, and polarity of emotion-related words and disfluencies in speech are explored using linguistic analysis software SEANCE (Crossley et al., 2017). Investigations will be made using both dimensional and categorical conceptualizations of psychopathy to determine if results differ based on methodology. Findings can have implications for emotion-deficit hypotheses of psychopathy and may aid in the identification and assessment of psychopathic traits.

EXPLORING THE EXPERIENCEES OF MULTIPLE PERSPECTIVES WITHIN EQUINE-ASSISTED PROGRAMS USING PHOTOVOICE

Brooke Bowditch

Supervisor: Dr. Vivian Lee

The purpose of this study was to explore the motivations and experiences of people who participated in an equine-assisted therapeutic program. There is a need to broaden and explore the range of recreational services available to individuals with neurodevelopmental conditions. The present study collaborated with TROtt, a therapeutic riding barn in Ottawa, to collect data as a measure of their quality assurance. The study used a qualitative method called "Photovoice," a non-invasive and participant-forward way to capture participant perspectives. Results demonstrated that equine-based programs provided many benefits to participants, including feelings of autonomy, opportunities to develop new skills, finding a sense of community, positive emotions, multisensory experiences, opportunities for non-verbal communication, and a calming environment. By moving towards a better understanding of the motivations, preferences, and values that drive engagement in equine-based services, our work can allow for a more comprehensive knowledge of how to better structure and program recreational services.

INCREASING INFORMATION ELICITATION: AN EVALUATION OF THE MODEL STATEMENT, A MOCK TRANSCRIPT, AND DEMO ON INFORMATION YIELD AND RECALL ACCURACY FOLLOWING A DELAY

Emma Canning

Supervisor: Dr. Kirk Luther

Investigative interviews of victims and witnesses of crimes are crucial to the resolution of criminal cases. The current study compared three techniques for enhancing information provision and accuracy by demonstrating to interviewees what is expected of them during the interview. Participants ($N = 44$) viewed a video of a mock crime, and later returned to the lab for an investigative interview using one of the following techniques: (1) the model statement, where participants listen to a recording of a detailed account of an event; (2) the mock transcript, where participants read a detailed transcript of someone recalling an event; (3) the Demonstration for More Detail technique (DeMo), where the researcher demonstrates the type and amount of detail required; and (4) a control group where participants were asked to provide a free-recall account of the event.

THE INFLUENCE OF PRE-EXISTING BELIEFS AND DEMAND CHARACTERISTICS: HOW SOCIAL MEDIA TIME-REDACTION STUDIES MAY BE REPORTING FALSE POSITIVES

Natasha Cavanaugh

Supervisor: Dr. Andrea Howard

With the recent uprise in technology development, the concern for social media use is ever increasing. Research has aimed to show that social media has a negative impact on well-being, however, results from social media time-reduction studies remain divided. In this experimental study, we test whether pre-existing beliefs and experimental demand characteristics explain people's views about social media after receiving positively- or negatively-slanted information. We hypothesize that people assigned to the condition emphasizing the negatives of social media will be more willing to participate in a time-reduction study and will be more likely to endorse a negative view of social media as compared to people assigned to the condition emphasizing the positives of social media. We also hypothesize that the difference between conditions will be stronger for those who have stronger pre-existing beliefs about social media's harms.

SELF-REPORT MEASURES OF PSYCHOPATHY AND EMOTION PERCEPTION

Soleil Cazeau

Supervisor: Dr. John Logan

The present study investigated the validity of three different self-report measures of psychopathy by evaluating how well they predicted performance in an emotion perception task. The rationale for the study is based on the finding that individuals who score high in psychopathic traits have difficulty perceiving certain emotions, such as fear. Surprisingly, no previous research has compared different self-report measures of psychopathy using the same criterion variables. Regression analyses will be used to determine which measures account for the largest amount of variance in emotion perception accuracy, which in turn will provide guidance for choosing the optimal measures for evaluating psychopathy in future research.

EXAMINING THE INFLUENCE OF SEXUAL PREFERENCE AND SIBLING GENDER ON RISK FACTORS FOR SIBLING SEXUAL ABUSE

Natalie Cook

Supervisors: Dr. Kelly Babchishin & Emma J. Holmes

This study examined how risk factors for sibling sexual contact (SSC) varied depending on whether a person's sexual preferences matched their sibling's gender. Participants (*N* = 1104) were grouped by the concordance between their sexual preferences (other- or same-gender as the participant) with their sibling's gender (other- or same-gender). An online survey assessed risk factors for SSC, including sibling-typical activities (e.g., bathing with a sibling during childhood) and atypical childhood sexual behaviours (e.g., putting hands in underwear in public). Propensity to engage in SSC was measured via participants' disgust and moral opposition toward fictional SSC depictions. Sibling-typical activities and atypical childhood sexual behaviours were significantly related to disgust (*r* = .27-.55) and moral opposition (*r* = .27-.52) in concordant groups (where sexual preference matched sibling gender) but not discordant groups ($r_{Disgust}$ = .10-.18; r_{Moral} = .12-.15). This study suggests that concordance between sexual preferences and sibling gender may be risk-relevant.

THE ROLE OF PPO-IDENTIFIED STRENGTHS IN FACILITATING UPTAKE OF THE MADE IN ONTARIO CORE CORRECTIONAL PRACTICES MODEL OF COMMUNITY SUPERVISION: EXAMINING GENDER DIFFERENCES AND THE IMPACT ON RECIDIVISM

Victoria Di Virgilio

Supervisor: Dr. Shelley Brown

Community supervision in Canada relies on probation and parole officers (PPOs) to implement evidence-based models like risk-need-responsivity (RNR) and core correctional practices (CCPs), which traditionally focus on risk reduction. However, these approaches have historically overlooked the role of client strengths in rehabilitation, despite growing recognition of their impact on positive outcomes. The Ontario Ministry of the Solicitor General's Made-in-Ontario Core Correctional Practices (CCP) Model of Community Supervision builds on evidence-based frameworks (i.e., CCPs) while fostering strength-based, trauma, diversity, and inclusivity (TDI) responsive practices. The current study examines if PPO-identified strengths influence probation outcomes, particularly their role in the Ministry's model adherence and reducing recidivism, while also exploring potential gender differences in these effects. To examine this, PPO case notes associated with 407 clients on probation were manually coded to capture the study variables. Implications for incorporating strength-based approaches in community-based supervision models are discussed.

The opinions and views expressed in this report reflect those of the author and not the Ontario Ministry of the Solicitor General. This project was done with the support of the Ontario Ministry of the Solicitor General.

