NOWCAM

26TH ANNUAL NORTHWEST COGNITION AND MEMORY

May 2-4, 2024

University of Victoria

3800 Finnerty Rd, Victoria

OnlineAcademicCommunity.uvic.ca/NOWCAM-conference/

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THURSDAY, MAY 2nd, 2024
6PM on

6 pm - late	No Host Reception
	CRAFT Beer Market (450 Swift St)

FRIDAY, MAY 3rd, 2024
8AM – 5:30PM

8:30 - 9:00 am	Registration
9:00 - 9:20 am	Opening Remarks
9:20 - 10:05 am	Paper Session 1: Truthiness/Misinformation
10:05 - 10:30 am	Break
10:30 - 11:45 am	Paper Session 2: Memory/Eyewitness
11:45 - 1:15 pm	Lunch
1:15 - 2:45 pm	Poster Session 1
2:45 - 3:45 pm	Paper Session 3: Executive Functioning
3:45 - 4:10 pm	Break
4:10 - 5:30 pm	Keynote Address: Dr. Peggy St Jacques
6:00 - 9:30 pm	Gala Dinner
	Maple Room at the Sticky Wicket (919 Douglas St)

SATURDAY, MAY 4th, 2024
9AM – 2:30PM

9:00 - 9:30 am	Registration
9:30 - 10:30 am	Paper Session 4: Cognition/Physical Activity
10:30 - 10:45 am	Break
10:45 - 11:45 pm	Paper Session 5: Learning/Metacognition
12:00 - 1:15 pm	Poster Session 2: Pizza lunch served
1:15 - 2:00 pm	Paper Session 6: Memory/Emotion
2:10 - 2:30pm	Closing Remarks

Keynote Address

Friday May 3rd at 4:10 pm

PEGGY ST. JACQUES

University Of Alberta

Perspectives and Presence in Event Memory

Memories for events, such as autobiographical memories from our personal past, are immersive experiences. Not only do we form events from our personal past in an immersive surrounding centered on where we are in the scene, when we remember we also mentally place ourselves back in that event. This immersive nature of our memories gives rise to the subjective feeling of mental time travel and sense of presence within the past, which brings our memories "back to life." In this talk, I will discuss two separate lines of research examining the immersive nature of event memories. In the first part of the talk, I will discuss the role that our first-person viewpoint plays in shaping our memories. In the second part of the talk, I will discuss ongoing research in our lab investigating how the subjective sense of presence contributes to how we form and remember real-world events created using mixed reality. Together this research will touch upon the cognitive neuroscience of how our self-perspective and sense of presence support immersive memories.

NOWCAM MISSION STATEMENT

The Pacific Northwest is home to numerous wide-flung Psychology departments with strengths in cognition and memory. NOWCAM provides a forum for faculty and students from these departments to get together and discuss their latest research. Interactions with other researchers can spark innovations and cross-fertilizations that move the research forward in new and exciting ways. In any case, it's good fun to get together with friends and colleagues who share similar interests, chew the cognitive rag a bit, and quaff a beer or two over a good meal.

The aim of NOWCAM is to support Pacific Northwest faculty and student researchers working in the general area of memory and cognition by creating an annual venue in which they can share their current research activities with an informed, sympathetic, and good-humoured audience. With the exception of keynote addresses, NOWCAM favours papers and posters presented by students (usually with faculty as co-authors). This gives students an opportunity to develop their chops, and faculty a chance to sit back and relax.

