PSYCHOLOGY UNDERGRADUATE RESEARCH COMMUNITY
2025 SYMPOSIUM

Tuesday, April 8th
9AM-5PM

Sidney Smith Hall
100 St. George Street

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LAND ACKNOWLEDGEMENT

We wish to acknowledge the land on which the University of Toronto operates. For thousands of years, it has been the traditional land of the Huron-Wendat, the Seneca, and the Mississaugas of the Credit. Today, this meeting place is still the home to many Indigenous people from across Turtle Island. We recognize a legacy of broken treaties and covenants and the need to strive to make right with all our relations.

We encourage you to learn about the Toronto Purchase (Treaty 13) through which the land we are meeting on was "purchased." For more information on the history of Treaty 13, please see: **https://mncfn.ca/the-toronto-purchase-treaty-no-13-1805/**

To learn more, you can visit:

https://indigenous.utoronto.ca/initiatives-protocols/

https://native-land.ca/

https://mncfn.ca/

https://wendake.ca/

https://sni.org/

You can also support these local organizations:

Native Women's Resource Centre of Toronto **(https://nwrct.ca/)**

Canadian Roots Exchange **(https://canadianroots.ca/)**

Native Canadian Centre of Toronto **(https://ncct.on.ca/)**

Yellowhead Institute **(https://yellowheadinstitute.org/)**

WELCOME LETTER

March 27, 2025

To the PURC Community,

We are so excited to have the opportunity to host the 2nd annual Psychology Undergraduate Research Community (PURC) Symposium! At each PURC meeting, we have the opportunity to see the tremendous curiosity, passion, and tenacity of our psychology undergraduates. We're so excited to be able to host this event to share and celebrate that talent.

The symposium was our favorite event last year. It was amazing to see so many students show off the work that they had been doing, and even more amazing to see how many people showed up to support our presenters. Planning this year's event, it was humbling to see the outpouring of enthusiasm for the symposium. We had so many applications this year that we had to add an entire, additional block of presentations to fit all of our amazing presenters! It is really a privilege to be in a department with so many talented and thoughtful students for us to be able to host an event like this.

PURC exists because of the support of many people in our department. First, we have to express our *immense* gratitude to our graduate mentors. So many of you showed up over and over this year, not only offering students your wisdom but also care and kindness. You are a critical part of everything we do, including writing workshops, grad school panels, and today's symposium. We have also been fortunate to have wonderful faculty mentors, especially Dr. Ashley Waggoner-Denton who inspired the PURC Symposium and works to ensure we have funding for this event.

One thing we love about PURC is watching the community grow, so we hope that today will be an opportunity not to share research, but to build connections with peers, graduate students, and faculty alike. Don't be shy to also seek professional advice today! The PURC Symposium is a great opportunity for undergraduate presenters to share their own wisdom and experiences in the psychology department with junior students.

We'd like to extend a warm welcome to all of you. We hope today will be rewarding, meaningful, and fun!

Mia Radovanovic & Ece Yucer
Lead PURC Coordinators

ACKNOWLEDGEMENTS

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SYMPOSIUM SCHEDULE

TIME	EVENT	LOCATION
9:00 - 9:50	**Breakfast & Opening Remarks**	Psych Lounge
10:00 - 11:20	**Talk Session 1**	
	Symposium 1: Social Categories	SS1072
	Symposium 2: Motivation & Resilience	SS1074
	Flash Talks 1: Cognition & Perception	SS2105
10:15 - 10:20	**Poster Set-Up**	Psych Lounge
10:20 - 11:20	**Poster Session 1:** *Memory & Learning*	Psych Lounge
11:30 - 12:50	**Talk Session 2**	
	Symposium 3: Memory & Learning	SS1072
	Symposium 4: Gender & Sexuality	SS1074
	Flash Talks 2: Mental Health	SS2105
11:40 - 11:45	**Poster Set-Up**	Psych Lounge
11:45 - 12:45	**Poster Session 2:** *Identity, Judgement, & Education*	Psych Lounge
1:00 - 2:00	**Graduate Student Keynote**	SS2135
2:10-3:30	**Talk Session 3**	
	Symposium 5: Child Development	SS1072
	Symposium 6: Autonomy & Belonging	SS1074
	Flash Talks 3: Education, Emotion, Evaluation	SS2105
2:10 - 2:15	**Poster Set-Up**	Psych Lounge
2:15 - 3:15	**Poster Session 3:** *Health & Well-Being*	Psych Lounge
3:15-3:45	**Refreshments & Networking**	Psych Lounge
3:45-4:00	**Awards & Closing Remarks**	SS2135

KEYNOTE ADDRESS

MRYAM ALI | Brain Activity Patterns in PTSD and Its Symptom-Based Subtypes

We propose that PTSD is a stress-related brain injury affecting memory rather than just a fear-based disorder. Trauma disrupts brain activity, particularly in brain signals of slow-frequency (delta, 1-4 Hz) and fast-frequency (gamma, 30+ Hz). Traditional studies compare PTSD patients to trauma-exposed individuals without PTSD, overlooking differences within PTSD. This study takes a data-driven approach to identify PTSD subtypes based on symptoms and brain activity. Methods: 111 Canadian Armed Forces (CAF) and Veteran participants (57 PTSD, 54 trauma-exposed controls) underwent resting-state magnetoencephalography (MEG) scans. Controlling for anxiety, depression, and concussion history, PTSD subtypes were classified using Re-experiencing, Avoidance/Withdrawal, and Hyperarousal symptom clusters. Results & Conclusion: PTSD showed delta and gamma abnormalities. Beta activity (15-25 Hz) distinguished subtypes: Hyperarousal had higher beta, linked to emotional overactivity, while Re-experiencing and Avoidance/Withdrawal had lower beta, suggesting cognitive and memory difficulties. These findings highlight distinct PTSD subtypes, reinforcing the need for personalized treatments.

Mryam Ali is a Ph.D. candidate jointly affiliated with the University of Toronto and the Hospital for Sick Children Research Institute. Her research uses magnetoencephalography (MEG) to uncover neural biomarkers linked to memory and emotion, reframing Post Traumatic Stress Disorder (PTSD) as a complex neurophysiological injury rather than a simple psychological fear-based disorder. With a foundation in behavioural neuroscience, she previously explored learning, memory and anxiety in rodents using various techniques to examine brain-behavior relationships. Now bridging animal and human research, Mryam brings a unique, multidisciplinary lens to psychiatric & cognitive neuroscience. She is also a passionate advocate for neurodiverse students, committed to advancing equity and inclusion in higher education.

ABRIDGED PROGRAM

TALK SESSION 1

Symposium 1: Social Categories

S1-1 Seeing Representation and Performing Better? The Mediating Role of Workplace Belonging
Presented By: Toko Michioka

S1-2 "It's Just a Preference!", Understanding Social Constructions of Racial Preferences in Dating
Presented By: Sydney Baxter

S1-3 Intersectionality Within Psychology: Necessity and Challenges
Presented By: Jacob Vaillancourt

S1-4 But Doesn't Retirement Sound So Relaxing?: Understanding Prescriptive Ageism Against Older Adults with Intersectional Identities
Presented By: Sophia Joulaei

Symposium 2: Motivation & Resilience

S2-1 Exploring the Relationship Between Mental Effort and Process Praise in Infancy
Presented By: Rachel Kingstone

S2-2 Resilience Among African-Born Women in North America: A Narrative Review
Presented By: Quinn Tan

S2-3 Gender Differences in Adolescent Stress Resistance and Emotional Control
Presented By: Diefei Hu

S2-4 A Scoping Review of Existing Body Image Guidelines for Parents of Youth
Presented By: Alishba Mansoor

Flash Talks 1: Cognition & Perception

F1-1 The Influence of Prior Knowledge on Visual Perception: How Human Expertise Levels Map to Neural Network Processing Depths in Bird Identification
Presented By: Noga Altman

F1-2 The Influence of Autobiographical (Life) Boundaries on Memory for Public Events and Their Temporal Organization
Presented By: Yichen (Cathy) Xu

F1-3 Enhancing Emergency Vehicle Visibility: Colour Perceptions of Emergency Vehicles
Presented By: Christine Huang

F1-4 Examining Scent-Enriched Memory in Virtual Environments
Presented By: Rafidal Islam

F1-5 Sleep Promotes Memory for Schema-incongruent Video Clips
    Presented By: Aimee Fermin Olivares

F1-6 The Impact of Chronic Stress and Insomnia on Amyloid Plaque Accumulation in Alzheimer's Disease
    Presented By: Jeremy Zhang

F1-7 Effects of Intensive Hand Therapy on Ipsilesional and Contralesional Motor Cortex Physiology in Chronic Stroke
    Presented By: Celina Abad

F1-8 Divide and Conquer: Attentional Modulation Among Media Multitaskers
    Presented By: Leonie Ferber

F1-9 The Effects of Arousal and Valence States on Retention: A Paired Associates Paradigm
    Presented By: Julianna Gajraj

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P1-1 Sexed and Back Again? Evidence for Structural Change in the "Sexually Dimorphic Nucleus" of the Human Brain Over the Menstrual Cycle
    Presented By: Amy Zucchetti

P1-2 Cued Reactivation of Real-World Memories in a Smartphone-Based Intervention Maintains Memory Benefits for Several Years
    Presented By: Eliza McCann

P1-3 fMRI Co-Fluctuations Reveal Age-Related Declines in Network Specialization: A Role for Basal Forebrain
    Presented By: Tien Yang

P1-4 The Influence of Retrieval Practice Versus Restudy on Real-World Event Memory
    Presented By: Mursal Jahed

P1-5 The High Mind: Towards a Unified Theoretical Account of Insight Problem-Solving, Predictive Processing and Relevance Realisation Through Oneirogenic Psychedelics
    Presented By: Darin Lei

P1-6 Remembering Over Time: Exploring the Temporal Dynamics of Retrieval
    Presented By: Krisha Khanna

P1-7 Relative Order Effect on Mnemonic Similarity Task Across Development
    Presented By: Kate Zhang

P1-8 Are Children 'Stickier' Than We Think? How Novelty Shapes Developmental Differences in Visual Attention
    Presented By: Shelby Suhan

P1-9 Differential Engagement of Dentate Gyrus During Category Exception Learning in Children Versus Adults
    Presented By: Paige Denega & Julia Gonsalves

P1-10 The Influence of Shared Age Identity on the Specificity of Autobiographical Memory
        Presented By: Jialin Du
P1-11 Aging & Cognition in the Workplace
        Presented By: Jacky Jin
P1-12 CA1 Structure is Related to Category Learning Performance in Children
        Presented By: Jessie Song & Rajdeep Kalsi

TALK SESSION 2

Symposium 3: Memory & Learning

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        Presented By: Kaynaat Abrar
S3-2 Decoding Verbal Reports of Category Learning Strategies
        Presented By: Christine (Chris) Arrabito
S3-3 Investigating Circuit Mechanisms Supporting Transitive Inference Through Behavioral and Optogenetic Approaches Preliminary Presentation
        Presented By: Yupeng Yao
S3-4 A Hypergeometric Approach to Modelling Cognitive Processes in Survey Responses
        Presented By: Joanna Sie

Symposium 4: Gender & Sexuality

S4-1 Queer Women on Church Street: The Relationship of Community with Social Invisibility and Mental Well-Being
        Presented By: Marina Papachristos
S4-2 Cumulative Psychological Burden in Women with Hereditary Cancer Syndromes
        Presented By: Shay Meyer
S4-3 Motivations for Gender-Affirming Gear Use in Trans and Gender-Diverse Populations
        Presented By: Chris Wong
S4-4 Internalizing Symptoms in Gender Diverse Youth
        Presented By: Alex Helmy

Flash Talks 2: Mental Health

F2-1 Psychometric Analysis of Two Gender Dysphoria Measures in a Sample of Gender Diverse and Cisgender Youth
        Presented By: Rowan Danton
F2-2 Dreaming in Neuropsychiatric Disorders
        Presented By: Sonny Duan

F2-3 The Relationship Between BPD, ToM, and Interpersonal Dysfunction
> *Presented By: Sarah Campbell*

F2-4 Assessing Attentional Processing Differences in Anxiety and Depression
> *Presented By: Isabel Cooke*

F2-5 Does Video Game Technology Have the Potential to Revolutionize Relationship Counselling and Interactive Therapy?
> *Presented By: Tushti Hari*

F2-6 Optimizing Study Spaces: The Psychological Impact of Environmental Design on Mental Well-Being
> *Presented By: Nicole Stochmal*

F2-7 Examining the Influence of Treatment Duration on Psychosocial Readiness and Transition Outcomes in Therapeutic Campus-Based Care: A Mixed-Methods Study
> *Presented By: Murad Mastrouk*

F2-8 Athlete Experience in Sport: Investigation into the Influence of Select Behaviors
> *Presented By: Taya Semeniuk*

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Identity, Judgement, & Education

P2-1 Eye Movements and Social Group Biases: Investigating Age and Gender Effects in Facial Recognition
> *Presented By: Maria Diaz*

P2-2 The Power of Construal-Level Cues: How People Infer Chefs' Gender from Their Dishes
> *Presented By: Casey Zhang*

P2-3 Still the Model Citizen? Investigating Legal Decision-Making for Model Minority Offenders
> *Presented By: Divina Sum*

P2-4 The Mediation Effect of Self-Efficacy on Time Management Behaviors and Psychological Well-Being
> *Presented By: Qinxue Hong*