STRESS SPILLOVER, RELATIONSHIP SATISFACTION AND THE MODERATING ROLE OF RELATIONSHIP-CONTINGENT SELF-WORTH

Nissa Doyle

Supervisor: Dr. Cheryl Harasymchuk

Stress spillover refers to stress that originates outside a couple yet permeates into the relationship. According to Karney and Bradbury's (1995) Vulnerability-Stress-Adaptation model, individual differences, such as self-esteem, and past experiences can play a role in shaping relationship quality. Self-esteem, an individual difference trait, refers to one's overall evaluation of self-worth and can be studied with a specific focus on the relationship content (i.e., relationship-contingent self-esteem; RCSE). The current study assessed the association between stress spillover and relationship satisfaction and the role of RCSE as a moderator. A community sample of individuals (*N* = 245) who were involved in a romantic relationship completed measures of perceived stress and relationship quality weekly over six weeks during the pandemic lockdown in spring 2020. Using a multi-level analysis to assess both between- and within-person differences, contrary to my hypothesis, there was no significant moderator effect of RCSE for stress spillover on relationship satisfaction.

DO WE KNOW THE FIRST IMPRESSIONS WE MAKE ON OTHERS? : AN OPEN-ENDED APPROACH TO META-ACCURACY OF FIRST IMPRESSIONS

Wesley Dunn

Supervisor: Dr. Norhan Elsaadawy

Do we know the first impressions we create? We investigate how accurately people perceive the impressions formed during brief "getting to know you" conversations. Rather than using standardized inventories, participants freely described how they believed their interaction partners would characterize them (meta-perceptions), while their partners provided open-ended impressions. We coded these responses to determine the traits that participants mentioned (e.g., Big Five, morality, humor, intelligence) and their accuracy. Overall, participants showed some meta-accuracy: although they occasionally pinpointed the correct trait impressions, they often overlooked traits their partners mentioned or fixated on traits not considered. Analyses revealed that accuracy varied across personality facets, with sociability yielding the highest accuracy and facets of conscientiousness and agreeableness the lowest. No correlates of meta-accuracy (e.g., self-esteem, narcissism) were observed. These findings highlight the challenges in accurately perceiving the impressions we create and reveal the content of the meta-perceptions we form during first impression interactions.

AN EXAMINATION OF THE INTERCONNECTEDNESS OF EXERCISE, EXERCISE HABIT, AND STRESS, THROUGH A MODERATION ANALYSIS

Sofia Eggleton

Supervisor: Dr. Katie Gunnell

Exercise habit is related to exercise (Lutz et al., 2010), but it is unclear if stress can impact this relationship. I examined if stress moderates the link between habit and exercise. Carleton University undergraduate students (N = 141; M_{age} = 19.37, SD = 3.89; 73% female) completed self-report surveys at 2 time points across seven days. Moderation analyses were performed using the PROCESS Macro (Hayes, 2022). Habit at time 1 was related (p < .05) to exercise at time 1 (r = .44) and time 2 (r = .31). Exercise across the 2 time points was also correlated (r = .54, p < .05). Stress did not moderate the link between habit and change in exercise behaviours (p =.75). Research is needed to examine if stress acts as a moderator between habit and exercise or if results were null due to methodological factors (e.g., self-report questionnaires, small sample size).

THE INFLUENCE OF POSITIVE AND NEGATIVE AWE ON PROSOCIAL BEHAVIOUR, PRO-ENVIRONMENTAL BEHAVIOUR, AND WELLBEING

Sara El Kayali

Supervisor: Dr. John Zelenski

Self-transcendent emotions push individuals to engage in prosocial behaviour by transcending and shifting their attention away from "their self" towards other members of society. Awe, which is one type of self-transcendent emotions, can push individuals to indulge in prosocial and pro-environmental behaviours. Awe can be positive or negative depending on the stimulus. This study examines the effect of nature-induced awe on prosocial behaviour, pro-environmental behaviour, and wellbeing (positive affect, negative affect, and life satisfaction) using three conditions: positive awe (breathtaking nature scenes), negative awe (natural disasters), and no awe (control). Variables, such as the sense of powerlessness, the sense of the small self, and nature connectedness will also be measured to test their relationship to awe, prosocial behaviour, pro-environmental behaviour, and wellbeing. The study also examines the influence of trait extraversion on the effect of positive and negative awe on prosocial behaviour, pro-environmental behaviour, and wellbeing.

SELF-EXPANSION WITH A CROSS-GROUP STRANGER: THE IMPACTS OF INTERGROUP AND INTERPERSONAL SIMILARITY

Shannon Enke

Supervisor: Dr. Chad Danyluck

Cross-group friendships can foster social cohesion in diverse communities by broadening perspectives through a process called self-expansion. However, perceptions of similarity with an outgroup member can impact the degree of self-expansion experienced. This study explored whether perceptions of intergroup and interpersonal similarity promote feelings of self-expansion with a cross-group stranger. Participants' traits and social group affiliations were used to prime perceptions of similarity with an imagined cross-group stranger. Participants then engaged in reflective writing and reported self-expansion levels. Results indicated that compared to the moderate overlap similarity group, participants primed with high personal/group similarity reported significantly higher self-expansion, while those primed with high personal/group dissimilarity reported significantly lower self-expansion. Additionally, when primed with high interpersonal similarity and intergroup dissimilarity, participants reported significantly higher self-expansion than those primed with high personal/group dissimilarity. These findings imply that perceived similarity with an outgroup member can encourage self-expansion, particularly when there is interpersonal similarity.

PERCEIVED DISSIMILARITY AND RELATIONAL SELF-EXPANSION IN MIDLIFE FRIENDSHIPS

Imane Farah

Supervisor: Dr. Cheryl Harasymchuk

Perceived similarity in friendships has been found to be predictive of attraction and friendship satisfaction. In contrast, according to self-expansion theory, some dissimilarity (i.e., personality, interests, or attitudes) may provide advantages to relationships by encouraging self-expansion. Relational self-expansion is strongly predictive of relationship satisfaction, but most of the research is limited to romantic contexts. The current study explored two competing hypotheses in the context of friendships, namely whether perceived dissimilarity predicts a) higher self- expansion and friendship satisfaction or b) lower self-expansion and friendship satisfaction. It also examined self-concept clarity as a moderator of self-expansion, with higher scores predicted to be associated with higher self-expansion. To explore these hypotheses, midlife adults (N = 241) completed questionnaires assessing self-concept clarity, friendship satisfaction, relational self-expansion, and perceived general similarity. A moderated-mediation model was conducted to assess whether the link between perceived dissimilarity and friendship satisfaction is due in part to self-expansion, especially for people who score relatively low or high on self-concept clarity. Results showed that perceived dissimilarity predicted lower self-expansion and friendship satisfaction, but self-concept clarity showed no moderating effects.