GETTING TO THE CONFERENCE

All of the conference activities will take place in the Bob Wright Building on the UVic campus.
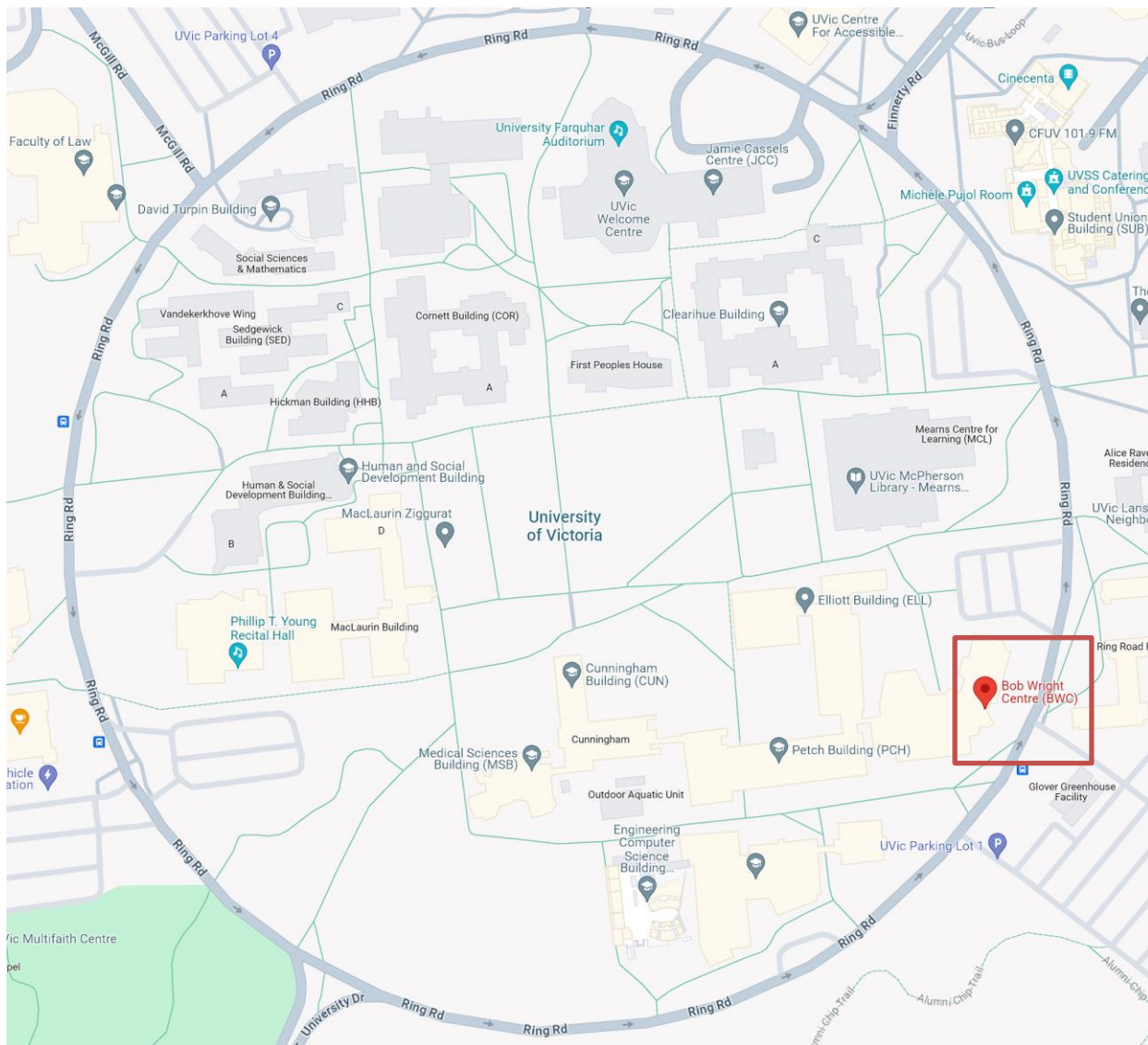
PARKING INFORMATION

There are many parking lots on the external side of Ring Rd that allow visitor parking at $9 per day. UVIC Parking Lot 1 is the closest to the conference. Please note that depending on the day/time, finding parking at UVIC can be difficult, and it is suggested to give yourself some extra time to find parking.

GALA INFORMATION

On Friday, May 3rd at 6:00 pm (Dinner served at 7:00 pm), the Gala dinner will be held at the Sticky Wicket in the Maple Room. The Sticky Wicket is in downtown Victoria (919 Douglas St). From the UVIC Transit Exchange, the **7 DOWNTOWN – TO 21 INTERURBAN** and **11 TILLICUM CTR – VIA GORGE** bus lines will get you to the venue in ~30 minutes.

INTERNET ACCESS

Visiting members of eduroam-supported institutions may securely connect to the EDUROAM wireless network. Authentication and support of eduroam for visitors is provided by your home institution. The best way to prepare to use EDUROAM for wireless access on a device at another institution is to ensure it works properly at your home institution before travelling. Further information can be found at http://eduroam.org.