P2-5 Who Perceives Singlehood Discrimination and Identifies with Singlehood? A Within-Group Investigation of Singles
> *Presented By: Charm (Ming-Ying) Lee*

P2-6 "By the Way, My Pronouns Are…": Pronoun Correction Does Not Lead to Negative Social Perceptions of Transgender People
> *Presented By: Catherine Ma*

P2-7 What Stands the Test of Time? Children's and Adults' Perceptions of Trait Stability
> *Presented By: Claire Finley*

P2-8 The Impact of Second Year Learning Communities on Basic Psychological Need Satisfaction, Motivation, Well-Being, and Academic Performance
      Presented By: Bruce Zhang

P2-9 Addressing Moral Polarization Using a Novel Wisdom Education Paradigm Called Dialectic into Dialogos
      Presented By: Parham Bokaei Jazi

P2-10 Understanding Student Well-Being and Performance Through Social and Self-Connection
      Presented By: Chloe Gauthier

P2-11 Role of Identity Safety Cues in Syllabi across Course Styles
      Presented By: Wei-Ting Chen

P2-12 Existential Meaning and Mental Health Among Undergraduate Students
      Presented By: Sophia Khan

TALK SESSION 3

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      Presented By: Selina Fu

S5-2 iPlay: Exploring Children's Perceptions and Evaluations of Fairness
      Presented By: Zeynep Sila Kurtoglu

S5-3 Impact of Attention on Visual Statistical Learning: Age Differences in the Neural and Behavioral Indices
      Presented By: Bilge Güven & Akshita Srivastava

S5-4 The Relationship Between Adolescent Manga Engagement and Adult Empathy
      Presented By: Liuxin Han

Symposium 6: Autonomy & Belonging

S6-1 How Pay Dispersions in Your Organization May Support or Thwart Your Basic Psychological Needs
      Presented By: Lucy Jeong

S6-2 Exploring the Effects of Social Invisibility on Acculturative Stress: The Role of Relational Mobility Among Chinese International Students at The University of Toronto
      Presented By: Jianqi Hou

S6-3 A Sociological Analysis on the Emotional Impact of AI on Undergraduates' Career Planning Process
      Presented By: Mam Kittani

S6-4 Optimizing a Smartphone-Based Memory Aid Using the Capability, Opportunity, and Motivation Model (COM-B) and Theoretical Domains Framework (TDF): A Person-Based Approach
      Presented By: Raphael Kwok

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F3-1 The Critical Pedagogy of International Students in The University of Toronto
Presented By: Emma Li

F3-2 Compassion on Campus: Addressing the Needs of Students Affected by Global Conflicts
Presented By: Elaine Guan

F3-3 Mathematical Intuition in Education: Conceptualizing and Enhancing Intuitive Reasoning
Presented By: Maya Winfield

F3-4 Dark Romance Fiction: Is It Really An Escape From Reality?
Presented By: Aaliyah Hunt-Andries

F3-5 Post It, Feel It: Impact of Relationship-Relevant Social Media Posts on Romantic Relationship Perceptions
Presented By: Olivia Yin

F3-6 Improving Attitudes Towards Androids and Artificial Sentience: The Influence of Video Games on Attitude Change
Presented By: Matei Sturdza

F3-7 Judging Source Credibility: University Degree or Work Experience
Presented By: Carrie Zheng

F3-8 Intentionality and Mindsets in Guilt Decision-Making and Rehabilitation Verdicts
Presented By: Noah Frazer

F3-9 Infants Perceive Fairness as Emotionally Significant
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F3-10 Misinformation in Parent-Child Interactions: Examining Gender Differences
Presented By: Xinyan (Cynthia) Lin

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P3-1 The Effect of BRCA1 and BRCA2 Mutations on Associative Memory and Hippocampal Function
Presented By: Trisha Menon

P3-2 Exploring How Female Adolescent Athletes Navigate and Regulate Their Emotions and Moods Alongside Menstruation While Participating in Sports
Presented By: Hitomi Sato

P3-3 The Sexed Brain on Birth Control: Grey Matter Volume Variations in Oral Contraceptive Users versus Naturally Menstruating Women
Presented By: Tanya Kataria

P3-4 Body Satisfaction and Suicidality in Gender Diverse Youth: Further Insights utilizing Measures of Suicidal Thoughts and Behaviours
> *Presented By: Reem Baghdady*

P3-5 Resilience and Basic Psychological Needs in the Relationship Between Sexuality and Wellbeing
> *Presented By: Jennifer X. Yu*

P3-6 One-Size Doesn't Fit All: Population-Level Models Do Not Fully Capture Individuals' Affective Well-Being
> *Presented By: Rachel Yen*

P3-7 Parenting Dynamics Following Separation and Outcomes for Children
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P3-8 Burnout in Final-Year Students: Examining Demands, Resources, and Gap Year Options
> *Presented By: Xiaojing Zhu*

P3-9 Moderators of Work Hours and Well-Being
> *Presented By: Andy Jiang*

P3-10 The Significance of Sense of Belonging for PTSD Symptom Management in Veterans and First Responders
> *Presented By: Paniz Salehi*

P3-11 Impacts of Age-Related Hearing Loss on Gait Performance During Cognitive Tasks in Virtual Reality: Implications for Early Detection of Alzheimer's Disease
> *Presented By: Ramsha Mahmood*

P3-12 Is Sexual Satisfaction Meaningful? It Depends on your Gender and Sexual Orientation
> *Presented By: Clizia Martini*

TALK SESSION 1

Symposium 1: Social Categories

S1-1 Seeing Representation and Performing Better? The Mediating Role of Workplace Belonging

Toko Michioka[1], Clizia Martini[1], K. Colin Li[1], & Rebecca Neel[1]
[1] University of Toronto

Representation in real life (e.g., role models) can be conceptualized as identity-based (e.g., race) or values-based (e.g., honesty). While previous work has shown that seeing more people who share one's identity and values improves job performance, few studies have examined why that is the case. This study examines whether belonging explains the relationship between representation and job performance. We recruited 407 full-time employees with at least one marginalized identity and asked them to list their important identities and values and answer questions about them. Path analysis showed that both identity-based and values-based representation predict belonging, but values-based representation was a stronger predictor. Additionally, values-based representation had a stronger indirect effect on outcomes through belonging. Our findings suggest that representation enhances job performance by fostering belonging, with values-based representation playing a greater role. Future research can explore which values matter most and whether these effects extend to other settings including schools.

S1-2 "It's Just a Preference!", Understanding Social Constructions of Racial Preferences in Dating

Sydney Baxter[1]
[1] University of Toronto

This study examines sociological factors influencing racial preferences in dating among young adults in the Greater Toronto Area (GTA). Through qualitative interviews with individuals aged 19-22, I explore how media exposure, peer reinforcement, and personal experiences shape dating choices. Social Identity Theory suggests that majority groups shape ideals of attraction, while Social Cognitive Theory explains how repeated exposure to media, particularly romantic roles in TV shows, reinforces racial biases. Peer influence in school environments further strengthens these preferences. The study finds that access to diverse racial groups and personal experiences significantly impacts dating choices, with positive media portrayals having a stronger effect than negative stereotypes. A grounded theory approach reveals that racial biases stem from exposure and reinforcement, with participants in racially homogeneous settings favouring the dominant racial group. While limited by sample size, this study challenges the assumption that racial bias in dating is primarily rooted in negative stereotypes.

S1-3 Intersectionality Within Psychology: Necessity and Challenges

Jacob Vaillancourt[1] & Patricia Sanchez[1]
[1] University of Toronto

The use of intersectional theory has been increasing in the psychological literature. However, papers often fail to recognize the origin and inherent politicization of the theory. This review synthesizes scholarly arguments of the need for social justice and a recognition of politicization to use intersectionality. Scholars demonstrate how quantitative and qualitative research can benefit from recognizing intersections as their own identity rather than the combination of multiple identities. Intersectionality challenges principles within psychology including parsimony and objectivity creating discomfort in practitioners and researchers alike. Recognizing shortcomings in the literature is essential to help serve understudied and underserved communities in particular. Research without intersectionality may unwittingly reproduce oppressive institutions and social contexts. The research reviewed in this paper can inform both the use of intersectionality within the literature and the need for policy to reinforce and recognize the needs of different communities.

S1-4 But Doesn't Retirement Sound So Relaxing?: Understanding Prescriptive Ageism Against Older Adults with Intersectional Identities

Sophia Joulaei[1], Hannah Gans[1], & Alison Chasteen[1]
[1] University of Toronto

While ageism research has grown more prolific in recent years, studies that explore aging through an intersectional lens remain limited. Specifically, little is known about the variability of prescriptive stereotypes – commonly held beliefs about how older adults should behave – across social groups. Prior work on prescriptive stereotypes related to consumption, identity, and succession suggests that succession-based expectations show the greatest variation across intersectional identities. This study will examine how these expectations shift based on the race and gender of older adults. In an online survey, 320 university students will read a scenario featuring an older White or Black man or woman who conforms to or violates a succession-based stereotype. Participants will then rate their attitudes toward the vignette target, and older adults more generally. By developing a more concrete understanding of how stereotypes vary across social groups, this research will inform strategies to reduce age-based discrimination and promote inclusivity.

Symposium 2: Motivation & Resilience

S2-1 Exploring the Relationship Between Mental Effort and Process Praise in Infancy

Rachel Kingstone[1], Mia Radovanovic[1], Grace (Wujiamei) Sun[1],
Lydia Altun[1], Kate Kim[1], & Jessica A. Sommerville[1]
[1] University of Toronto

Infants persist for longer on motor-based tasks when they are praised for their effort (i.e., process praise), especially when this praise overlaps temporally with their effort and success (Radovanovic et al., 2023). However, as children get older, the challenges they persist through become more cognitive. Thus, the present experiment explored the relationship between process praise and persistence in infants aged 16-23 months old (n=50/96, M=19.19 months). We assessed caregivers' process praise and infants' physical persistence on a dyadic gear-stacking task, and their cognitive persistence on a visual search task. We found that temporally-aligned process praise which linked infants' effort and success predicted both physical persistence, t(47)=3.01, p=.004, and cognitive persistence, t(34)=3.93, p=.049. Our preliminary results suggest that temporally-aligned process praise may help infants learn to view effort positively, fostering the later development of growth mindsets.

S2-2 Resilience Among African-Born Women in North America: A Narrative Review

Quinn Tan[1], Jenalyn Ormita[1], & Gillian Einstein[1,2]
[1] University of Toronto
[2] Rotman Research Institute, Baycrest Centre

African immigrants represent one of the fastest-growing populations in the US and Canada since the 20th century. However, African-born women face various pre- and post-immigration challenges, further complicated by their social identities related to race, gender, and immigration status. Extant research has emphasized the negative effects of immigration hardships, but many of these women successfully rebuild their lives in their host countries, suggesting the presence of resilience factors. This narrative review aims to explore resilience findings and gaps among African-born women in North America. A rigorous search was employed by searching six databases and following Preferred Reporting Items for Systematic reviews and Meta-analyses (PRISMA) guidelines, followed by sorting relevant articles into themes. Preliminary findings show that religious faith, social support, and cognitive reframing all function as factors contributing to resilience. This review can potentially inform policymakers and practitioners in developing culturally sensitive integrative supports for African-born women in North America.

S2-3 Gender Differences in Adolescent Stress Resistance and Emotional Control

Diefei Hu[1], Alice Xingyu Li[2], & Amanda Sharples[1]
[1] University of Toronto
[2] Stanford University

Adolescence is a critical developmental stage marked by numerous challenges and stressors. This study explores gender differences in stress resistance, focusing on how the social roles associated with gender may influence their ability to cope with stress. Using nationally representative data from 40 countries in the Programme for International Student Assessment (PISA), we found that girls consistently report weaker stress resistance levels compared to boys. This difference may reflect genuine differences or be artifacts of socialization processes, where boys are often encouraged to maintain composure and solve problems independently in the face of stress, while girls are encouraged to openly express their emotions and seek support from others. Interestingly, in developed countries, the gender differences in stress resistance, measured by Cohen's d (0.724), were more pronounced compared to those in developing nations (0.691). Our findings underscore the importance of addressing the distinct mental health needs of adolescent girls and boys, with particular attention to how socialization may shape their ability to manage stress.

S2-4 A Scoping Review of Existing Body Image Guidelines for Parents of Youth

Alishba Mansoor[1], Elise Christopoulos[1], Fengyue Xu[1], Landyn Meadows[1],
Madison F. Vani[1], & Catherine M. Sabiston[1]
[1] University of Toronto

Body image concerns are common among youth in sports, impacting commitment, enjoyment, and leading to dropout. Parents play an important role in their child's sport experience, however, parents often feel ill-equipped to help their children with body image concerns. Equipping parents with the proper tools to support their children is essential. This scoping review aimed to examine existing guidelines for parents on youth body image. Following Sabiston et al. (2022) eight-step framework, the study asked: What guidelines exist for parents regarding their child's body image? The protocol was pre-registered (https://osf.io/9hq78). Articles were included if they provided recommendations for parents of youth aged 4–18 and were published in English within the last 10 years. Databases searched included Embase, PsycINFO, and others. The search yielded 13,204 articles, with 7,828 screened after removing duplicates. Eligible articles will be synthesized to extract current recommendations and guidelines.