THE ROLE OF NEED SATISFACTION AND FRUSTRATION IN MODERATING THE RELATIONSHIP BETWEEN SOCIAL MEDIA USE AND STRESS IN UNIVERSITY STUDENTS.

Levi Fisher

Supervisor: Dr. Katie Gunnell

Research on social media has rarely considered subjective need experiences and how they are related to stress. I hypothesized that need frustration during social media use would amplify the relationship between time spent on social media and stress, whereas need satisfaction during social media use would diminish the relationship. Students (N = 151; M_{age} = 19.36, SD = 3.77, female = 71.5%) completed two self-report surveys one week apart. Hayes' (2021) PROCESS macro was used to test moderation. Bivariate correlations revealed that need frustration during social media use was negatively related to stress ($r_{Time\ 1}$ = .36, $r_{Time\ 2}$ = .24) and time spent on social media (r = .30). Need satisfaction was negatively related to stress at both times ($r_{Time\ 1}$ = -.33, $r_{Time\ 2}$ = -.24). No significant moderation results were found for need satisfaction (p = .21) and frustration (p = .08). Further research is needed to clarify potential methodological issues that may have contributed to null results.

NAVIGATING CAREER OBSTACLES: THE ROLE OF PERSONALITY, PARENTAL INFLUENCE, AND ADAPTABILITY

Owen Frank

Supervisor: Dr. Bernadette Campbell

Personality traits, parental career-related behaviours, and career adaptability have been shown to influence career development. This study examined the impact of neuroticism, career adaptability, and parental career-related behaviours (interference and engagement) on career anxiety, vocational self-concept crystallization, and career exploration. Data from 230 undergraduate students were analyzed using hierarchical regression to assess the predictive effects of these factors. Results indicated that career adaptability was the strongest predictor of vocational self-concept and career exploration, while neuroticism significantly predicted career anxiety. However, parental career behaviours did not significantly impact any of the measured career outcomes, suggesting that emerging adults rely more on other influences. These findings contribute to career development research by highlighting the central role of adaptability in career decision-making and provide practical implications for career counselling interventions that emphasize adaptability training.

SUBSTANCE USE AND LONG-HAUL TRUCKERS

Rachael Goenaga

Supervisors: Drs. John Weekes & Kim Hellemans

In safety-sensitive industries where the risk of harm to individuals and to others is high, substance use is a serious issue. In Canada, long-haul truck drivers hold safety-sensitive positions and require tailored supports to manage substance use in the workplace. Addressing this issue involve several laws: the *Highway Traffic Act*, the *Canadian Criminal Code*, and *Canadian Human Rights Act*. Thus, supporting truck drivers is a complex act, requiring balancing laws and work duties. This study builds on previous research by the Canadian Centre on Substance Use and Addiction to gain insights into work-related risks and protective factors for substance use in transportation. While research has focused on sleep and drug/alcohol testing, very few studies have examined workplace substance use policies. This study aims to identify specific risk factors, examine current policies, explore available supports, and understand stigma surrounding substance use for commercial drivers. Findings offer valuable information to improve supports and reduce substance use for drivers.

THE IMPACT OF COGNITIVE ENGAGEMENT ON COGNITIVE DECLINE: INVESTIGATING SEX AND LIFE-STAGE DIFFERENCES

Sarah Goulding

Supervisor: Dr. Cassandra Morrison

Cognitively stimulating activity (CSA) helps mitigate dementia risk by enhancing cognitive reserve, yet research on sex differences and the effect of CSA across different life-stages (e.g., childhood, adulthood, older adulthood) remains limited. This study examines sex differences in CSA's effects across different life stages. Data from 2,747 participants (2,068 females, 679 males) across 19,523 time points from the RUSH database were analyzed. CSA engagement (high/low) was categorized using a median split for early, middle, and late life. Linear mixed-effects models assessed rates of cognitive decline. Early-life CSA did not impact decline in males or females. In middle-life, females with high CSA experienced slower decline, while males experienced faster decline, compared to their low CSA counterparts. High late-life CSA was protective for both sexes, especially females. CSA effects vary by sex and life stage, highlighting the need for tailored interventions to reduce cognitive decline and dementia risk.

RACIALIZED NAMES AND SOUND SYMBOLISM

Tim Hendrikx

Supervisor: Dr. David Sidhu

Sound symbolism links certain kinds of phonemes to perceptual properties (e.g., sonorants with roundness and voiceless stops with spikiness). Sidhu et al. (2019) applied this to names and personality traits, showing that round- and spiky-sounding names went with different personality factors. We examined name sound symbolism using the Stereotype Content Model's Warmth and Competence dimensions. We also tested whether associations generalize to typically Black names, unlike prior studies that used typically White names (Sidhu & Pexman, 2015; Sidhu et al., 2019). Participants (*N* = 66) rated 64 names on how likely they expected a person with that name to possess a given trait (related to warmth or competence). We found that round-sounding names were judged higher in warmth and competence, regardless of race or gender. Notably, typically Black names were rated higher on both dimensions. We also considered individual differences in feelings towards different groups. Our findings provide insight into sound symbolism and social cognition.

ARE CORE CORRECTIONAL PRACTICES (CCP) ASSOCIATED WITH POSITIVE CHANGE (AND FEWER CHARGES) AMONG CLIENTS ON PROBATION IRRESPECTIVE OF GENDER, INDIGENEITY, OR ACUTE MENTAL HEALTH AND SUBSTANCE MISUSE CRISES?

Abby Higginson

Supervisor: Dr. Shelley Brown

The intersection of mental health, substance use, and the criminal justice system presents significant challenges for probation and parole officers (PPOs), particularly when supervising justice-impacted persons (JIPs) with complex needs. Grounded in the risk-need-responsivity (RNR) model (Andrews et al., 1990), this research explores the relationship between core correctional strategies (e.g., teaching clients to reframe thinking styles) and client outcomes while on probation (e.g., less substance use, employment stability) and whether gender and Indigeneity moderate these effects. The study also explores if the presence of acute mental health crises and substance misuse influences the relationship between probation and parole officers' use of Core Correctional Practice (CCP) strategies and client outcomes. The study analyzes 193 probation case notes following the introduction of the Ontario Solicitor General's Made-in-Ontario Core Correctional Practices (CCP) Model of Community Supervision. A subset of six items from the Client Change Scale (CCS, Serin & Lloyd, 2018) is used to assess behavioural change across key life domains (e.g., employment, substance use, program engagement). Findings will inform evidence-based training enhancements and policy reforms to improve probation outcomes for diverse populations.