OR

Use the "UVIC Guest" network and follow the instructions for authentication on the network. When you connect to the network you will be automatically redirected to the authentication page with instructions.

PRESENTER INFO

Each speaker will have 10 minutes to give their presentation, followed by 3 minutes for questions. There will be 2 minutes to change to the next speaker. The first speaker of each session will be the session chair.

USE OF FACE COVERINGS

UVIC does not require masks to be worn on its campuses.

ACKNOWLEDGEMENTS

NOWCAM conferences have in recent years been generously supported by KPU, SFU, UBC, and UVic

Program
Paper & Poster Abstracts Listed After Program

Thursday, May 2nd

18:00 - 23:00	**Social**
	CRAFT Victoria Harbour

Friday, May 3rd

08:30 - 09:00	**Registration**
09:00 - 09:20	**Opening Remarks**
09:20 - 10:05	**Paper Session 1: Truthiness/Misinformation**

Testing the Fluency Account for Truthiness

Daniel G. Derksen, Deborah A. Connolly, Eryn J. Newman, Daniel M. Bernstein

A Two-Phase Procedure to Investigate the 'Photo Truthiness' Effect

Bennett King-Nyberg, Kaitlyn Fallow, Hartmut Blank, Eryn Newman, D. Stephen Lindsay

Muddying the Waters: The Effects of Disinformation on the Perception of Truth and Consensus

Kirandeep K. Dogra , Ellie Mack, Vi Ly, Serena Calkins, Niko Newbould & Ira E. Hyman Jr.

10:05 - 10:30	**Break**
10:30 – 11:45	**Paper Session 2: Memory/Eyewitness**

The Cross Race Effect in Lineup Identifications in White, East Asian, and Hispanic Individuals

Crystal Huang, Ryan J. Fitzgerald

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Consequences at the Border: Do Consequences Improve Face Matching Accuracy on Border Control Tasks?

Camryn Yuen, Ryan Fitzgerald

Gender Differences in Eyewitness Identification

Emma Kruisselbrink, Ryan Fitzgerald

Juror Sensitivity to Eyewitness Reliability is Not Affected by Expert Credibility

Brayden Anderson, Ryan Fitzgerald

The impact of suggestion from a trusted adult on child credibility ratings

Nikola R. Klassen, Madison B. Harvey, Kristina Todorovic

11:45 - 13:15	**Lunch**
13:15 - 14:30	**Poster Session 1**
14:45 - 15:45	**Paper Session 3: Executive Functioning**

Comparing Study Strategy Use Amongst University Students With and Without ADHD

Alannah Wallace, Todd Handy

Misokinesia: An Attentional Sensitivity Towards Others' Actions

Sumeet Jaswal, Todd Handy

Just in Time? Examining the Impact of Time and Day on Parole Decision-Making

Fiza Hasan, Kirk Luther, Caylah Lemon & Heather Price

Revisiting the timing of distractor suppression

Daniel Tay, Liam Waldie, John J. McDonald

15:45 - 16:10	Break
16:10 - 17:30	**Keynote**

Perspectives and Presence in Event Memory

Dr. Peggy St Jacques

| 18:00 - 21:30 | **Gala Dinner** |
| | **Maple Room at the Sticky Wicket** |

Saturday, May 4th	
09:00 - 09:30	**Registration**
09:30 - 10:30	**Paper Session 4: Cognition/Physical Activity**

Mental Marathons: The Role of Endurance Exercise on Attention

Frances Copithorne, Katherine Boere, Olav Krigolson

The Effects of Physiological Depletion on Cognition

Katherine Boere, Frances Copithorne, Olav Krigolson

Examining Post-Competition Affect and Predicting Beliefs About Future Contests

Ekam Banipal, Dr. Shawn Geniole

Sex-Specific Effects of Physical Activity on Memory in Older Adults: Implications for Women's Health in Aging

Colleen Lacey (MSc), Jodie Gawryluk (PhD)

| 10:30 - 10:45 | **Break** |

| 10:45 - 11:45 | **Paper Session 5: Learning/Metacognition** |

Unveiling categories: Observing perceptual shifts in geology undergraduates

Anna Lawrance, Mateusz Janiszewski, Hilda Deborah, Andy Fraass, Duncan Johannessen, Lucinda Leonard, Dipendra Mandal, Brett Roads, & James Tanaka