Flash Talks 1: Cognition & Perception

F1-1 The Influence of Prior Knowledge on Visual Perception: How Human Expertise Levels Map to Neural Network Processing Depths in Bird Identification

Noga Altman[1], Erik Wing[2], & Asaf Gilboa[1,2]
[1] University of Toronto
[2] Rotman Research Institute at Baycrest Hospital

This study examines how prior knowledge influences visual perception by comparing bird experts and novices to a convolutional neural network (CNN) on a delayed match-to-sample task. We ran a delayed-match-to-sample task with both bird novices and experts and trained a CNN to achieve a high accuracy in classifying the same bird images. We hypothesize that novices' performance will align with earlier layers of the CNN, while experts' would correspond to later layers. This prediction stems from the theory that novices primarily attend to low-level visual features (similarly to early CNN layers), whereas experts attend to more high-level, abstract features (like deeper CNN layers). To investigate this, we have extracted activations at various layers of the network and plan to test whether images which produced similar activation patterns within early layers will correlate with those confused by the novices, while images with similar activation patterns within late layers will correlate with those confused by the bird experts.

F1-2 The Influence of Autobiographical (Life) Boundaries on Memory for Public Events and Their Temporal Organization

Yichen (Cathy) Xu[1], Malcolm Binns[2], & Morris Moscovitch[1,2]
[1] University of Toronto
[2] Rotman Research Institute

Memory segmentation plays a crucial role in how individuals perceive and recall past events. This study investigates the impact of life boundaries on familiarity and perceived temporal distance of world events. In Part 1, 335 participants (ages 18-22) segmented their lives into distinct phases and rated the familiarity and relevance of news events from 1964 to 2024. Results revealed that events near life boundaries were rated as more familiar, but boundaries did not influence perceived relevance. Part 2 explores how life segmentation affects judgments of temporal distance and order. A new group of participants (ages 18-19) will assess the temporal order perceived time gap between event pairs occurring within the same boundary versus across different life boundaries(e.g., primary school, high school, university), leveraging their similar life segmentation. These two studies will contribute to the understanding of the influence of autobiographical memory on the memory of public events and their temporal organization.

F1-3 Enhancing Emergency Vehicle Visibility: Colour Perceptions of Emergency Vehicles

Christine Huang[1]
[1] University of Toronto

Emergency vehicle (EV) accidents are a growing concern in Toronto, emphasizing the need for people to immediately notice EVs to ensure road safety. This paper explores how human colour perception influences EV recognition, focusing on the trichromatic theory of cone activation and spectral power distribution. Red, the most commonly used EV colour, is perceptually salient in daylight but loses effectiveness at night due to artificial lighting conditions. Yellow and green, with high visibility across both daylight and artificial lights, are recommended alternatives. However, factors such as colour associations with emergencies, colour vision deficiencies, and driver inexperience can impact EV recognition. By analyzing the strengths and limitations of different colours, this paper proposes a multi-colour approach to determine the best combinations for maximum visibility. Additionally, enhancing the audio component of EVs is suggested to assist drivers with colour vision deficiencies, ensuring a comprehensive approach to improving EV recognition and road safety.

F1-4 Examining Scent-Enriched Memory in Virtual Environments

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[3] Trent University
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The presence of redundant cues across sensory modalities typically enhances cognitive performance, however the effect of olfactory cues on memory has not been well studied. Earlier work from our group found the addition of object-congruent scents within virtual environments improved object recall but not scene recognition. The present follow-up study will extend this work to investigate the role of cognitive load in mediating the effect of olfaction on memory. Participants first complete a visual search task in a virtual reality environment, with or without a secondary auditory task. Next, they complete recall and recognition memory tests. We employed a 2x2 within-subject design with modality (Smell vs. No Smell) and cognitive load (Single vs. Dual Task) as factors. Data collection is ongoing. The results will provide insight into whether increased task demands enhance or inhibit olfactory memory benefits and inform the utility of olfactory cues in memory-based applications (e.g., training, therapy).

F1-5 Sleep Promotes Memory for Schema-incongruent Video Clips

Aimee Fermin Olivares[1], Nelly Matorina[1], Stephanie Simpson[1,2],
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Sleep benefits memory. Theoretical accounts have proposed that sleep is involved in integrating new information into existing schemas. Here, we investigated this question using naturalistic stimuli. Seventy-six participants encoded 40 film clips and were assigned to either a sleep or wake condition. Participants completed an immediate free recall test for 10 clips (5 schema-congruent, 5 schema-incongruent) followed by a delayed free recall test after 12 hours. We observed a decline in memory performance across all conditions, except for schema-incongruent videos in the sleep condition. These findings suggest that sleep plays a critical role in selectively consolidating unexpected naturalistic information.

F1-6 The Impact of Chronic Stress and Insomnia on Amyloid Plaque Accumulation in Alzheimer's Disease

Jeremy Zhang[1]
[1] University of Toronto

Chronic stress and sleep disturbances, particularly insomnia, have been increasingly linked to neurodegenerative processes, yet their combined effects on Alzheimer's disease (AD) pathology remains underexplored. Stress elevates cortisol levels, disrupting sleep and impairing the brain's glymphatic system—a waste clearance pathway in the brain responsible for removing metabolic waste products, including amyloid-β. This literature review synthesizes existing research on the bidirectional relationship between stress, sleep dysfunction, and amyloid accumulation, highlighting cognitive consequences. My paper also includes a proposal which outlines a future study to investigate whether chronic stress exacerbates sleep fragmentation, thereby accelerating amyloid deposition. By using neuroimaging and examining stress-related hormonal changes, we can identify early intervention strategies for AD prevention. Findings from this review will contribute to a comprehensive understanding of stress and sleep's influence on Alzheimer's progression and propose possible intervention approaches.

F1-7 Effects of Intensive Hand Therapy on Ipsilesional and Contralesional Motor Cortex Physiology in Chronic Stroke

Celina Abad[1], Alica Rogojin[1], & Jed Meltzer[1]
[1] University of Toronto

Stroke is a leading cause of mortality, and a major contributor to adult disability. The most prevalent of which being hemiparesis, the weakness of the hand and arm. New technology from the MyHand(TM) device, a hand function therapy device that targets finger and hand mobility, has previously been linked to significant improvements in hand function. We investigate whether with treatment using the MyHand(TM) System, disability and impairment of the hand in survivors of stroke may be improved. We employed TMS techniques to measure the excitatory and inhibitory mechanisms of the motor cortices, in stroke patients and healthy controls. The manifestation of hand disability of stroke patients arises from a disproportion in excitatory and inhibitory activity when performing a motor activity. Thus, we examine whether there are improvements in excitatory and inhibitory mechanisms in stroke patients as a result of the use of the MyHand(TM) System, resulting in observable hand function advancements.

F1-8 Divide and Conquer: Attentional Modulation Among Media Multitaskers

Leonie Ferber[1] & Amy Finn[1]
[1] University of Toronto

Over the last decade or so, we have witnessed a growing incidence of media multitasking, yet the associated cognitive effects and their mechanisms are still unclear (Zhou & Deng, 2023). For example, despite evidence suggesting reduced performance on executive functioning and attentional filtering tasks (Cain et al., 2016), multitaskers may exhibit some unexpected benefits in other attentional tasks. Namely, studies point toward an enhanced ability to integrate stimuli across modalities among multitaskers (Lui & Wong, 2012). This finding may reflect a broader attentional scope or an increased incidence of attentional lapses. The present study examines the impact of media multitasking on attentional biases and integration. Specifically, we are assessing within-modality integration of task irrelevant stimuli among multitaskers. Furthermore, we will measure whether these individuals are more prone to attentional lapses and if so, we will assess whether their ability to integrate stimuli is temporally related to attentional lapsing.

F1-9 The Effects of Arousal and Valence States on Retention: A Paired Associates Paradigm

Julianna Gajraj[1] & Can Mekik[1]
[1] University of Toronto

The ACT-R rational analysis of memory proposes that memory is an adaptive system, making available the memories most likely to be needed over time (Schooler & Anderson, 1997). A key component of ACT-R is the base level activation (BLA) equation, which includes two free parameters, scale and decay, fitted to experimental data. As emotions are an adaptive function guiding cognitive processes including memory (Pérez et al., 2016), we propose to theoretically motivate the decay and scale parameters as reflecting arousal and valence state levels, respectively. Our proposal implies two hypotheses we investigate: (1) while controlling for valence, within participant variation in arousal does not affect the retention interval at which probability of retrieval is 50% (RI-P50); (2) while controlling for arousal, within participant variation in valence is positively correlated with the RI-P50. Participants will complete a paired-associates memory task to collect measures of the RI-P50 across varied affective state induction conditions.

POSTER SESSION 1

Learning & Memory

P1-1 Sexed and Back Again? Evidence for Structural Change in the "Sexually Dimorphic Nucleus" of the Human Brain Over the Menstrual Cycle

Amy Zucchetti[1], Tanya Kataria[1], Malvina Skorska[2], & Diana Peragine[1,2]
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The "sexually dimorphic" third interstitial nucleus of the anterior hypothalamus (INAH3) is smaller among females than males, a difference widely attributed to the permanent "organizing" effects of sex hormones on the developing brain. While some "activating" influences, like testosterone suppression/replacement, have been examined in adults, endogenous ones, like ovarian cycling, remain unexplored. To better understand the source and stability of this sex difference, we charted structural change in the INAH3-containing anterior superior hypothalamus across the menstrual cycle. To this end, seventeen naturally cycling young women underwent blood hormone sampling and T1-weighted anatomical magnetic resonance imaging during low-estrogen/progesterone (menses), high-estrogen (ovulation), and high-progesterone (luteal) phases. A lower volume was observed in the INAH3-containing anterior superior hypothalamus during ovulation than menses—and was inversely related to ovulatory progesterone. Findings are consistent with cyclic fluctuations in INAH3 size, and raise the possibility of a dynamic sex difference rather than a fixed/inborn one.

P1-2 Cued Reactivation of Real-World Memories in a Smartphone-Based Intervention Maintains Memory Benefits for Several Years

Eliza McCann[1], Bryan Hong[1], Miranda Chang[1,2], & Morgan D. Barense[1,3]
[1] University of Toronto
[2] Simon Fraser University
[3] Rotman Research Institute

HippoCamera is a smartphone-based intervention designed to mitigate age-related decline, where participants record and review high-fidelity memory cues. Previous studies found benefits to episodic recollection with associated hippocampal differentiation for events that were reviewed using HippoCamera compared to those that were not. Here, we followed-up with participants several years after initially using HippoCamera to investigate the longevity of these mnemonic benefits. We found persisting memory benefits on recollective, phenomenological, and qualitative outcomes for events recorded and reviewed using HippoCamera relative to control events from the same time period. These results suggest that HippoCamera can produce robust and long-lasting memory benefits.

P1-3 fMRI Co-Fluctuations Reveal Age-Related Declines in Network Specialization: A Role for Basal Forebrain

Tien Yang[1], Robyn Wilford[1], Ariana Youm[1], Melanie Cohn[1,2], & Katherine Duncan[1]
[1] University of Toronto
[2] Krembil Research Institute

Resting-state networks support specialized information processing, but aging disrupts this structure, increasing between-network and decreasing within-network connectivity. This phenomenon, known as dedifferentiation, is associated with age-related cognitive decline. However, its underlying mechanisms remain unclear. Given the basal forebrain's role in regulating brain activity via cholinergic projections and its age-related vulnerability, we hypothesized that basal forebrain cholinergic activity coordinates network dedifferentiation. Using the edge-timeseries method, we analyzed resting-state fMRI data from older adults by computing a segregation timeseries and cross-correlating it with the basal forebrain BOLD signal. We replicated dedifferentiation in older adults but found no significant correlation between segregation scores and neuropsychological performance. Moreover, basal forebrain activity and network segregation exhibited an oscillatory cross-correlation, potentially suggesting a feedback loop. This study provides initial evidence linking basal forebrain activity to network dedifferentiation, highlighting its role in cognitive aging and its potential implications for early detection and interventions targeting aging-related brain changes.

P1-4 The Influence of Retrieval Practice Versus Restudy on Real-World Event Memory

Mursal Jahed[1], Lauren A. Homann[1], & Morgan D. Barense[1,2]
[1] University of Toronto
[2] Rotman Research Institute

Retrieval practice improves memory for retrieved information, regardless of feedback, and enhances memory more strongly than restudy (testing effect). However, little is known about the testing effect in the context of naturalistic memories. This can be attributed to previous studies primarily investigating the testing effect in lab settings. To address this, we recruited 52 adults who underwent a museum-like tour of the Hart House building which was rich in sensory information, factual details, and social interactions. Participants then retrieved or restudied tour-related information over three review sessions before completing a final memory assessment which evaluated the testing effect, broader episodic memory, and integration of tour memories with semantic knowledge. Though we did not find a significant effect of retrieval practice on broader episodic memory, our work shows a significant testing effect in this naturalistic context. Additionally, we find the retrieval group to show a significantly higher integration with semantic knowledge.

P1-5 The High Mind: Towards a Unified Theoretical Account of Insight Problem-Solving, Predictive Processing and Relevance Realisation Through Oneirogenic Psychedelics

Darin Lei[1]
[1] University of Toronto

Although not well-understood, the notion that psychedelics promote insight problem-solving has been long recognized in cognitive science for decades. Emerging research in cognitive and computational neuroscience highlights that both states share an underlying neural basis for their perceptually rich and cognitively bizarre experiences, leading to moments of insight. Such results have also led to an overarching proposal that dreams might have evolved to assist with the brain's ability to generalize and overcome overfitting. These findings converge with key cognitive science frameworks – relevance realization (RR) and predictive processing (PP) – yet discourse on their integration remains limited. This paper examines the extent to which psychedelics may serve as a facilitator of the RR and PP frameworks, using its effects on insight, the overfitted brain hypothesis, and REBUS model as apparatuses for exploring this view. It argues that psychedelics offer a profound and novel avenue for investigating the foundations of cognition.