The opinions and views expressed in this report reflect those of the author and not the Ontario Ministry of the Solicitor General. This project was done with the support of the Ontario Ministry of the Solicitor General.

USE OF FORCE IN CANADIAN POLICING: AN EXAMINATION OF INCIDENTS INVOLVING PERSONS IN CRISIS

Eva Huppe

Supervisor: Dr. Craig Bennell

While persons in crisis (PIC) are overrepresented in police use of force (UoF) incidents, the contexts and causes remain unclear. Using data from standardized reports collected over a two-year period from a large Canadian police agency, this study compared UoF incidents involving PIC and persons not in crisis. PIC comprised 17.1% of subjects across all incidents (draw, display, and applied; *N* = 2,191) and 24.2% of applied incidents (*N* = 1,146). Results indicated that situational factors, such as officer, subject, and environmental characteristics, were significantly associated with whether a subject was perceived to be in crisis. Controlling for these factors, PIC had higher odds of force being applied to them, but lower odds of UoF being effective compared to persons not in crisis. However, PIC were no more likely to be handcuffed or injured, nor were officers more likely to be injured. Implications for police training and policy are discussed.

AN ANALYSIS OF DEMAND CHARACTERISTICS: UNCOVERING THE TRUE EFFECTS OF SOCIAL MEDIA ON MENTAL HEALTH

Roshan Kapur

Supervisor: Dr. Andrea Howard

As social media use continues to rise, concerns about its effects on mental health remain debated. While some research links social media to adverse mental health outcomes, others highlight its benefits, such as social connectedness. Inconsistencies in research raise concerns that pre-existing beliefs may influence self-reported mental health outcomes in experimental settings, particularly when the negatives of social media are highlighted. This study examines whether individuals who strongly believe that social media is harmful will report poorer well-being, particularly when social media is framed in a negative light. Participants were assigned to conditions highlighting either the harms or benefits of social media and were asked to complete mental health questionnaires. We hypothesized that negatively framed social media information would result in lower mental health scores, especially amongst those with negative pre-existing beliefs about social media. We aim to clarify whether the observed effects stem from actual social media use or biases introduced by experimental framing and participant expectations

STEADFAST STUDENTS: HOW RESILIENCE BUFFERS THE RELATIONSHIP BETWEEN NEGATIVE MENTAL HEALTH OUTCOMES AND PAST VICTIMIZATION

Jacques Lalonde

Supervisor: Dr. Tina Daniels

Bullying, also known as victimization, affects 2 of 5 Canadian youths on a monthly basis (Statistics Canada, 2023), and has been associated with a variety of negative outcomes such as the exacerbation of symptoms of depression and anxiety (Kasturiratna et al., 2024). Resilience, on the other hand, has been found to be a protective factor against the development of these negative outcomes across various contexts (Ji, 2024; Türk, 2024; Shahidi et al., 2024). Research is unclear regarding how resilience can act as a buffer against developing symptoms of depression and anxiety following bullying victimization in Canadian university students. It was hypothesized that resilience would moderate the relationship between past victimization and symptoms of depression and anxiety, such that higher resilience would be associated with fewer symptoms. Moderation analyses were conducted on a sample of 393 students with a mean age of 19.99 years. Results and implications for practice are discussed.

CYBERBULLYING: AN EXAMINATION OF DEFENDANT AND VICTIM RACE, AND BULLYING REASON ON MOCK-JUROR PERCEPTIONS

Hunter Langill

Supervisor: Dr. Joanna Pozzulo

There is limited research examining the influence of extralegal factors on mock-juror decision-making for a cyberbullying-related criminal case. This study investigated whether the race (White vs. Indigenous) of the defendant and victim, as well as the reason for cyberbullying (previous bullying vs. exposure for cheating) had an impact on mock-juror decision-making. Undergraduates read a mock-trial transcript and then completed several questionnaires assessing decisions of guilt, sentencing length, defendant and victim perceptions, cyberbullying bystander behaviour, and racial attitudes. Reason for cyberbullying significantly impacted dichotomous and continuous guilt, such that when the defendant was exposed for cheating on an exam, mock-jurors attributed more and higher guilty verdict ratings than when the defendant was previously bullied. Racial attitudes were significantly associated with mock-jurors' perceptions of the victim, such that mock-jurors with increased racial bias were more likely to view the victim less favourably. Race of the victim or defendant did not produce any significant main effects. The results of this study provide information to key policy makers and legislators about potential extralegal factors and biases that could impact jurors' decision-making surrounding cyberbullying-related crime.

MENTAL HEALTH AND CAREER INTENTIONS AMONG YOUNG ADULTS

Lucas Larivière

Supervisors: Drs. Kate Dupré & Eva Guerin

Poor mental health has been shown to influence career-related behaviours and outcomes for working individuals. However, there is a lack of research examining how the mental health states of young adults influence their career intentions. Informed by the Conservation of Resources theory, this study examined the relationships between loneliness and psychological distress, career aspirations, and motivation to lead among young adults, and explored whether recovery moderates these effects. Additionally, this study investigated whether loneliness and distress are related to the decisions to pursue public sector work (e.g., military service), an area that remains underexplored in career research. Participants included 255 university students who completed a survey on their mental health and career goals. Results suggested that low levels of loneliness were associated with an increase in career aspirations, while psychological distress had no significant relationship with career outcomes. Exploratory data analysis revealed that public service motivation was not related to loneliness or distress. Finally, moderation analyses showed that recovery moderated the effects of loneliness and distress on career aspirations, as well as the relationship between loneliness and motivation to lead. These findings contribute to vocational research by highlighting how current mental health states can influence the career intentions of young adults. The moderated effects of recovery highlight the importance of disengaging from academic or work-related stress to reduce the negative impact of mental health challenges on career intentions.

POLITICAL AND RACIAL BIAS IN JUROR DECISION-MAKING: POLICE USE OF FORCE DURING A PROTEST

Jayden Lemieux

Supervisor: Dr. Joanna Pozzulo

Previous research has established that racial and political biases act as extra-legal factors in the decision-making of mock-jurors. This study seeks to further examine these biases with Canadian mock-jurors in a case involving a police use of force (UoF) incident at an encampment-style protest. By manipulating the race of the defendant and the victim as either White or Middle Eastern, as well as the protest issue (climate change awareness or international student housing), we seek to examine whether racial and political biases affect Canadian mock-jurors. Other variables of interest are police legitimacy ratings, colour-blind racial attitudes, and mock-jurors' political biases. We found that varying the race of the defendant or victim or varying the protest issue had no effect on mock-jurors decision-making. Upon examining mock-jurors degree of political identification with the protest issue, we discovered that when mock-jurors identified more highly with the protest issue they attributed a higher degree of guilt to the defendant (i.e., continuous guilt), perceived the defendant (i.e., police officer) less favourably, and perceived the victim (i.e., protestor) more favourably. These findings have relevant implications for understanding factors that lead to miscarriages of justice in jury trials and for informing criminal justice reform.