Category Learning in Virtual Reality and the Impact of Information Access Costs on Learning Outcomes and Attention-Related Behaviours

Robin Colin Alexander Barrett, Dr. Mark Blair

Exploring Memory and Individual Learning Differences in the Anatomy Labs: Traditional vs. Virtual Smackdown

Leena Alkhammash , Leena Alkhammash, AJ Monroe, Aminata Condé, Emily Lo, Khushi Sharma, Lauren Belyea-Nisbet, Maya Lehman, Sean Jeon, Daniela Palombo, Jillianne Code, Claudia Krebs

Cognition and Lifestyle Behaviours in Young Adults

G. Kyle Gooderham, Todd C. Handy

12:00 - 13:15	**Poster Session 2: Pizza lunch served**
13:15 - 14:00	**Paper Session 6: Memory/Emotion**

Tugging on Time Using Virtual Reality: The Effects of Emotion on Retrospective Duration Memory

Omran Safi, Yiran Shi, Tyler Lin, Christopher R. Madan, Daniela J. Palombo

Shades of Emotion: Memory Recall for Event Details

Nada Alaifan, Peter Graf

Metacognitive Hindsight Bias in Younger and Older Adults

Liam Ruel, Carolyn Baer, Rakefet Ackerment, Daniel M. Bernstein

14:10 - 14:30	Closing Remarks

Paper Abstracts

Paper Session 1: Truthiness/Misinformation (09:20 - 10:05)

Testing the Fluency Account for Truthiness

Daniel G. Derksen, Deborah A. Connolly, Eryn J. Newman, Daniel M. Bernstein

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Claims evaluated with semantically-related photos are more often judged true than claims evaluated without photos (truthiness). According to the fluency account, photos increase the speed and ease of processing the claims (a truth cue). We tested the fluency account by: measuring truthiness magnitude and claim evaluation time independently, manipulating the fluency of photo-present trials, and attempting to reverse the truthiness effect through training. We observed truthiness wherein evaluations were faster when photos were present and when absolute fluency was increased. However, faster evaluations did not always correspond to larger truthiness effects. Training did not reverse truthiness. Fluency partially explains truthiness.

A Two-Phase Procedure to Investigate the 'Photo Truthiness' Effect

Bennett King-Nyberg, Kaitlyn Fallow, Hartmut Blank, Eryn Newman, D. Stephen Lindsay

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Previous research found that non-probative photos increase belief in obscure claims, known as the "photo truthiness" effect, though the effect is small. We tested whether separating photo exposure from truth judgments in a two-phase procedure would enhance this effect. Participants viewed claims with and without photos, then later assessed their truthfulness. This was compared to a one-phase procedure where judgments were made immediately. Results from five pre-registered studies showed no significant increase in the photo truthiness effect with the two-phase procedure, but belief ratings were substantially higher in the two-phase setup, regardless of photo presence.

Muddying the Waters: The Effects of Disinformation on the Perception of Truth and Consensus

Kirandeep K. Dogra , Ellie Mack, Vi Ly, Serena Calkins, Niko Newbould & Ira E. Hyman Jr.

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Sharing disinformation can convince people to adopt that position, create doubt concerning true information, and lead people to be less convinced of an agreed upon position. We examined how flooding individuals with conflicting information about controversial topics affected their perceptions of truth and their belief of expert consensus. Participants either read true, false, or mixed statements. Individuals presented with only one side accepted that position as true and as the consensus view. However, those presented with both sides were less confident in true information and that a consensus exists. Flooding people with disinformation may make it harder to discern truth.

Paper Session 2: Memory/Eyewitness (10:30 – 11:45)

The Cross Race Effect in Lineup Identifications in White, East Asian, and Hispanic Individuals

Crystal Huang, Ryan J. Fitzgerald

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The cross-race effect is poorer recognition of faces of another race compared to faces of one's own race. This research investigates the cross-race effect in White, East Asian, and Hispanic participants, using a repeated measures lineup procedure. Participants (n = 150) were recruited in Metro Vancouver and participants also completed a survey measuring intergroup contact and social motivation to individuate faces. None of the groups showed an own-race advantage and no impact of intergroup contact or social motivation was found. However, when White and Hispanic participants were grouped together into one "Non-Asian" group, an own-group advantage was found.