P1-6 Remembering Over Time: Exploring the Temporal Dynamics of Retrieval

Krisha Khanna[1], Lorraine (Jingran) Liu[1], Matthew Dougherty[1], & Katherine Duncan[1]
[1] University of Toronto

Memory is understood as a process involving encoding, storage and retrieval, all of which rely on different cognitive mechanisms. Some prior research suggests that encoding performance may wane over prolonged periods of time. However, the relationship between retrieval performance and time remains relatively unexplored. Based on the reliance of encoding and retrieval on different attention processes, we predicted that retrieval may improve over time. To investigate this, we designed a novel experimental paradigm where participants learn and remember associations. The participants' accuracy and response time were measured. Our pilot data (n=8) did not show an improvement in retrieval performance over time. Instead, the results suggest an initial "ramp-up" effect in retrieval performance, wherein retrieval accuracy improves after the first trial for the subsequent 2-3 trials. Currently, we are refining our experimental design to improve overall task performance and recruiting more participants.
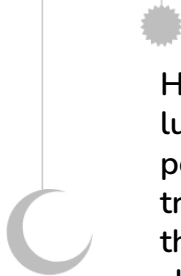
P1-7 Relative Order Effect on Mnemonic Similarity Task Across Development

Kate Zhang[1], Cory McKenzie[1], & Meg Schlichting[1]
[1] University of Toronto

Previous findings based on the Mnemonic Similarity Task (MST) suggested that pattern separation, a component of episodic memory, gradually improves with age.

However, prototypical MST paradigms lack consideration of how the order lure-target co-occurrence during the testing phase might impact memory performance differently across age groups. Manipulating relative order of respective trials for target and similar lure could reveal different processes of episodic memory throughout childhood. Hence, the current study investigated whether younger children (n = 28, 6 years), older children (n = 42, 10-11years), and adults (n = 24, 18-35 years) would show distinct reactions to different lure-target relative orders. We expect that adults will show more enhanced performance with target item presented before lure item of the same pair, and by contrast, children could be less affected by its presence. This research aims to provide new insights into the nuances of memory development in childhood and cognitive maturation.

P1-8 Are Children 'Stickier' Than We Think? How Novelty Shapes Developmental Differences in Visual Attention

Shelby Suhan[1], Josie Davies[1], Aarthi Ravi[1], & Amy Finn[1]
[1] University of Toronto

Children explore the world differently than adults, using broad attentional strategies that narrow with age. However, conflicting findings suggest children may not be as exploratory as assumed. While eye-tracking research shows younger children exhibit less exploration during scene viewing, these results may be influenced by task demands or the novelty of stimuli. Novelty, which increases exploratory eye movements in adults, has yet to be examined in children. This study investigates eye movements in 4- to 6-year-olds, 8- to 10-year-olds, and adults viewing novel and familiar scenes. By analyzing fixation duration, fixation count, saccade count, and saccade amplitude, we aim to clarify developmental differences in visual exploration and whether novelty enhances or reduces exploration across development.

P1-9 Differential Engagement of Dentate Gyrus During Category Exception Learning in Children Versus Adults

Paige Denega[1*], Julia Gonsalves[1*], Sagana Vijayarajah[1], Margaret L. Schlichting[1], & Michael L. Mack[1]
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* Denotes equal contribution

Categorization—to group items by shared characteristics—is an important learning strategy used early in life. Some items in the group don't share the same characteristics (exceptions) and must therefore be learned separately. Reconciling exceptions may depend on dentate gyrus (DG), a hippocampal subfield that stores highly detailed, separated memories. However, because DG structure shows refinement in childhood, it is unclear how the subfield may support exception learning in children. We compared DG engagement in children (7-9 years) versus adults during a category learning task that included exceptions. Adults outperformed

children in exception learning, suggesting developmental improvements in the ability to reconcile exceptions. At the neural level, DG was more engaged for exceptions than other same-category items, with this difference greater in adults than children. These findings suggest the functional role of DG in supporting exception learning is present in childhood, with developmental improvements to this mechanism enhancing flexible learning.

P1-10 The Influence of Shared Age Identity on the Specificity of Autobiographical Memory

Jialin Du[1], Bryan Hong[1], Kailin Summers[2], Morgan D. Barense[1,3], & Signy Sheldon[2]
[1] University of Toronto
[2] McGill University
[3] Rotman Research Institute

Older adults often recall fewer specific episodic details and more general non-episodic details than younger adults, a difference typically attributed to age-related brain changes. However, social factors, such as shared age identity between communication partners, may also influence recall. We analyzed data from an online study where younger (n = 71) and older (n = 72) adults recounted past events to fictional younger or older listeners. Using the Autobiographical Interview protocol, we quantified episodic and non-episodic details. Older adults produced fewer episodic details when addressing younger listeners, indicating that shared age identity affects memory specificity. These findings emphasize that social dynamics, alongside neurobiological factors, shape autobiographical memory in aging. Integrating social context into memory research offers a more comprehensive understanding of age-related recall differences, challenging the sole focus on brain changes. This underscores the need for holistic approaches in studying lifespan memory changes.

P1-11 Aging & Cognition in the Workplace
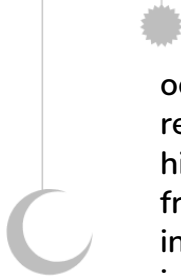
Jacky Jin[1], Jennfier Ryan[2], & Geoffrey Leonardelli[3]
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[3] Rotman School of Management

As the global population ages, more adults are remaining in the workforce longer, raising critical questions about how cognitive aging impacts decision-making, performance, and expertise. Traditional views have largely emphasized cognitive decline, focusing on reduced processing speed, memory deficits, and executive dysfunction. However, recent research challenges this perspective by exploring the potential cognitive benefits of aging. This review synthesizes research on age-related changes across cognitive domains, including memory, attention, executive function, and social cognition, and examines factors shaping cognitive reserve, such as

occupational complexity, lifelong learning, and social engagement. Workplace-relevant processes like decision-making, learning, and creativity are analyzed, highlighting both challenges and advantages in older workers. Finally, theoretical frameworks from lifespan development and organizational psychology provide insight into how older adults experience cognitive changes in the workplace. By integrating diverse findings, this review offers a broader perspective on cognitive aging and identifies avenues for future research and workplace adaptation.

P1-12 CA1 Structure is Related to Category Learning Performance in Children

Jessie Song[1], Rajdeep Kalsi[1*], Sagana Vijayarajah[1], Michael L. Mack[1],*
& Margaret L. Schlichting[1]
[1] University of Toronto
* Denotes equal contribution

Grouping items based on regularities ("categorization"; e.g., all birds fly) enables us to generalize our knowledge to new experiences (owls are birds and therefore can fly). Although this learning strategy is used early in life, categorization improves greatly with development. In adults, category learning may be associated with cornu ammonis 1 (CA1)—a hippocampal subfield that extracts regularities across experiences. It is unclear whether the same association exists in children, as CA1 shows structural refinement throughout childhood. We asked how CA1 volumes in children (7-9 years) versus adults relate to performance on a category learning task. Adults had better task performance than children, reflecting developmental improvements in the ability to extract regularities. Relating CA1 volume to task performance showed a negative association across children—those with lower CA1 volumes performed better than those with higher volumes. These findings suggest CA1 structural refinement may underlie category learning improvements during childhood.

TALK SESSION 2

Symposium 3: Memory & Learning

S3-1 Every Four-Legged Animal is Indeed a Dog: Investigating Concussive Symptoms in a Non-Concussed Psychiatric Sample

Kaynaat Abrar[1], Jeremy Frank[2], & Konstantine K. Zakzanis[1]
[1] University of Toronto Scarborough
[2] Innerqore Health

In the post-acute stages of an uncomplicated mild traumatic brain injury, many individuals report persistent physical, cognitive, and psychological deficits, including dizziness, fatigue, poor memory, and headaches (Boake et al., 2005). These symptoms, when lasting over 3 months, form the basis of post-concussion syndrome (Bigler, 2008). Archival data from 140 participants with various psychiatric disorders were analyzed. Participants completed the Rivermead Concussion Questionnaire along with various psychometric tests of psychopathology, with symptom validity indexes. Various inferential statistics will be employed to examine differences between groups in terms of overall Rivermead scores and symptoms, controlling for multiple comparisons. We hypothesize that individuals with varying psychiatric diagnoses would endorse concussive symptoms with similar base rates to those who have suffered a concussion, and that significant differences in symptom clusters between psychiatric disorders would be found. Results will inform clinical practice to negate future positive diagnoses of concussion in psychiatrically impaired individuals.
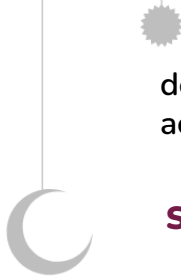
S3-2 Decoding Verbal Reports of Category Learning Strategies

Christine (Chris) Arrabito[1], Yongzhen Xie[1], & Michael Mack[1]
[1] University of Toronto

Real-world categories often involve exceptional items, such as whales in the mammal category. However, the mechanisms underlying exception learning remain unclear. Prior studies on exception learning focus on quantitative measures, like accuracy and reaction time, and subjective reports of categorization strategies have been under-utilized. Here, we investigated how verbal reports predict learners' behavioural performance and neural processes in exception learning. Participants (n=53) learned competing visual categories involving regular and exception items and verbally reported categorization strategies after learning. Using ChatGPT, we analyzed participants' verbal reports to rate their attended feature dimensions and awareness of category congruency. We found that individuals' verbal report ratings — particularly attended dimensions — were associated with their categorization performance. Moreover, verbal report ratings predicted learning-induced changes in exception and regular-item representations in hippocampal subfields. Our findings

demonstrate that verbal reports serve as a valuable tool for investigating the acquisition of categories with exceptions.

S3-3 Investigating Circuit Mechanisms Supporting Transitive Inference Through Behavioral and Optogenetic Approaches Preliminary Presentation

Yupeng Yao[1], Silvia Margarian[1], & Kaori Takehara-Nishiuchi[1]
[1] University of Toronto

Transitive inference (TI) is a key cognitive ability that enables logical reasoning based on learned relationships. The hippocampus (HPC) and medial prefrontal cortex (mPFC) are known to be involved, but the precise neural circuits remain unclear. This study investigates TI mechanisms in male C57BL/6J mice using an automated spatial nose-poke task with linear and relational training paradigms. Behavioural analyses revealed that mice trained on relational structures demonstrated higher inference accuracy and more stable response times. c-Fos immunohistochemistry identified activated brain regions, and optogenetic manipulations are being used to determine the necessity of the HPC-mPFC pathway in TI. The results so far indicate that enhanced relational training improves TI performance, thereby supporting its role in flexible learning. Future research will look into the causal involvement of specific neural circuits, helping to gain a better understanding of how the brain supports reasoning and decision-making in complicated inference tasks.

S3-4 A Hypergeometric Approach to Modelling Cognitive Processes in Survey Responses

Joanna Sie[1] & Can Mekik[1]
[1] University of Toronto

Ordinal scales, such as Likert scales, are essential in psychological and social science research. Data from such scales are commonly analyzed using metric models, which include traditional statistical methods such as t-tests, ANOVAs, and linear regression analyses. However, it has been shown that metric models are ill-suited for analyses of ordinal data, and may potentially lead to misinterpretations. In this study, we examine a cognitively-motivated, yet simple, statistical model of response processes in ordinal items. In particular, we assume that ordinal responses on an N-point scale are generated by taking N samples without replacement from memory and counting the number of samples that match the prompt. We compare this model with a similar approach using sampling with replacement and with cumulative link models on theoretical, practical, and empirical grounds.

Symposium 4: Gender & Sexuality

S4-1 Queer Women on Church Street: The Relationship of Community with Social Invisibility and Mental Well-Being

Marina Papachristos[1], Daliah Marei[1], & Rebecca Neel[1]
[1] University of Toronto

While literature has largely recognized queer spaces for their positive impact on holistic well-being, generalized queer experiences not only inattentively exclude the specific intersections of being a queer woman but overlooks the structural misogyny still prevalent in queer spaces. Through social invisibility theory, experiences of inattentive discrimination are understood to lead to cascading negative outcomes, with queer women's intersectional identities making them more vulnerable to experiences of invisibility. Focusing on Toronto's "Gaybourhood", this research investigates how participation, engagement, and connectedness to Traditional LGBTQ+ Spaces on Church Street compares to Queer Women-specific spaces in influencing feelings of LGBTQ+ ingroup invisibility and mental well-being. With data being collected from Queer Women in Toronto via university courses and community initiatives, it is hypothesized that higher levels of connectedness, participation, and engagement in queer women-specific spaces will correlate more strongly with improved mental well-being and reduced feelings of invisibility compared to mainstream LGBTQ+ spaces.