THE ROLE OF AGE IN RECIDIVISM RISK AMONG MEN WITH INTELLECTUAL DEVELOPMENTAL DISORDER (IDD) AND A HISTORY OF SEXUAL OFFENDING: A META-ANALYSIS

Kelsey May

Supervisor: Dr. Kelly Babchishin

Effective correctional interventions align services to the clients' recidivism risk. Doing so requires knowledge about risk factors for the population of interest. This meta-analysis examines the predictive validity (discrimination) of age for men with IDD and a history of sexual offending. Database searches identified 26 relevant studies representing 10 unique samples (combined sample size > 400). The effect sizes (Cohen's d) were aggregated using both fixed-effect and random-effects models. Younger men were, as expected, more likely to engage in sexual recidivism ($d_{(fixed-effect)}$ = .463, 95% CI [0.23, 0.70], k = 10, N = 438), non-sexual violent recidivism ($d_{(fixed-effect)}$ = .401, 95% CI [-0.02, 0.82], k = 5, N = 143), any violent recidivism ($d_{(fixed-effect)}$ = .658, 95% CI [0.34, 0.97], k = 6, N = 186), and any recidivism ($d_{(fixed-effect)}$ = .756, 95% CI [0.41, 1.10], k = 5, N = 156) with low variability across studies. These findings highlight the need for age-informed risk assessments and tailored intervention strategies for men with IDD to enhance public safety and rehabilitation outcomes.

EXAMINING THE MODERATING ROLE OF SOCIAL COMPARISON ON THE EFFECTS OF SOCIAL MEDIA REDUCTION ON BODY IMAGE

Melina McLellan

Supervisors: Drs. Shelley Brown & Gary Goldfield

In an emerging digital age, social media plays a significant role in shaping adolescents' perceptions of body image. Research indicates that high social media use is related to poor body image, contributing to maladaptive behaviors, including disordered eating. Social comparison is heightened through social media use, further contributing to body image. However, minimal experimental evidence limits causal inferences. The present study is a secondary analysis examining the moderating role of social comparison on the effects of social media reduction on body image in youth experiencing emotional distress. A randomized controlled trial was conducted with 220 participants in either the control (unrestricted social media) or intervention (1 hr/day social media) group. Screenshots of screen time tracker reports were used to monitor social media use. Weight and appearance esteem were assessed at baseline and post-intervention using the Body Esteem Scale for Adults and Adolescents (BESAA). Data will be analyzed through three-way repeated measures ANOVA models.

STUCK IN A LOOP: HOW RUMINATION CONTRIBUTES TO DEPRESSION FOLLOWING BULLYING VICTIMIZATION

Kaelan McPherson

Supervisor: Dr. Tina Daniels

Distressing experiences such as bullying put individuals at greater risk of thinking over and over again on their experience. This experience can include event-related rumination, a repetitive and often negative thought fixation upon the bullying victimization. This rumination is problematic, given that rumination can contribute to the development and maintenance of depression following a distressing event (e.g., assault or health issues). The current study aimed to investigate the relationship between bullying victimization and depression and the role event-related rumination may play. Additionally, intrusive and deliberate thoughts in rumination will be examined separately in order to clarify inconsistencies in prior research. Participants filled out an online questionnaire detailing victimization experience, depression symptoms, and event-related rumination ($N = 486$, $M_{age} = 20.0$). Participant responses were examined using a mediation model. It was hypothesized that rumination would act as a pathway or mechanism through which experiencing victimization increases the likelihood of developing depressive symptoms.

SCHOOL-BASED & CROSS-CURRICULAR APPROACHES TO PROMOTE POSITIVE PSYCHO-SOCIAL DEVELOPMENT IN CLIMATE CHANGE EDUCATION: A SCOPING REVIEW

Kushi Murthy

Supervisor: Dr. Stefania Maggi

This scoping review will examine school-based and cross-curricular approaches to climate change education that promote psycho-social development in adolescents and young adults. A search of peer-reviewed journal articles (1989-2024) yielded 66 studies, with 18 meeting inclusion criteria. Thematic and cluster analyses were conducted in NVivo, revealing key themes related to the promotion of social and emotional learning, resilience, self-efficacy, and pro-environmental behaviours, while highlighting the effectiveness of school-based approaches (e.g., the 'whole-school' model, after-school programs) and cross-curricular approaches (e.g., interdisciplinary high school & university courses). Three key themes appeared across all studies: (1) youth engagement and participation as a pathway to resilience and action in the climate crisis; (2) rethinking climate education as a child rights obligation; and (3) understanding the psychological and emotional dimensions of climate change beyond eco-anxiety.

EXPLORING THE ROLE OF VIOLENT ATTITUDES IN THE ASSOCIATION BETWEEN TRUST AND VIOLENT BEHAVIOURS

Hafsa Omar

Supervisors: Dr. Kevin Nunes & Cassidy Hatton

Trust has been identified as a potential factor influencing violence, with lower levels of generalized trust linked to higher homicide rates and extremist attitudes. However, limited research has explored the relationship between trust and attitudes toward violence—a known risk factor for violent behaviour. Attitudes toward violence, defined as the degree of positive or negative evaluation of violence, are closely associated with and predictive of violent behaviour. Preliminary findings by Hatton & Nunes (2024) revealed a negative relationship between trust and attitudes toward violence, with attitudes mediating the link between trust and violent behaviour in a sample of community men. The current study seeks to replicate and extend these findings with a larger, mixed-gender sample and multiple measures of trust, attitudes toward violence, and violent behaviour. This research aims to enhance understanding of trust as a potential risk factor for violence and clarify the mediating role of attitudes toward violence.

HOW IMMIGRANT PARENTS CONCEPTUALIZE AUTISM

Yigit Ali Paputcu

Supervisor: Dr. Vivian Lee

Cultural differences in the conceptualization of autism may influence family priorities, expectations for support, and their compliance with proposed treatments. Twenty-four immigrant caregivers of autistic children were recruited from an autism-focused service provider. They were interviewed and asked to describe their understanding of autism, their family life, and experiences with autism-related care. Five main themes were identified: (1) how traditional cultural views, stigma, and stereotypes intersect in shaping perceptions of autism; (2) parental struggles in reconciling cultural beliefs with diagnosis acceptance and recognizing their child's strengths; (3) how differing family beliefs reshape household roles and create tension; (4) the role of cultural influences in service provision; and (5) the significance of cultural support networks in community relations. The results provide a nuanced understanding of the culturally specific challenges immigrant families face in accessing autism-focused care. The findings can help professionals adopt more culturally responsive approaches and inform policies that promote better integration of immigrant communities within the autism support system.