Consequences at the Border: Do Consequences Improve Face Matching Accuracy on Border Control Tasks?

Camryn Yuen, Ryan Fitzgerald

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Border control officers must decide whether passport images match their holders. The purpose of this study was to create an experimental paradigm that increased participants motivation to avoid errors on border control tasks. Participants decided whether passport photographs matched ambient photographs of passport holders. Half of the participants received feedback and the other half received a time-consuming consequence if they made an error. Consequences reduced mistaken accusations of nonmatching passports, without significantly reducing the miss rate for passports that actually did not match their holder. These results suggest that consequences can make participants behave more like real border control officers.

Gender Differences in Eyewitness Identification

Emma Kruisselbrink, Ryan Fitzgerald

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Meta-analytic techniques were used to examine gender differences in eyewitness lineup identifications. Boys/men were found to choose more in general from lineups than girls/women. We expected that girls/women would perform better on lineup tasks than boys/men. Boys/men and girls/women had comparable rates for correct identifications of the target in target-present lineups. When the target was absent from the lineup, boys/men made more false identifications than girls/women. Additionally, we expected that boys/men would display higher confidence in false identifications than girls/women. This was supported. Boys/men were more confident in false identifications than girls/women.

Juror Sensitivity to Eyewitness Reliability is Not Affected by Expert Credibility

Brayden Anderson, Ryan Fitzgerald

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Eyewitness expert testimony is used in courtrooms to educate juries on information not widely known to the public. The credibility of the expert could affect how jurors interpret their testimony. We assigned mock-jurors to read trial transcripts that varied in the reliability of an eyewitness identification and the credibility of an expert witness. Contrary to previous research on expert bias and juror decision-making, expert credibility did not affect juror sensitivity to eyewitness reliability. The results suggest jurors may be able to look past superficial cues to expert credibility and base their verdict on the evidence in the case.

The impact of suggestion from a trusted adult on child credibility ratings

Nikola R. Klassen, Madison B. Harvey, Kristina Todorovic

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Suggestive questioning of child witnesses can impact memory and lead to false disclosures. Suggestion can be introduced during official investigative interviews, however, there are often outside conversations between the child and a trusted adult, such as a parent, that can also influence a child's memory. It is unclear if triers-of-fact understand the potential impact of suggestive questioning of a child in conversations with a trusted adult. The current study aimed to investigate this by asking participants to read a mock transcript, rate the child's credibility, and make legal decisions. Findings and implications will be discussed.

Paper Session 3: Executive Functioning (14:45 - 15:45)

Comparing Study Strategy Use Amongst University Students With and Without ADHD

Alannah Wallace, Todd Handy

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University students are often challenged with managing a range of tasks that place a high demand on the executive system. Students can develop cognitive behavioural strategies to help regulate their use of executive functions to cope with these high demands within the academic context (e.g., using a planner, self-testing). The present study utilizes thematic analysis to compare how students with and without ADHD apply strategies during their studies. Understanding contexts in which students are best able to self-regulate use of cognitive behavioural strategies is essential in helping students develop effective strategy use and improve academic outcomes.

Misokinesia: An Attentional Sensitivity Towards Others' Actions

Sumeet Jaswal, Todd Handy

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My work investigates misokinesia, characterized by aversion to others' repetitive movements, and its impact on attention and daily life. We explore its prevalence in diverse populations, revealing its broader societal implications. Through neurocognitive experiments, we unveil misokinesia's influence on attentional processes, offering insights into its underlying mechanisms. Additionally, qualitative interviews provide nuanced perspectives on misokinesia's social and personal consequences, shedding light on its profound effects on individuals' lives. Our findings contribute to understanding misokinesia's prevalence beyond clinical settings

and highlight its significance for mental health and interpersonal relationships, emphasizing the need for greater recognition and support.