S4-2 Cumulative Psychological Burden in Women with Hereditary Cancer Syndromes

Shay Meyer[1], Michelle Galper[1], & Gillian Einstein[1,2]
[1] University of Toronto
[2] Rotman Research Institute, Baycrest Centre

Female BRCA mutation (BRCAm) carriers are at an increased risk of developing breast and ovarian cancer and consequently face an elevated risk of experiencing cancer-related distress. Carriers must also navigate decision-making regarding invasive preventative procedures, including ovarian removal (bilateral prophylactic salpingo-oophorectomy; BSO). However, few studies have examined BRCAm's self-reported and biomarkers of stress and their correlation with depressive symptoms. In a small cohort of Swedish women, we compared perceived stress, depressive symptoms, and hair cortisol concentration (HCC) between BRCAm without BSO (n = 18), BRCAm + BSO (n = 26), and age-matched controls (n = 22). BRCAm + BSO exhibited greater depressive symptoms compared to age-matched controls (p = 0.004); perceived stress and HCC did not differ between groups. Our findings suggest BRCAm may have a psychological burden that persists following risk-reducing BSO. It is critical to understand how medical surveillance and elevated cancer risk contribute to distress in individuals with hereditary cancer syndromes.

S4-3 Motivations for Gender-Affirming Gear Use in Trans and Gender-Diverse Populations

Chris Wong[1] & William S. Ryan[1]
[1] University of Toronto

Gender-affirming gear (GAG) refers to tools and accessories that help transgender and gender-diverse (TGD) individuals align their external appearance with their gender identity or internal sense of self. Using an approach/avoidance motivation framework, TGD participants—including those who use GAG, want to use GAG, or choose not to use GAG—provided qualitative responses on their motivations, experiences, and barriers related to GAG. They also completed novel scales assessing approach and avoidance motives for their use (or non-use) of GAG, alongside measures of psychological well-being, gender congruence, and authenticity. We predict that TGD individuals adopting approach motives for wearing GAG (e.g., to move toward a self-presentation that expresses who I am) will report greater psychological well-being, authenticity, and gender congruence compared to those with avoidance motives (e.g., to prevent discomfort and dysphoria related to parts of my body that don't align with my gender identity).

S4-4 Internalizing Symptoms in Gender Diverse Youth

Alex Helmy[1], Monika Folkierska-Zukowska[2], Daisy Hu[2], Diana E. Peragine[2], Lindsey T. Thurston[2], Meng-Chuan Lai[3], Dough P. VanderLaan[2], & Malvina N. Skorska[2]
[1] University of Toronto
[2] University of Toronto Mississauga
[3] Centre for Addiction and Mental Health

Research exploring predictors of mental health among GD youth has found that ratings of peer and family support may moderate the risk of developing clinically significant internalizing symptoms. However, it is unclear how ratings of peer and family support interact in their association with the severity of internalizing symptoms. To address this gap, 69 cisgender and 61 GD adolescents (ages 12-17 years), who were attending clinics for gender-affirming care, answered questions reflecting internalizing symptoms (Youth Self-Report), and peer and family support (collected as part of a larger study). Analysis of variance will investigate whether GD adolescents experience internalizing symptoms at significantly higher rates than cisgender adolescents. Regression analysis will further examine the extent that peer and family support moderate any association between internalizing symptom severity and group (GD and cisgender). This research aims to provide insight into the psychosocial risk or resilience factors that can be used to inform clinical interventions.

Flash Talks 2: Mental Health

F2-1 Psychometric Analysis of Two Gender Dysphoria Measures in a Sample of Gender Diverse and Cisgender Youth

Rowan Danton[1], Alex Helmy[1], Reem Baghdady[1], Monika Folkierska-Żukowska[2], Daisy Hu[2], Diana E. Peragine[2], Lindsey T. Thurston[1], Meng-Chuan Lai[3], Doug P. VanderLaan[1,2], & Malvina Skorska[1]

[1] University of Toronto, St. George
[2] University of Toronto, Mississauga
[3] Centre for Addiction and Mental Health

The rising number of adolescents exploring non-cisgender identities underscores the need for measures with inclusive language that reflect modern gender diversity. Tools based on cisgender-normed frameworks risk producing inaccurate data and pathologizing gender diversity. This study examines the psychometric performance of two gender dysphoria measures: the Gender Identity/Gender Dysphoria Questionnaire for Adolescents and Adults (GIDYQ-AA), rooted in gender-normed language, and the Gender Congruence Life Satisfaction (GCLS) scale, which uses inclusive language. Cisgender (n=76) and gender diverse (n=55) adolescents (ages 12-17 years of age) referred to clinics for gender-affirming care self-reported data for both measures. To assess the psychometric properties, internal consistency (Cronbach's alpha), known-groups validity (independent samples t-tests), and convergent validity (Pearson's correlations) are analyzed. If non-gender-normed tools demonstrate superior psychometric properties, this would support the importance of inclusive language in enhancing patient care for gender diverse adolescents. These findings can inform the appropriateness of cisgender-normed frameworks in gender-based healthcare.

F2-2 Dreaming in Neuropsychiatric Disorders

Sonny Duan[1] & Paul Whissell[1]
[1] University of Toronto

Interest in dreams traces back to Aristotle and has continued into modern psychology research, with many believing dream content to be an indirect measure of self, mental state, and the unconscious mind. Current literature has found a connection between dreams and neuropsychiatric disorders such as depression, schizophrenia, and Parkinson's disease, suggesting that dreams may offer insight into the assessment, treatment, and experiences of these disorders. However, the inherent limitations of dream research methodology can result in conflicting findings. This article analyzes research from 1990 onward to find patterns in the literature and provide an overview on current perspectives in dream phenomenology within various neuropsychiatric disorders. These trends can be used to guide future research, identifying common methods and areas in need of greater investigation.

F2-3 The Relationship Between BPD, ToM, and Interpersonal Dysfunction

Sarah Campbell[1] & Patricia Sanchez[1]
[1] University of Toronto

Borderline personality disorder (BPD) is characterized by emotional dysregulation, interpersonal dysfunction, and heightened sensitivity to social cues. Individuals with BPD often experience disruptions in empathy, specifically impaired cognitive empathy and heightened affective empathy, which contribute to social misinterpretations and relational distress. Theory of Mind (ToM), the ability to understand others' thoughts and emotions, plays a key role in social cognition, and deficits in ToM have been linked to interpersonal challenges in BPD. This study aims to investigate the relationship between BPD-like traits, ToM deficits, and interpersonal dysfunction in a non-clinical sample. Participants from the University of Toronto will complete measures assessing interpersonal problems, ToM ability, and BPD-like traits. A correlational design will be used to determine whether ToM deficits mediate the relationship between BPD traits and interpersonal dysfunction. Data collection is still in progress.

F2-4 Assessing Attentional Processing Differences in Anxiety and Depression

Isabel Cooke[1], Jennifer Ryan[1,2], Jessica Zaffino[1,2], Lily Daniels[2], & Eugenie Roudaia[2]
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Visual intake and cognitive processing are essential in the perception and navigation of our environment. Visual attentional processing can be quantified by the Functional Field of View (FFOV) task, where participants must attend and recall stimuli that are displayed rapidly in central and peripheral vision. This task reliably shows age-related sensory and cognitive declines, but has never been used to explore clinical cognitive deficits, such as declines in attention seen in anxiety and depression. Using the FFOV task, this project measures attentional processing in healthy adults with or without anxiety and depression symptomatology, as measured by the Beck Depression Inventory (BDI) and the State-Trait Anxiety Inventory (STAI). Previous research shows that divided-attention processing is especially impaired in individuals with depressive symptoms and that attentional focus is impaired in those with anxiety symptoms. Based on these findings, it is hypothesized that adults with greater depression and anxiety symptomatology will perform worse than adults without significant symptoms.

F2-5 Does Video Game Technology Have the Potential to Revolutionize Relationship Counselling and Interactive Therapy?

Tushti Hari[1]
[1] University of Toronto

Traditional research has often emphasized the negative consequences of video games, including addiction and heightened aggression. However, emerging studies suggest a paradigm shift—video games may foster communication and enhance relationship counseling. This qualitative meta-analysis explores how video games can serve as a therapeutic tool in couples therapy. By reviewing peer-reviewed literature from the past decade, this research identifies key therapeutic benefits, including conflict resolution, emotional regulation, and improved communication. Studies (Fishman, 2022; Curtis et al., 2017) highlight how video games create engaging, interactive environments that promote relationship-building. The recent rise of videotherapy (Simpson et al., 2020) further underscores the relevance of this medium. However, risks remain, including potential overuse and dependency. While findings suggest video games could complement or even replace traditional methods, further research is needed to balance their benefits with potential drawbacks. Can gaming truly revolutionize interactive therapy? The evidence suggests a promising future.

F2-6 Optimizing Study Spaces: The Psychological Impact of Environmental Design on Mental Well-Being

Nicole Stochmal[1]
[1] University of Toronto

The design of physical environments significantly influences cognitive function, productivity, and mental wellness. This literature review examines how environmental factors, including biophilic design, natural light, colour psychology, and acoustic conditions, enhance focus, reduce stress, and promote cognitive restoration in study spaces. Research suggests that exposure to natural elements, such as plants, wooden textures, and fractal patterns reduces stress, enhances productivity, and mitigates mental fatigue. Natural light has been shown to improve cognitive functions, focus, and mental health. Additionally, nature-inspired colours like blue and green aid concentration and emotional regulation. Lastly, studies demonstrate that aromatherapy (e.g., peppermint scent) and nature-based soundscapes (e.g., water sounds) further enhance mental clarity, relaxation, and cognitive performance. By synthesizing interdisciplinary findings, this review highlights how evidence-based environmental design can optimize study spaces, support student mental health, and mitigate stress-related burnout. These insights offer practical implications for creating academic environments that promote well-being and learning.

F2-7 Examining the Influence of Treatment Duration on Psychosocial Readiness and Transition Outcomes in Therapeutic Campus-Based Care: A Mixed-Methods Study

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[1] Hull Services
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Researchers have long debated the optimal duration of therapeutic care for children with complex mental health needs. This study investigated whether extended treatment in Therapeutic Campus-Based Care (TCBC) settings promotes stronger psychosocial outcomes. We hypothesized that longer lengths of stay would correlate with improved Child and Adolescent Functional Assessment Scale (CAFAS) scores and reduced high-risk behaviors. Participants (N=598) ranged from 4 to 17 years old, with an average stay of 469.87 days (SD=318.62). Kruskal-Wallis tests indicated a significant effect of age on total days in TCBC, $H(2)=57.33$, $p<.001$, $\eta^2=0.087$, with older youth leaving earlier than younger children. Moreover, regression analyses revealed that length of stay positively predicted improvements in discharge placements, $\beta=.41$, $t(594)=5.09$, $p<.001$. Findings suggest that while prolonged care may enhance emotional stability, benefits plateau beyond certain thresholds.

F2-8 Athlete Experience in Sport: Investigation into the Influence of Select Behaviors

Taya Semeniuk[1] & Mireille Babineau[1]
[1] University of Toronto

In sports, the coach-athlete relationship exhibits a crucial role on athlete mental health, influencing their well-being during both practice and competition. Yelling behaviors are practiced by coaches across various sports; however, research has yet to investigate how these behaviors may relate to athletes' experiences of anxiety. The purpose of the present study is to investigate the relationship between coach yelling behaviors and athlete anxiety symptoms. University of Toronto varsity athletes will complete a single questionnaire where they'll share their experiences of anxiety during competition, along with the frequency with which their coach exhibits yelling behaviors. In line with previous research illustrating negative associations between maladaptive coaching practices and athlete mental health, the author hypothesizes that results will yield a positive correlation between athlete anxiety symptoms and yelling frequency. This study hopes to advance the literature by providing a deeper understanding of how specific coaching behaviors may influence athlete mental health.

POSTER SESSION 2

Identity, Judgement, & Education

P2-1 Eye Movements and Social Group Biases: Investigating Age and Gender Effects in Facial Recognition

Maria Diaz[1] & Jennifer Ryan[1]
[1] University of Toronto

Facial recognition memory is closely tied to visual exploration, with eye movements offering insights into how individuals process and encode faces. Research has shown that visual sampling patterns are influenced by familiarity, age, gender, and social group biases. This study leverages an eye movement dataset (Mazloum-Farzaghi et al., 2023) to investigate how gender and age influence repetition effects in face viewing. Specifically, I aim to determine whether this dataset aligns with previous findings by examining (i) gender differences in visual sampling, (ii) the persistence of these gender differences in aging, (iii) the presence of an own-gender bias in viewing patterns across age groups, and (iv) the influence of an own-age bias on visual exploration. In line with previous findings showing that women exhibit greater fixation patterns during encoding, older adults demonstrate diminished repetition effects, and both age and gender biases shape recognition memory, we predict significant age and gender effects, with persistent gender differences and notable own-gender and own-age biases in visual exploration. Findings from this study will contribute to our understanding of how social group biases shape attention and memory, offering insights into age- and gender-related changes in cognitive processing.
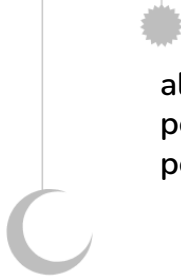
P2-2 The Power of Construal-Level Cues: How People Infer Chefs' Gender from Their Dishes

Casey Zhang[1], McLean Morgan[1], & Nick Rule[1]
[1] University of Toronto

It had been established that people can accurately infer chefs' gender from images of their dishes; however, the specific cues underlying this ability were unclear. The present study aimed to identify the mechanisms driving these inferences. First, we determined whether people rely on construal-level or detailed information by applying low (extracting construal-level info) and high (extracting detailed info) spatial frequency filters to images. Results showed that accurate gender inference only occurs with low spatial frequency images, indicating a reliance on construal-level information. Next, we identified two such visual elements – angularity and radial symmetry – which contain gender associations and examined whether they are mediators. Angularity was mathematically quantified using Python and radial symmetry using a gender categorization task. Mediation analyses revealed that

although neither is a mediator, both are involved in shaping participants' gendered perceptions of dishes. These results provide insight into the gendered social perception mechanisms that pervade creative industries.