MIND, BODY, AND SLEEP: INVESTIGATING THE MODERATING ROLE OF SLEEP QUALITY IN THE RELATIONSHIP BETWEEN EXERCISE AND SELF-ACCEPTANCE

Sasha Patacairk

Supervisor: Dr. Rachel Burns

Objectives: Prior research has demonstrated that physical activity is associated with increased psychological well-being. However, there has been less research examining exercise and its correlation with psychological wellbeing, specifically self-acceptance. The present study examines the hypothesis that exercise will be positively correlated with self-acceptance with sleep quality as a moderator in a university student population. **Methods:** The sample ($n = 87$) was obtained from a SONA study at Carleton University. Exercise, sleep quality, and self-acceptance were measured with cross-sectional, self-report data. **Results:** The hypothesis was tested using a linear regression analysis. In unadjusted and adjusted models, the analysis concluded that there was no significant interaction between sleep quality and exercise on self-acceptance. **Conclusion:** Sleep quality did not moderate the association between exercise and self-acceptance. These results indicate that other factors may play a more prominent role in influencing self-acceptance in this population. Future research could explore additional variables or alternative methodologies to better understand the dynamics between these factors.

PARENT SUPPORT FOR LEARNING AND FAMILY-SCHOOL RELATIONSHIPS IN RELATION TO CHRONIC ABSENTEEISM FROM SCHOOL IN CHILDREN AGED 9-14 WITH ADHD SYMPTOMATOLOGY

Annabeth Perry

Supervisor: Dr. Maria Rogers

Increasing evidence indicates that youth with ADHD are absent from school at twice the rate of their non-ADHD peers (Niemi et al., 2022). While parental involvement in education has been shown to benefit students, research on its impact on school attendance in children with ADHD is limited, particularly in terms of parental educational support and the parent teacher relationship. This study aims to address this gap by exploring two key research questions: 1a) Is parental educational support associated with school attendance in children with ADHD symptoms? 1b) Does child age moderate this relationship? 2a) Is the parent teacher relationship associated with school attendance? 2b) Does child age moderate this relationship? In spring 2022, data were collected from 95 parents of children (aged 9-14) with ADHD symptomatology as part of a Canada-wide survey. Results suggest that parent support for learning and a positive parent-teacher relationship are both associated with higher levels of school attendance. Regression analyses will be conducted to examine the associations between two types of parental involvement—parent-teacher relationship and parental educational support—and school absenteeism. Further moderation analyses were conducted to see if child age has a moderating effect on this relationship. The results of this study could help guide educators, mental health professionals, and public health workers in leveraging parental involvement, an underutilized resource in addressing school absenteeism in children with ADHD. This research may also lay the foundation for future studies exploring the role of parenting in influencing school attendance.

MEDIATING ROLES OF BURDENSOMENESS AND BELONGINGNESS IN THE LINK BETWEEN SOCIAL SUPPORT AND SUICIDAL BEHAVIORS AMONG UNIVERSITY STUDENTS

Clara Primo

Supervisor: Dr. Yan Liu

Suicide is a major health crisis worldwide, and the highest rates of suicidal ideation occur between 16 and 34 years old. However, there is a lack of research in suicidal behaviours among the Canadian university student population. To fill in this gap, this study aims to investigate the relationship between social support (SS) and suicidal behaviours (suicidal ideation and suicide attempts) among university students as well as the mediating effects of perceived burdensomeness (PB) and thwarted belongingness (TB). A total of 496 undergraduate students, recruited through Carleton University's SONA, responded to an online survey (M_{age}= 20, 67% female). Path analysis based on structural equation modelling was conducted to examine the mediation effects of PB and TB. Results showed that SS was an important predictor for PB, TB, and suicidal behaviours. PB mediated the relationship between SS and suicide ideation, but TB did not. Similar results were found for suicide attempts.

MODELLING ELECTRIC FIELD DISTRIBUTION IN TDCS FOR AUDITORY VERBAL HALLUCINATIONS IN SCHIZOPHRENIA PATIENTS: A SIMNIBS SIMULATION STUDY

Courtney Reesor

Supervisors: Drs. Natalia Jaworska & Andrea Howard

Transcranial direct current stimulation (tDCS) as a treatment for auditory verbal hallucinations (AVH) in schizophrenia populations exhibits variability in its therapeutic effects. This study explores SimNIBS simulation software to investigate the role of individual anatomical differences on the effectiveness of tDCS treatment. Neural magnetic resonance imaging (MRI) data was collected from 12 participants with schizophrenia and a history of AVHs was used to construct mri2mesh head models, which were segmented and adjusted manually. The SimNIBS graphical user interface used the head models to replicate actual tDCS protocols, with rectangular saline-soaked sponge electrodes (7x5cm) positioned at AF3 (anode) and CP5 (cathode) with a constant 2mA current. The simulation modelled the electric field (EF) depth and distribution in regions of interest associated with AVH across participants. Using SimNIBS to model the EF will contribute to a deeper understanding of tDCS treatment effectiveness and emphasize the importance of individualized treatment protocols.

INVESTIGATING PERSONALITY AND EMOTIONS IN EVERYDAY GOAL PURSUIT

Irina Reunova

Supervisor: Dr. Kira McCabe

This study examined the relationships between personality states, everyday goals, and state affect. I tested whether everyday goals related to one specific, hypothesized state or multiple personality states. I also tested whether there were differences in state affect during and after goal pursuit. Participants (N = 215) completed a survey in which they answered questions about personality, goal pursuit, and affect at the trait and state levels. For states, they recalled a recent event in which they pursued these goals and whether they experienced the personality states while pursuing the goals. They also reported affect during and after goal pursuit. While most everyday goals were related to the expected personality state, most goals were related to multiple personality states. Moreover, state affect during and after goal pursuit had correlations around .50, which suggests that while the two overlapped, participants reported different levels of emotions before and after goal pursuit.

INVESTIGATING SELF-CONTROL STRATEGIES USE AND EFFECTIVENESS IN ADHD

Elliott Richard

Supervisor: Dr. Marina Milyavskaya

Attention-deficit/hyperactivity disorder (ADHD) is prevalent among post-secondary students and is associated with an increased risk of poor academic achievement. Therefore, identifying ways to help those with ADHD symptomatology excel in their academic goals is crucial. ADHD is linked with difficulties in self-control, but self-control can take on different forms, such as modifying your situation (situational strategies) or shifting your attention or your thoughts (intrapsychic strategies). This study examines the effectiveness of these different self-control strategies for those with high ADHD symptoms compared to those with low symptoms. A sample of undergraduates completed two surveys one week apart. The first survey asked participants to list three goals for the upcoming week and included measures of ADHD symptomatology and self-control strategies. The second survey assessed goal progress. Findings will provide insight into how self-control manifests in individuals with ADHD symptoms and how it may support academic success.

INVESTIGATING LINGUISTIC SYNCHRONY IN PAROLE HEARINGS

Brogan Roach

Supervisor: Dr. Kirk Luther

Linguistic style matching (LSM) refers to how alike people's language sounds when they communicate. In high stakes interactions like parole hearings, LSM may shape perceptions of trust and credibility, potentially affecting parole decisions. The current study examined how incarcerated individuals' language aligns with parole board members' language, and whether this alignment varies by the incarcerated individuals' risk level. Using BUTTER software to analyze parole hearing transcripts, we examined language mimicry between low-, moderate-, and high- risk offenders. We anticipate greater LSM in hearings with low-risk offenders, suggesting increased rapport and trust, and lower LSM in moderate- and high-risk cases, which may reflect social distance. Findings will deepen our understanding of communication dynamics in institutional settings and highlight how perceived risk influences linguistic behaviour. This research has implications for parole board training, suggesting linguistic patterns as potential indicators of bias or rapport in decision-making, with broader relevance to forensic and legal contexts.

THE SOCIAL COST OF BULLYING: PEER VICTIMIZATION AND ITS IMPACT ON SOCIAL COMPETENCE

Liv Rodger

Supervisor: Dr. Tina Daniels

Research has continuously found bullying to be associated with a wide range of negative outcomes among youth, including decreased mental and physical health, academic functioning, social functioning and self-esteem (Gazelle & Rudolph, 2004; Lee & Vaillancourt, 2019; Martinez et al., 2024; Iyer-Eimerbrink & Jensen-Campbell, 2019). A link between peer victimization, low social competence and low self-esteem ratings has been established in the literature, however there is a lack of research that specifically addresses the effects of relational and physical victimization on social competence, and what this relationship looks like among children in middle childhood attending Canadian schools (Boulton et al., 2010; Browning et al., 2003; Overbeek et al., 2010). The current thesis examined if relational and physical peer victimization resulted in a decrease in teacher-ratings of social competence over a two-year period among children in grades 4 to 6 attending schools across Canada. It was expected that higher levels of peer victimization would be associated with lower ratings of social competence two years later.

STIGMA AND SOCIAL SUPPORT: MODERATORS OF MINORITY STRESS AMONG SEXUAL AND GENDER MINORITIES

Kaya Scherr

Supervisor: Dr. Chris Davis

Sexual and gender minorities (SGM) are often the target of interpersonal and systemic discrimination that significantly increases their stress and worsens their mental health. The minority stress model posits that distal minority stressors, such as discrimination, trigger a proximal stress response in the minority person which negatively impacts mental and physical health. The purpose of our study was to assess whether social support from family and friends moderates the effect of minority stressors on proximal stress (internalized stigma and rejection anticipation), identity concealment, and symptoms of anxiety and depression. Drawing from an online survey of 447 people who had previously identified as a sexual or gender minority, we found some evidence that social support moderates distal stressors and proximal stress. We also found that social support moderates distal stressors and symptoms of depression.

SELF-DISTANCING AND "GENERIC YOU" STATEMENTS: A PATH TO RECOVERY FROM GAMBLING DISORDER?

Sophie Schott

Supervisor: Dr. Michael Wohl

Recovery from gambling disorder is challenging, with high rates of relapse. The present study examined whether adopting a self-distanced (third-person) perspective versus a self-immersed (first-person) perspective when reflecting on past (problematic) gambling behaviour helps people stay on the recovery path. Additionally, we investigated the use of generic "you" statements—generalized statements employing the pronoun "you"—as a potential linguistic marker of self-distancing. We surveyed 421 people in recovery from gambling disorder and found that, as predicted, adopting a self-distanced approach was positively associated with intention to remain in recovery compared to those who used a self-immersed perspective. However, there was no significant difference between those who adopted a self-distanced or self-immersed perspective on ambivalence toward their recovery or the extent to which they used the generic "you" to describe their recovery journey. These findings imply that self-distancing may be a tool to help people stay on the recovery path.

THE RELIABILITY OF AMYLOID BIOMARKERS: HOW PET, CSF, AND PLASMA REFLECT AD-RELATED BRAIN CHANGES

Jason Scully

Supervisor: Dr. Cassandra Morrison

With the recent availability of new beta-amyloid directed treatments for Alzheimer's disease (AD), accurate assessment of amyloid burden has gained increasing importance. However, limited data exists examining the sensitivity of positron emission tomography (PET), cerebrospinal fluid (CSF), and plasma amyloid biomarkers to AD-related structural brain changes. A total of 248 participants who had MRI and amyloid measurements from CSF, PET, and plasma were included from the Alzheimer's Disease Neuroimaging Initiative database. Structural brain changes differed in their association with the different methods to measure amyloid. For example, hippocampal volume was significantly associated with all three amyloid measurement methods (CSF, PET, plasma, $p < .05$), while ventricular volume was only significantly associated with CSF ($p = .007$). Our findings suggest that current plasma measures of amyloid are not as sensitive as CSF and PET, while CSF and PET differed in their strength of association to detect AD-related pathology and structural brain changes.

ACES AND RECIDIVISM IN JUSTICE-IMPACTED YOUTH: CONSIDERING GENDER DIFFERENCES AND THE MEDIATING EFFECTS OF MENTAL HEALTH

Olivia Sebastian

Supervisors: Dr. Shelley Brown & Ellen Coady

Young persons who have experienced trauma in their childhood are disproportionately represented in the legal system (Malvaso et al., 2022) and are more likely to recidivate compared to their peers without trauma histories (Yannon et al., 2024). This study aims to assess if the presence of mental health diagnoses mediates the predictive relationship between adverse childhood experiences (ACEs) and recidivism in justice-impacted youth. The potential moderating effect of gender will also be tested. The detailed narrative clinical notes of youth ($n = 343$) referred by a judge for a mental health assessment were retrospectively coded for mental health diagnoses and trauma histories. Recidivism data was retrieved from previously coded official conviction records. This research will inform whether it is necessary to implement universal trauma-responsive rehabilitative practices which specifically target the mental health needs of justice-impacted youth.