P2-3 Still the Model Citizen? Investigating Legal Decision-Making for Model Minority Offenders

Divina Sum[1] & Patricia Sanchez[1]
[1] University of Toronto

The model minority myth has often been designated to minority groups, typically those of Asian descent, to describe their successful aptitude and ability within society. Studies intersecting legal decision-making and the model citizen has centred around the "Model Citizen." However, little research has been done regarding "Model Offenders". This study presents participants with a series of vignettes to ascertain the legal judgements towards an Asian-Canadian offender. Participants' endorsement of the model minority myth will be taken before the screening of the vignettes. Within the vignettes, we manipulate the type of immigrant, the offender, type of crime and the race of the victim to understand how the "Model Minority" will be sentenced. We hypothesise that the model minority myth will impact sentencing decisions, with the directionality of sentencing determined based on the manipulated factors, such crime type and the race of the victim. Data collection for this experiment is still ongoing.

P2-4 The Mediation Effect of Self-Efficacy on Time Management Behaviors and Psychological Well-Being

Qinxue Hong[1] & Ashley Waggoner Denton[1]
[1] University of Toronto

In the current academically demanding environment, effective time management behaviors play a critical role in enhancing students' psychological well-being by reducing stress and promoting academic success. This study explores the mediation effect of self-efficacy on the relationship between time management behaviors and psychological well-being in university students. Based on Bandura's social cognitive theory, I hypothesize that self-efficacy—an individual's belief in their ability to achieve specific outcomes—serves as a key mediating role. A sample of university students is recruited to complete online surveys. Regression-based mediation analysis will be used to test four hypotheses: (1) time management behaviors positively correlate with psychological well-being, (2) time management behaviors positively influence self-efficacy, (3) self-efficacy positively affects psychological well-being, and (4) self-efficacy mediates the relationship between time management and psychological well-being. The findings will provide valuable insights for universities to design targeted interventions that promote self-efficacy and support students' mental health.

P2-5 Who Perceives Singlehood Discrimination and Identifies with Singlehood? A Within-Group Investigation of Singles

Charm (Ming-Ying) Lee[1], Elaine Hoan[1], & Geoff Macdonald[1]
[1] University of Toronto

Single people constitute a heterogeneous group with diverse experiences shaped by factors such as demographics, well-being, and motivations. Although research on singlehood is gaining momentum, a comprehensive understanding of the traits associated with perceptions of singlehood-based discrimination (singlism) and identification remains limited. Across two studies, this research offers a descriptive profile of predictors for perceived singlehood discrimination and identification among singles. Single participants (N = 1631, 53% men, MAGE = 29.35) completed a host of widely examined measures that may have important relations with these two constructs. Our data revealed that single women and those who were lonelier, older, more committed to being single, and higher in anxious attachment perceived greater singlehood discrimination. Singles with higher life satisfaction and autonomy identified more strongly with other singles across four of five in-group identification components. Notably, being a single woman was linked to identity satisfaction but not to other identification components. Collectively, these findings illuminate the multifaceted nature of singlism and singlehood identification, laying the groundwork for more in-depth research into the interplay of various singlehood-related factors.

P2-6 "By the Way, My Pronouns Are…": Pronoun Correction Does Not Lead to Negative Social Perceptions of Transgender People

Catherine Ma[1] & Alison Chasteen[1]
[1] University of Toronto

Misgendering, the use of inaccurate gendered language to refer to a person, is associated with negative health outcomes for transgender people. A potential barrier to correcting misgendering is fear of social backlash, which often occurs to confronters of prejudice; however, it is unclear how confronters of misgendering are perceived. In a vignette study, we varied a transgender target's gender (man vs woman) and reaction to being misgendered (accept vs correct misgendering). Participants rated the transgender target on likeability, appropriateness, and tendency to complain both before (Time 1) and after (Time 2) the target's reaction was revealed. There was no main effect of target reaction or gender; in fact, contrary to our expectations, participants rated targets more positively at Time 2. This is one of the first studies to explore how correcting misgendering impacts perceptions of transgender people and provides an initial step in developing interventions related to misgendering corrections.

P2-7 What Stands the Test of Time? Children's and Adults' Perceptions of Trait Stability

Claire Finley[1], Alexa Sacchi[1], & Christina Starmans[1]
[1] University of Toronto

How do we change over time? Previous literature suggests that people believe that moral characteristics are especially central to one's identity (Heiphetz et al., 2018; Strohminger & Nichols, 2014). In a pilot study, we explored whether this extends to intuitions about change over time. We measured 5- to 8-year-old children's (N = 29) and adults' (N = 99) perceptions of the stability of different psychological traits from childhood to adulthood. We compared five traits – morality, intelligence, personality, values, and preferences – to see which one participants thought would persist. Preliminary results suggest that both children and adults believe intelligence is the most persistent, followed by morality. However, adults rated values as the least stable trait whereas children thought preferences were the least stable. These findings help to contextualize how people think of character plasticity, relating to issues ranging from the criminal justice system to our approach to teaching.

P2-8 The Impact of Second Year Learning Communities on Basic Psychological Need Satisfaction, Motivation, Well-Being, and Academic Performance

Bruce Zhang[1] & William S. Ryan[1]
[1] University of Toronto

The Second-Year Learning Communities (SLC) program at the University of Toronto is an educational support initiative designed to foster academic and personal growth in second-year undergraduate students and incorporates features that align with Self-Determination Theory (SDT). This study investigates how participation in SLC influences basic psychological need (BPN) satisfaction, motivational quality, academic performance, and well-being. Using a between-subjects design, the study collects data through an online questionnaire, sampling 300 second year University of Toronto students who either participate or do not participate in SLC. Based on SDT, I hypothesize that SLC students will report higher autonomy, competence, and relatedness levels than non-SLC students. I also expect SLC students to show higher levels of autonomous motivation, lower levels of controlled motivation, better academic performance, and greater well-being across social, mental, and physical domains. By examining these relationships through the lens of SDT, this study aims to provide insights that can inform more effective pedagogical strategies for enhancing student engagement, academic success, and holistic well-being.

P2-9 Addressing Moral Polarization Using a Novel Wisdom Education Paradigm Called Dialectic into Dialogos

Parham Bokaei Jazi[1], Paniz Salehi[1], Parsa Shekarloo[2], Aida Esmaelbeigi[3], Konstantinos Xanthios[1], Pouria Saffaran[1], Abby Goldstein[1], Michel Ferrari[1], & John Vervaeke[1]
[1] University of Toronto
[2] York University
[3] McMaster University

Recently, researchers have noted the emergence of a phenomenon termed "Moral Polarization", describing the extent to which opposing sides of the political divide perceive one another as immoral. However, there have yet to be studies examining potential approaches for directly addressing moral polarization. To address this gap, we have modified a novel wisdom education paradigm, termed Dialectic into Dialogos. We review the rationale for the construction of this method, as well as proposed pathways for its expected efficacy. In the study, participants will engage in a predetermined protocol to discuss a virtue, such as justice. We aim to reinstill a sense of common moral orientation, potentially decreasing negative moral judgements. As a wisdom education practice, Dialectic into Dialogos aims to foster a sense of intellectual humility and improve perspective taking, previously shown to mitigate polarization. Future research could explore wisdom education paradigms to address political polarization.

P2-10 Understanding Student Well-Being and Performance Through Social and Self-Connection

Chloe Gauthier[1] & Ashley Waggoner Denton[1]
[1] University of Toronto

This study investigates the influence of social and self-connection on undergraduate students' well-being and academic performance. Grounded in Social Baseline Theory and the Social Constructivist Paradigm, this study explores the independent and combined roles of these connections, mediated by resilience, emotional regulation, and hope. Full-time undergraduate students at the university of Toronto will be surveyed using validated self-report measures. Social and self-connection were hypothesized to positively predict well-being and academic performance, with self-connection mediating the impact of social connection. Additionally, interdependent self-construal is expected to amplify the benefits of social connection. Data analysis will employ structural equation modeling to examine direct, mediated, and moderated relationships. The findings aim to inform university interventions that enhance student well-being by fostering both personal alignment and supportive social networks, addressing challenges characteristic of emerging adulthood. This research contributes to a nuanced understanding of how inter- and intra-personal dynamics support academic and psychological resilience in competitive academic settings.

P2-11 Role of Identity Safety Cues in Syllabi across Course Styles

Wei-Ting Chen[1] & Ashley Waggoner Denton[1]
[1] University of Toronto

Inclusive teaching practices are essential in higher education, particularly for students from stigmatized identities who face identity threats that undermine their belonging and academic outcomes. Identity safety cues (ISCs) in educational settings—such as inclusive imagery and anti-discrimination policies—have been shown to improve student engagement and perceptions of instructors. While prior research has examined ISCs in classroom environments, their impact within course syllabi remains understudied. This study extends Maimon et al. (2023) by investigating ISCs across different course styles (lecture vs. seminar). Using a between-subjects design, we manipulate course style and ISC presence within syllabi and measure students' belonging, engagement, and instructor impressions. We hypothesize that ISCs will enhance belonging-related outcomes and instructor perceptions, with stronger effects in seminar courses due to increased social identity salience. Findings will contribute to understanding how syllabi shape inclusive learning environments and inform best practices for fostering student belonging in higher education.

P2-12 Existential Meaning and Mental Health Among Undergraduate Students

Sophia Khan[1] & Ashley Waggoner Denton[1]
[1] University of Toronto

The pursuit of existential meaning is a dynamic process which evolves over time, the undergraduate years being a critical stage in navigating questions of purpose of meaning in life linked to mental health. When individuals understand their purpose, it is positively correlated with improved mood, behaviour, and self-attitudes. The present study evaluates what elements contribute to meaning in the lives of undergraduate students, while accounting for diverse cultural backgrounds. It is hypothesized that undergraduate students will demonstrate lower mental health and existential meaning compared to normative adult samples, reflecting the rising prevalence and severity of mental disorders in this age group. We are currently recruiting undergraduate students to complete a survey and conduct qualitative interviews. By learning more about undergraduate students from diverse cultures elements of meaning, we will be able to identify best practices and provide recommendations to ensure that undergraduate students are best supported in this critical period.

TALK SESSION 3

Symposium 5: Child Development

S5-1 Children's Sharing Behaviours Within the Context of Collaboration

Selina Fu[1] & Jessica A. Sommerville[1]
[1] University of Toronto

Fair behaviours are key to cooperative social relationships. However, in windfall resource distributions, children exhibit self-serving biases (Kanngiesser & Warneken, 2012) that persist after joint work (Corbit, 2019). Here, we explore whether distributions favoring the self occur because children overestimate their contributions (Sommerville & Hammond, 2007). To address this question, 3.5- to 5.5-year-old children (N=48, M_{AGE}=4.25 years) worked in equal amounts with a partner to move puzzle pieces and look for prizes together. They then distributed the prizes and answered questions measuring respective work effort. Children allocated more prizes to themselves (V=859, p<.001), reported contributing greater effort (V=459, p<.001), and claimed to move more pieces than their partner (t(47)=2.19, p=.035). Notably, the amount of children's self-allocated prizes correlated with reports of work effort (rs(46)=0.392, p=.006) and pieces moved (rs(38)=0.420, p=.007). Thus, children reward themselves more when they remember doing more work, suggesting overestimations of work underlie biased distributions following collaboration.

S5-2 iPlay: Exploring Children's Perceptions and Evaluations of Fairness

Zeynep Sila Kurtoglu[1], Norman Zeng[1], & Jessica A. Sommerville[1]
[1] University of Toronto

Understanding fairness is a critical component of early social and moral development. By 15 months, infants expect fair distributions and demonstrate preferences for fair individuals. This study examines young children's ability to evaluate fairness and act upon these evaluations. Using a touchscreen-based cookie distribution paradigm, children (n=18, ages 1–3.99 years) observed fair and unfair distributors and could respond by rewarding or punishing them. Findings revealed that children rewarded fair distributors significantly more than they punished unfair ones, suggesting that fairness evaluations drive prosocial behavior. However, children did not significantly react to unfair distributors, indicating a more complex motivation underlying fairness perceptions. Methodological challenges included small sample size and technological issues, limiting generalizability. Future directions include investigating gender influences on fairness judgments and using paradigms allowing for a wider range of responses. These findings contribute to our understanding of fairness in early childhood and inform strategies for fostering cooperation and equity in learning environments.

S5-3 Impact of Attention on Visual Statistical Learning: Age Differences in the Neural and Behavioral Indices

Bilge Güven[1*], Akshita Srivastava[1*], Elena Greatti[1,2], Amy Finn[1], & Levi Antle[1]
[1] University of Toronto
[2] SISSA (International School for Advanced Studies)
* Denotes equal contribution

Statistical learning (SL) is the ability to extract regularities from our environment. Prior research in adults demonstrates SL is modulated by attention, but research on children is limited. Attention evolves throughout development, with children exhibiting broader attentional focus and more frequent attentional lapses. This results in children better absorbing task-irrelevant information even when their attention is directed elsewhere. The present study explores how attention shapes SL across development. Children and adults will be exposed to a visual stream containing statistical regularities, and either focus on it or have their attention diverted by completing a 1-back task, with neural entrainment and behavioural tasks as measures of SL. We predict that diverting attention will affect SL abilities in both children and adults, but that children will be less affected. This study will provide insight into how children's immature attention influences their SL abilities, potentially explaining their advantages in domains like language learning.