EXPLORING ACADEMIC RESILIENCE AND MENTAL HEALTH AMONG YOUNG CANADIAN ADULTS

Daniel Sulatycky

Supervisor: Dr. Kate Dupré

The goal of this study was to explore moderators influencing the relationship between academic resilience and mental health, guided by the Conservation of Resources (COR) Theory. It was hypothesized that higher academic resilience would positively influence mental health, with curiosity and healthier behaviours moderating this relationship positively. Conversely, financial strain and loneliness were expected to negatively moderate the relationship. A total of 214 undergraduates participated, completing an online survey that assessed academic resilience, mental health and potential moderators. Moderation analysis revealed that curiosity, loneliness, and healthier behaviors did not significantly moderate the relationship between academic resilience and mental health, but financial strain did. Additionally, higher academic resilience was positively correlated with better mental health. These findings have important implications for understanding the factors that can influence the relationship between academic resilience and mental health. Specifically, while certain positive behaviors like curiosity and healthy habits may not directly moderate this relationship, negative factors such as financial strain appear to play a significant role. Further research is needed to explore these moderators more deeply and to better understand how resource accumulation, as described by COR theory, influences students' mental health and resilience.

THE FAULT IN OUR PEERS: PEER VICTIMIZATION'S ASSOCIATIONS WITH STRESS IN LATE ADOLESCENCE.

Tamara Tobin

Supervisors: Dr. Rob Coplan & Alicia McVarnock

Negative social experiences like peer victimization can impact adolescents' adjustment during the transition from high school to university (Jantzer & Cashel, 2017), leading to increased stress (Newman et al., 2005; 2011). This study's aim was to investigate links between types of past peer victimization (i.e., physical, verbal, social, attacks on property, and cyber) and adolescents' stress during the university transition. Participants were *N* = 488 undergraduate students aged 17 to 19 (*M* = 18.16, *SD* = .633). Participants completed self-report questionnaires measuring peer victimization (MPVS-R; Betts et al., 2015) and stress (PSS; Cohen et al., 1983). Hierarchical linear regression analyses revealed that verbal victimization has a unique relationship with stress when controlling for all other study variables (*p* < .001). Gender did not moderate the relationship between past peer victimization and stress. These results have implications for high school and university stress and well-being initiatives.

YOUNG WORKERS' RESPONSES TO MENTAL ILL-HEALTH IN THE WORKPLACE

Olivia Vettoretto

Supervisor: Dr. Janet Mantler

Young adults aged 18 to 25 have the highest prevalence of mental ill-health, coinciding with their career launch. The purpose of this research was to explore how young workers, at the beginning of their careers, describe their experiences with mental ill-health at work, how they respond to those challenges, and what that means for their work. Fifteen participants who self-identified as having mental ill-health were interviewed using a semi-structured protocol. Using Reflexive Thematic Analysis, I identified four key themes. Most participants' mental ill-health tipping point stemmed from internal, external, and work-related factors. Participants had diverse decision-making processes for responding to mental ill-health at work, with most choosing to stay despite their mental health challenges. Notably, all participants – whether they stayed, quit, or took a leave –reported mental health improvements attributed to learning to transition into the workforce, mitigate harmful workplace stressors, and cultivate realistic workplace expectations.

NAVIGATING THE SPECIFIC RESPONSIVITY FACTOR: UNDERSTANDING HOW TRAINING PROBATION OFFICERS IN TRAUMA, DIVERSITY, AND INCLUSIVITY INFLUENCES CLIENT ENGAGEMENT AND RECIDIVISM AS A FUNCTION OF GENDER AND INDIGENEITY

Rebecca Wieler

Supervisor: Dr. Shelley Brown

Individuals serving community sentences represent a diverse population, with a variety of needs and unique lived experiences. Understanding how to support these clients to promote positive change is an important avenue of research. A new training curriculum—the Ontario Ministry of the Solicitor General's Made-in-Ontario Core Correctional Practices (CCP) Model of Community Supervision- was designed to address this by training probation and parole officers on a set of behaviours described as Trauma Diversity and Inclusivity (TDI) pillars. The study seeks to investigate whether probation and parole officers use of TDI pillars increased post implementation of the ministry's model. A sample of probation and parole officer case files for clients on probation (pre-training: *n* = 152, and post-training: *n* = 134) were coded to compare TDI use. This study also seeks to investigate if TDI skills correlate with client engagement and effort, and positive probation outcomes during supervision.

The opinions and views expressed in this report reflect those of the author and not the Ontario Ministry of the Solicitor General. This project was done with the support of the Ontario Ministry of the Solicitor General.

FROM SHYNESS TO AVOIDANCE IN EARLY CHILDHOOD: THE MODERATING ROLE OF SOCIAL ANXIETY, SOCIAL ANHEDONIA, AND NEGATIVE PEER EXPERIENCES

Edna Zygta

Supervisor: Dr. Rob Coplan

Shy children desire connection but withdraw due to fear, whereas socially avoidant children actively evade socialization. The etiology of social avoidance remains debated, with peer rejection, social anxiety, and social anhedonia all considered as possible factors. The goal of this honours thesis was to examine the roles of social anxiety, social anhedonia, and peer problems in the links between shyness and social avoidance in early childhood. Participants were parents of 148 children (ages 30-87 months) who completed assessments over 16 months, including child shyness and social avoidance (Time 1, Time 3), social anxiety, peer difficulties, and social anhedonia (Time 2). Among the results, both shyness and avoidance displayed moderate stability over time. However, results from hierarchical regressions did not support existing theories on the roles of social anxiety or social anhedonia in the etiology of avoidance. Parental education and peer problems were significant risk factors, warranting further exploration.

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Graduate Students who made PURE 2025 a success.

Please join us in recognizing the invaluable contributions
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Special thanks to Alexandra **Creeden**

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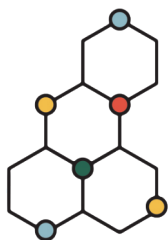
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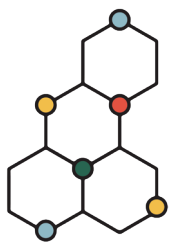Vol. 2 No. 1 (2024)

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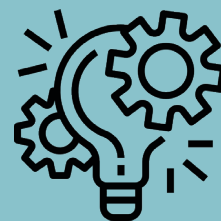## CARLETON UNDERGRADUATE
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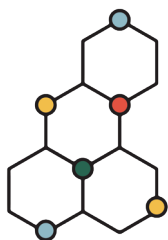
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