S5-4 The Relationship Between Adolescent Manga Engagement and Adult Empathy

Liuxin Han[1] & Si Jia Wu[1,2]
[1] University of Toronto
[2] Ontario Institute for Studies in Education

While manga, a special Japanese comic book, has become wildly popular among teens, most parents' attitude remains hesitant. To examine deeper, we administered surveys at an offline event Anime North in Toronto to 174 adults (54 females, 98 males, 22 non-binary, mean age = 25.44, SD age = 5.56). The survey assessed 1. adolescent manga engagement, 2. affective empathy with the empathic-concern subscale from Interpersonal Reactivity Index (IRI), and 3. cognitive empathy with perspective-taking subscale from IRI. Besides manga, we also included control measures of traditional narrative engagement and comic-related narrative engagement. From our results, given a small sample size, we observed trends very close to, but yet reaching statistical significance — surprisingly, a positive trend between manga engagement and empathic-concern, while a negative trend between mana engagement and perspective-taking. This suggests that reading manga may be associated with mixed effects on empathy. However, more examination is needed.

Symposium 6: Autonomy & Belonging

S6-1 How Pay Dispersions in Your Organization May Support or Thwart Your Basic Psychological Needs

Lucy Jeong[1], Soo Min Toh[2], & Wiliam Ryan[1]
[1] University of Toronto
[2] Rotman School of Management

Many organizations utilize incentives to motivate employees, resulting in pay dispersion (PD). Horizontal PD (HPD) refers to differences in total pay among employees at the same hierarchical level, while vertical PD (VPD) involves pay differences across different hierarchical levels. Despite its prevalence, existing literature lacks a clear theoretical framework on how PD affects employees, leading to conflicting findings. This research clarified these inconsistencies by exploring how PD impacts employees' innate Basic Psychological Needs (BPN)–relatedness, autonomy, and competence–which are essential for subjective well-being and intrinsic motivation, posited by Self-Determination Theory (SDT). A preliminary study involving full-time employees in Canada (n=50, M_{AGE}=33) revealed that HPD significantly predicted relatedness need satisfaction when moderated by individual pay levels, $F(10,38)=2.99$, $p<.01$, and the degree of performance-related pay, $F(10,38)=2.45$, $p<.05$. This study has significant practical implications and contributes to the literature by exploring PD through a new theoretical lens (SDT), moving beyond traditional Expectation or Equity theories.

S6-2 Exploring the Effects of Social Invisibility on Acculturative Stress: The Role of Relational Mobility Among Chinese International Students at The University of Toronto

Jianqi Hou[1], Elia Q.Y. Lam[1], & Rebecca Neel[1]
[1] University of Toronto

Social invisibility - feeling unseen or unnoticed by others - is a type of stigma and often leads to negative consequences and well-being (Neel et al., 2023). Chinese international students may be particularly susceptible to social invisibility in their new contexts because they may be seen as lacking familiarity with the local language or culture. This cultural or linguistic mismatch may lead to lower well-being and higher stress of adjusting to the local culture (i.e., acculturative stress). However, the impact of invisibility may be reduced for students who are more able to enter new relationships and leave existing dysfunctional relationships. We conducted an online study with 300 Chinese international students at the University of Toronto, to explore whether social invisibility is related to acculturative stress, and whether the extent to which students can form and end relationships (i.e., their relational mobility) affects the relationship between social invisibility and acculturative stress. Results from our

study may inform future strategies to help international students manage social interactions in new cultural settings and improve their wellbeing.

S6-3 A Sociological Analysis on the Emotional Impact of AI on Undergraduates' Career Planning Process

Mam Kittani[1] & William Magee[1]
[1] University of Toronto

There is growing concern among Undergraduates' about AI's impact on careers. Consequently, undergraduates' are navigating through the career planning process with historically significant uncertainty and emotion. In this study, we develop a model describing how information about AI runs through Undergraduates' social networks first, implicating their emotions second, and how this affects their career decisions third. Importantly, we are designing a longitudinal 10 year study with data collection occurring annually, to understand how Undergraduates' career decisions evolve as AI penetrates more completely into society. We control for SES and perceived career stability (a construct based on career category; engineering and english as two different categories). A structural equation model (SEM) is included with data analysis being done through R. We find evidence supporting associations between Undergraduates' social networks, their emotions, and their career decisions. We discuss the implications of AI on Affect Control Theory and the Linked Lives framework.

S6-4 Optimizing a Smartphone-Based Memory Aid Using the Capability, Opportunity, and Motivation Model (COM-B) and Theoretical Domains Framework (TDF): A Person-Based Approach

Raphael Kwok[1], Bryan Hong[1], & Morgan D. Barense[1,2]
[1] University of Toronto
[2] Rotman Research Institute

To promote healthy cognitive aging, we designed HippoCamera, a smartphone-based application that improves everyday memory. Despite previously demonstrating its memory benefits, there are multiple considerations in the translation of the app from a research setting to use in the real-world. To increase the usability of the app and facilitate more widespread adoption, we created various redesigns through a co-design study with older adults. These prototypes were developed using the Person Based Approach, and assessed via a mixed-methods user study, including structured interviews and questionnaires. We conducted an inductive thematic analysis guided by the COM-B and TDF to better understand potential barriers and facilitators to usage. We then incorporated this user feedback in an iterative manner to implement various behaviour change techniques to the app. Overall, this approach allowed us to identify strategies to improve HippoCamera's usability, while also identifying key considerations for the design of other digital memory aids.

Flash Talks 3: Education, Emotion & Evaluation

F3-1 The Critical Pedagogy of International Students in The University of Toronto

Emma Li[1] & Amanda Sharples[1]
[1] University of Toronto

The Canadian Bureau for International Education reported nearly one million international students in Canada by the end of 2022, drawn by factors like educational quality. However, the accuracy of this hope warrants evaluation. While Canadian institutions generally rank well globally, the challenge of instructing students from diverse cultural and linguistic backgrounds remains under-researched. This presents a barrier for these students to access comparable educational experiences, hindering their future opportunities for education, employment, and personal fulfillment. The objective of this study is to explore both the reasons behind the academic struggles of international students, such as culture and/or language, and possible solutions to alleviate them. Their effects on the perspectives, opinions and biases of instructors will serve as a potential basis for understanding possible obstacles as well as solutions for the challenges that international students face.

F3-2 Compassion on Campus: Addressing the Needs of Students Affected by Global Conflicts

Elaine Guan[1], Shelby Suhan[1] & Mireille Babineau[1]
[1] University of Toronto

Rising global instability has led to 28 ongoing conflicts, impacting approximately 2 billion people across the world (Carpiniello, 2023; World Bank, 2018). The mental health costs of those who have experienced warzone trauma are often overlooked and lead to long-term consequences. This is especially apparent in children and youth highlighting the importance of early intervention and accommodations. The aim of our study is to research the mental health costs and support provided to university students who have directly experienced war zone trauma, intergenerational transmission of war zone trauma, and/or have cultural ties with active war zone countries. A questionnaire-based study will be conducted to research the accommodation/accessibility services being offered to support this population of students. We hope to assess and expand the current resources by implementing a more trauma-informed and needs-based approach as suggested by current literature. Along with this, we aim to implement student's suggestions that have first-hand experiences with the University of Toronto's resources.

F3-3 Mathematical Intuition in Education: Conceptualizing and Enhancing Intuitive Reasoning

Maya Winfield[1] & Margaret Karras[1]
[1] University of Toronto

Conceptualizing mathematical intuition and its implication for mathematical education has been a subject of interest among researchers and educators for decades. Intuition has been cited by experts as a necessary component of knowledge, however, the mechanism underlying mathematical intuition and its development remain a topic of ongoing debate (Burton, 1999). This literature review aims to explore the current state of research on mathematical intuition, specifically the theoretical understanding of intuition and its role in mathematical problem-solving. Through analyzing the previous research in the area, this paper aims to gain a deeper understanding of how intuition operates in mathematical thinking and explore ways to facilitate effective intuitive reasoning in students.

F3-4 Dark Romance Fiction: Is It Really An Escape From Reality?

Aaliyah Hunt-Andries[1]
[1] University of Toronto

This study investigates why women/girls are drawn to dark romance novels, specifically featuring heterosexual couples, and how they justify toxic depictions of love within the genre. Dark romance, a sub-genre characterized by morally ambiguous protagonists and themes of psychological or physical trauma, often features love interests who engage in toxic behaviors such as stalking, kidnapping, and murder. Through a content analysis of Reddit posts from the "r/RomanceBooks" sub-discussion group, this study explores how readers rationalize these portrayals. The literature review emphasized themes of escapism and reinforcement of traditional gender norms in dark romance fiction, where heroines are rewarded for displaying empathy and submissiveness. Findings show readers distinguish between fictional and real-life toxicity, using content warnings to maintain control. The study concludes that dark romance provides an illusion of freedom while reinforcing traditional gender roles, emphasizing the need to recognize implicit gender scripts in media consumption and relationships.

F3-5 Post It, Feel It: Impact of Relationship-Relevant Social Media Posts on Romantic Relationship Perceptions
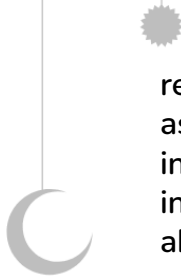
Olivia Yin[1], Tayler Wells[1] & Penelope Lockwood[1]
[1] University of Toronto

With social media rising in popularity over the past decade, it has become increasingly common for individuals to share relationship-relevant content (i.e., through posting). Little is known, however, about how posting about one's

relationship may impact relationship outcomes. The current study examines this association, specifically looking at past relationship-relevant Instagram posts. In one in-lab session, participants reviewed their most recent fifteen Instagram posts, indicating what these posts were about and how these posts made them feel (e.g., about their relationship). After all posts were reviewed, participants then completed relationship outcome measures. We predict that individuals will evaluate their relationships more positively immediately after reviewing a relationship-relevant post compared to other types of posts, and those with a higher number of previous posts about their relationship will feel more satisfied and committed. This research is currently ongoing; thus, a subset of our sample will be analyzed.

F3-6 Improving Attitudes Towards Androids and Artificial Sentience: The Influence of Video Games on Attitude Change

Matei Sturdza[1]
[1] University of Toronto

With the number of new releases increasing each year, video games have become a popular pastime around the world. These games are often built around narratives and allow individuals to engage with certain topics in a variety of ways, potentially providing new perspectives and deeper understanding. However, the limited research on this new form of media has not allowed the formation of a conclusive answer regarding its ability to influence our attitudes and opinions. I aim to look at whether the video game "Detroit: Become Human" will elicit a lasting change in preexisting attitudes towards artificial intelligence and sentience. I expect a significant change in scores on the related attitude questionnaire for participants who completed the video game. Additionally, I anticipate that this attitude change will persist after two months, with a potential small but not significant decrease over time.

F3-7 Judging Source Credibility: University Degree or Work Experience

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Although the 'Experts can be Trusted' heuristic is well established in the literature, unexplored questions remain about its scope and limitations. For example, not all experts attain expertise in the same way; some are considered experts because of their education credentials (e.g., PhD) but expertise can also stem from work experience. Unlike education-based expertise, experience-based expertise is understudied in persuasion research. Notably, it is unclear how people assess the credibility of work experiences when they are explicitly stated. Therefore, this study aims to investigate whether people weigh these two sources of expertise differently when evaluating source credibility. Participants read short texts accompanied by author biographies detailing either relevant or irrelevant education and work experience. We hypothesized that experience-based expertise will be deemed more

credible than education-based expertise due to the growing emphasis on work experience in modern society. Results will be discussed with implications in information processing and communicator characteristics.

F3-8 Intentionality and Mindsets in Guilt Decision-Making and Rehabilitation Verdicts

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Jury trials are a context in which lay models of intentionality and preexisting mindsets play a major role. In this experiment with data collection ongoing, we will present several vignettes with manipulated levels of intentionality to the participants and ask them to make several important legal judgements for factors including guilt, responsibility, likelihood of recidivism, and character. Preexisting mindsets will be measured, rather than manipulated, and moral foundations are also included as an exploratory variable. Previous research has shown that increased levels of intentionality similarly increase judgements of responsibility, and growth mindsets are associated with strong beliefs in rehabilitation, so we hypothesize that greater intentionality will be associated with greater guilt, responsibility, and sentencing ratings. We also hypothesize that growth mindsets would be associated with reduced likelihood of recidivism, and reduced expected severity of recidivism, and vice versa for fixed mindsets.

F3-9 Infants Perceive Fairness as Emotionally Significant

Aaron Wang[1], Norman Zeng[1], Jessica A. Sommerville[1], & Paul Bloom[1]
[1] University of Toronto

Children's moral understanding is tied to their awareness of others' emotions. By age four, they expect victims of unfairness to feel negative emotions, influencing their moral judgments (Stowe et al., 2022; Paulus & Moore, 2015). However, most of this research focused on children older than 3. Infants also show early fairness expectations, preferring fair agents and linking fairness to praise (Schmidt & Sommerville, 2011; Deschamps et al., 2016). This raises the question: do infants, like children, also connect emotions with fairness? Using a violation-of-expectation paradigm, 48 infants (13–17 months) watched a distributor give one cookie to one recipient and three to another. Test videos showed either congruent (smiling beneficiary, frowning victim) or incongruent reactions(smiling victim, frowning beneficiary). Infants looked significantly longer at incongruent videos ($p < .05$, $d = .44$), indicating surprise. These findings suggest that infants expect unfair distributions to elicit negative emotions in the disadvantaged and positive emotions in the advantaged. This extends fairness research beyond resource distribution to anticipated emotional responses, suggesting that infants may perceive fairness as emotionally significant.

F3-10 Misinformation in Parent-Child Interactions: Examining Gender Differences

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[1] University of Toronto

Misinformation creates social challenges, as individuals must discard information provided by authority figures. In laboratory settings, girls are more reluctant, on average, than boys to challenge a teacher and explore their own solutions (Radovanovic et al., 2024). People-pleasing socialization likely shapes these responses, as girls are expected to be obedient (Gralewski & Karwowski, 2013) and prioritize others' emotions (Zahn-Waxler et al., 1991) more than boys. To this hypothesis, we analyzed naturalistic videos (n=47/200) of parent-child interactions. Boys exhibited more testing behaviour (p=.009) and were more likely to set boundaries with caregivers (p=.001) than girls. Importantly, parents also tended to provide boys more evidence (p=.070). While future coding is required to disambiguate causation, these findings suggest that parents indeed encourage girls to be less critical of misinformation. Future research should explore how familial socialization may lead to long-term effects on how children learn and challenge others.

POSTER SESSION 3

Health & Well-Being

P3-1 The Effect of BRCA1 and BRCA2 Mutations on Associative Memory and Hippocampal Function

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BRCA1 and BRCA2 are genes that play a variety of important roles in their unmutated state. However, when mutated, the resulting changes in their function have been shown to affect neuronal function throughout the body, including those in the brain. Research has linked BRCA mutations, especially BRCA1, to changes in brain structure and poorer performance on certain cognitive tasks. Much of this research has focused on women who have undergone bilateral salpingo-oophorectomy (BSO), making it difficult to separate the effects of BRCA mutations from the effects of BSO and the resulting decline in 17β-estradiol. As such, the current study investigates the effect of BRCA1 and BRCA2 mutations on associative memory and hippocampal activity in women with intact ovaries. Importantly, previous research has not assessed hippocampal activity in these women pre-BSO. We hypothesize that BRCA1 mutations will have a greater negative effect on associative memory and hippocampal activity than BRCA2 mutations.

P3-2 Exploring How Female Adolescent Athletes Navigate and Regulate Their Emotions and Moods Alongside Menstruation While Participating in Sports

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Emotion and mood regulation are critical aspects of athletic performance, enabling athletes to compete at their optimal level. In recent years, research has increasingly recognized that hormonal fluctuations and symptoms throughout the menstrual cycle may impact female athletes' performance. However, much of the existing research focuses on middle-aged women, leaving a gap in the understanding of how menstruation impacts emotion and mood regulation in adolescent athletes. In the present study, we conducted semi-structured interviews with athletes aged 14 to 16 (n=5) from a variety of sports, including alpine skiing, squash, swimming, and taekwondo. Our aim was to explore how these athletes navigate and regulate their emotions and moods, in relation to menstruation while participating in sports. A thematic analysis is being conducted to identify these key themes in participants' experiences. We hope the results provide an in-depth view of these subjects, providing better support for female athletes.

P3-3 The Sexed Brain on Birth Control: Grey Matter Volume Variations in Oral Contraceptive Users versus Naturally Menstruating Women

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[2] University of Toronto

The "sexually dimorphic" third interstitial nucleus of the anterior hypothalamus (INAH3) is smaller among females than males, a difference widely attributed to the permanent "organizing" effects of sex hormones on the developing brain. While some "activating" effects of exogenous hormones, like testosterone suppression/replacement, have been characterized, those of ovarian hormones remain unexplored. To better understand their influence on brain sexual differentiation, we charted structural change in the INAH3-containing anterior superior hypothalamus over the hormonal contraceptive cycle. To this end, eighteen monophasic contraceptive users underwent salivary hormone sampling and T1-weighted anatomical magnetic resonance imaging during "active"/hormone-present and "inactive"/hormone-absent pill phases. Compared to the hormone-absent phase, volume of the INAH3-containing anterior superior hypothalamus was reduced in the hormone-present phase—and was inversely related to progestin dose. Findings are consistent with ovarian milieu-contingent fluctuations in INAH3's morphology, and raise the possibility of a dynamic sex difference in size rather than a fixed/inborn one.

P3-4 Body Satisfaction and Suicidality in Gender Diverse Youth: Further Insights utilizing Measures of Suicidal Thoughts and Behaviours

Reem Baghdady[1], Alex Helmy[1], Rowan Danton[1], Malvina Skorska[1], Monika Folkierska-Zukowska[2], Daisy Hu[2], Diana Peragine[2], Lindsey Thurston[1], Meng-Chuan Lai[3], & Doug VanderLaan[2]
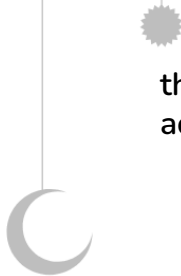*[1] University of Toronto*
[2] University of Toronto Mississauga
[3] Centre for Addiction and Mental Health

Research has shown that gender diverse adolescents experience greater suicidality than their cisgender counterparts, and that this increased suicidality is partly due to dissatisfaction with one's body (Li et al., 2024). However, Li et al. combined measures of suicidal thoughts and behaviours (attempts). To address this gap, 240 cisgender and gender diverse adolescents (ages 12-17 years) answered questions reflecting suicidal thoughts (Suicidal Ideation Questionnaire-JR), suicidal attempts, and questions related to body satisfaction. Analyses of variance will examine if gender diverse adolescents experience greater suicidality (thoughts and behaviours) and have lower body satisfaction than cisgender adolescents. A moderated mediation analysis will be conducted on the mediating role of body satisfaction in the relationship between group (gender diverse and cisgender) and suicidality, moderated by gender. The results will provide further insight into sources of distress

that characterize the experience of suicidal thoughts or behaviours in gender diverse adolescents.

P3-5 Resilience and Basic Psychological Needs in the Relationship Between Sexuality and Wellbeing

Jennifer X. Yu[1], Chris Wong[1], & William S. Ryan[1]
[1] University of Toronto

Sexual minority identity has been linked to disparities in health and well-being outcomes, including depression, anxiety, and stress. Resilience, conceptualized as the dynamic processes that facilitate adaptation to adversity, may help explain differences in these outcomes. Additionally, basic psychological needs—autonomy, competence, and relatedness—may serve as resilience-promoting factors that support well-being. This study uses a representative sample of American adults (n = 10,001; 55.6% Female) to examine the relationship between sexual minority identity and well-being. Specifically, it investigates whether resilient processes mediate these associations, with basic psychological needs as critical determinants of resilience. It is expected that sexual minority individuals experience poorer well-being outcomes due to lower satisfaction of basic psychological needs which leads to weaker resilient processes. This study aims to clarify how resilience operates in sexual minority populations and identify factors that may mitigate health disparities.

P3-6 One-Size Doesn't Fit All: Population-Level Models Do Not Fully Capture Individuals' Affective Well-Being

Rachel Yen[1], Sofia Panasiuk[1], Emorie Beck[2], & Felix Cheung[1]
[1] University of Toronto
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The experience of well-being is unique to each individual. Recent research using individual-level approaches has revealed that commonly used population-level methods do not accurately describe changes in life satisfaction at the individual level. We extended these findings to positive and negative affect—the affective components of subjective well-being—by comparing temporal networks of affect dynamics at both the population and individual levels, using experience sampling data from 201 undergraduates (13,305 observations). We also tested whether relationships between positive and negative affective states within individual networks vary by life satisfaction. We found a substantial discrepancy between population and individual affect networks. Further, levels of life satisfaction impact the persistence of positive affect over time. For individuals with higher life satisfaction, positive affect at a previous time point inhibits current positive affect. Our results suggest that population-level approaches inadequately capture individual experiences of affect, emphasizing the importance of individual-level approaches in understanding well-being.

P3-7 Parenting Dynamics Following Separation and Outcomes for Children

Nicole Hupalo[1] & Amanda Sharples[1]
[1] University of Toronto

Research has shown how parenting dynamics significantly impact children. Understanding how particular circumstances such as separation affect children can help us better understand the different mindsets and behaviours children develop in their formative years and beyond. This experiment explored how parenting dynamics have affected the well-being, attachment styles, and perceived romantic relationship views of university students. Specifically how loyalty binds and loyalty binding behaviours in families can influence attachment styles and perceived romantic relationships in adult children. If these negative behaviours are extreme and constant, this can signify parental alienation. The results will be based on data collected from the University of Toronto's PSY100 pool. We expect these results to demonstrate a variety of perspectives within the context of the overall question of well-being, which encompasses human relationships and concomitant issues such as different post-separation parental dynamics and attachment styles.

P3-8 Burnout in Final-Year Students: Examining Demands, Resources, and Gap Year Options

Xiaojing Zhu[1] & William Ryan[1]
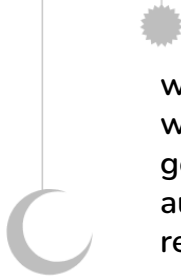*[1] University of Toronto*

Burnout, a psychological response to chronic stressors, is marked by emotional exhaustion, cynicism, and inefficacy. While initially studied in workplaces, I am particularly interested in exploring mechanisms of student burnout during job and graduate school applications. We recruited final-year undergraduate students from the University of Toronto to complete an online Qualtrics survey. This study examines how these students navigate application-related demands and resources and how these factors influence their perceived ability to take a gap year if career goals are unmet. Moreover, self-construal may moderate these relationships. We expect higher demands to reduce the perceived ability to take a gap year, especially for those with interdependent self-construal. Greater support will increase this ability, with interdependent individuals being less likely to take a gap year when support is low but more likely when support is high. Findings may inform discussions on healthcare, career guidance, and support services tailored to students' needs.

P3-9 Moderators of Work Hours and Well-Being

Andy Jiang[1] & William Ryan[1]
[1] University of Toronto

The relationship between working hours and employee well-being varies widely, benefiting some employees while harming others. This study examines how specific factors moderate this relationship, clarifying when longer hours enhance or diminish

well-being. Using a dataset containing measures of work hours, various types of well-being, and potential moderators, moderation analyses will explore the roles of gender, marriage status, caregiver role, job advancement satisfaction, and job autonomy. I anticipate that demographic factors, such as gender and caregiving responsibilities, will significantly moderate outcomes, with women and primary caregivers experiencing greater adverse effects from extended hours due to dual-role pressures. Job autonomy and job advancement satisfaction are expected to buffer adverse impacts, potentially making longer hours positively associated with well-being for employees who perceive greater autonomy and career progression opportunities. Testing these moderating effects will help organizations develop targeted policies to support employee mental health, optimize work schedules, and enhance overall employee satisfaction.

P3-10 The Significance of Sense of Belonging for PTSD Symptom Management in Veterans and First Responders

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[1] University of Toronto

While research shows that access to a support system helps in Post-Traumatic Stress Disorder (PTSD) symptom management, our study reveals that these systems may be ineffective without specific characteristics. PTSD symptoms can persist even in people already well-linked to a network of people. From the thematic analysis of interviews of 8 first responders and veterans recruited after completing the Valhalla retreat program, we identified that a sense of belonging—encompassing acceptance, connection, shared experiences, and reciprocal community relationships—plays a more crucial role in symptom reduction than the mere presence of a support system. These people were usually not family, friends or coworkers but people with similar diagnoses or experiences. These insights advocate for an evolved approach in PTSD treatment modalities and redefining of support systems in PTSD care, specifically in the first responders and veteran populations with PTSD who also experienced sanctuary trauma and moral injuries.

P3-11 Impacts of Age-Related Hearing Loss on Gait Performance During Cognitive Tasks in Virtual Reality: Implications for Early Detection of Dementia

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[1] KITE - Toronto Rehabilitation Institute - University Health Network
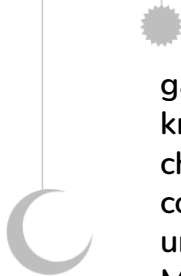*[2] University of Toronto*
[3] University of Guelph-Humber
[4] Wilfred Laurier University

Previous research has demonstrated that gait measures can serve as objective clinical markers of cognitive decline in older adults. When completing cognitive tasks during

gait, cognitive load is increased, which may further negatively affect gait. Another known risk factor for cognitive decline is hearing loss, however, whether gait characteristics in older adults with hearing loss (especially under conditions of cognitive load) are poorer than older adults with normal hearing is not well understood. In this study a group of older adults with normal hearing (N=24; M_{AGE}=71.9) and a group with hearing loss (N=9; M_{AGE}=74.4) performed single-task conditions (walking only or cognitive task only) and a dual-task condition (walking+cognitive task). We predict that the hearing loss group will exhibit slower walking speeds compared to the normal hearing group, particularly during the dual-task condition. This research may inform earlier detection of cognitive decline in those at known risk through gait measures.

P3-12 Is Sexual Satisfaction Meaningful? It Depends on your Gender and Sexual Orientation

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Sexual satisfaction contributes to a greater sense of meaning in life. However, little research has investigated whether this association may hold for single people and how it may differ by gender and sexual orientation. To fill in this gap in the literature, we sampled 298 singles with an equal split in the binary gender and three sexual orientations. Gender and sexual orientation are not significant moderators. However, evidence from the three-way interaction (gender × sexual orientation × sexual satisfaction) suggests that the correlation between sexual satisfaction and meaning in life is stronger for bisexual and gay men than for bisexual and lesbian women. In contrast, the difference in this correlation between heterosexual men and women is less pronounced. This work highlights the importance of intersectionality in well-being literature, suggesting that gender and sexual orientation should be considered together when unpacking how sexual satisfaction relates to single people's meaning in life.