Just in Time? Examining the Impact of Time and Day on Parole Decision-Making

Fiza Hasan, Kirk Luther, Caylah Lemon & Heather Price

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Repeated decision-making could deplete cognitive resources and energy available to making rational choices. Given parole decisions are made throughout the day and week, we examined the influence of temporal contexts on parole decisions. Four hundred eighty parole transcripts were stratified based on three risk levels (low-, moderate- and high-risk) and time of day (morning or afternoon) before running logistic regressions. For low-risk offenders, we found trends for more parole granted on Thursday and Friday mornings compared to Tuesday and Wednesday mornings. Although we cannot escape our temporal contexts, efforts to understand and manage temporal patterns can improve parole decision fairness.

Revisiting the timing of distractor suppression

Daniel Tay, Liam Waldie, John J. McDonald

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Salient stimuli are believed to be suppressed to prevent their "attend-to-me" signals from causing distraction. In support of this hypothesis, an event-related potential (ERP) study showed that a uniquely coloured distractor elicits a marker of suppression called the distractor positivity (PD) when participants search for another item (target). The PD appeared to begin 100 ms after stimulus onset, but the early phase of this positivity may have been associated with the attend-to-me signal itself. We discovered that the distractor still elicited the "early PD" when it became a target. This posterior contralateral positivity (Ppc) appears to reflect salience, not suppression.

Paper Session 4: Cognition/Physical Activity (09:30 - 10:30)

Mental Marathons: The Role of Endurance Exercise on Attention

Frances Copithorne, Katherine Boere, Olav Krigolson

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Short duration exercise has been known to transiently improve cognition. However, the effects of endurance exercise remain mixed. Electroencephalography (EEG) is a non-invasive way to measure brain processes of attention, decision making and memory. The aim of this research was to explore the immediate effects of endurance exercise on cognition, and the successive timeline for cognitive recovery. Two hours of submaximal running caused domain dependant reductions in cognitive abilities as measured by EEG up to 24 hours post activity. Cognitive impairment from prolonged activity could have implications for professions which require long hours of work without rest.

The Effects of Physiological Depletion on Cognition

Katherine Boere, Frances Copithorne, Olav Krigolson

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Research has demonstrated that exercise enhances cognitive functions, with at least 15 minutes required for noticeable benefits. Yet, the cognitive effects of exercise exceeding one hour are not well documented. This study investigates the impact of a two hour moderate intensity depletion run on cognitive performance. Using EEG and physiological metrics (heart rate & weight), the results show that a two hour run without adequate fuelling or hydration leads to cognitive impairments persisting beyond a day.

Examining Post-Competition Affect and Predicting Beliefs About Future Contests

Ekam Banipal, Dr. Shawn Geniole

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A study using virtual reality boxing matches was conducted to investigate mood, arousal, and stress effects on post-competition affect and future performance beliefs. The boxing matches were manipulated, to ensure random assignment to winning or losing conditions. After investigating the variables using an affect grid, results showed increased arousal regardless of outcome. Winners experienced mood improvement and decreased stress, leading to expecting better future performance. Losers reported similar mood, but higher stress, leading to expectations of poorer future performance. Correlational data suggests that as post-competition stress levels increase, participants tend to believe they would perform poorly in the future.

Sex-Specific Effects of Physical Activity on Memory in Older Adults: Implications for Women's Health in Aging

Colleen Lacey (MSc), Jodie Gawryluk (PhD)

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This study investigated the impact of sex, hormone replacement therapy (HRT), and physical activity (PA) on memory in older adults. 469 participants (245 females, mean age = 64±7.54) were included from the UK Biobank. Males outperformed females on a numeric memory task after controlling for age ($\beta = 0.44$, $p = .004$), with a significant moderating effect of PA ($\beta = -0.0996$, $p = .0108$). Of the female participants, non-HRT users (N=147) had higher memory scores than users after controlling for age (N= 95, $\beta=-0.41$, $p= .031$), but PA did not influence the HRT-memory relationship ($\beta=0.0018$, $p=.486$). These results underscore the need to consider sex and sex-specific health factors in understanding the benefits of PA on memory in older adults.

Paper Session 5: Learning/Metacognition (10:45 - 11:45)

Unveiling categories: Observing perceptual shifts in geology undergraduates

Anna Lawrance, Mateusz Janiszewski, Hilda Deborah, Andy Fraass, Duncan Johannessen, Lucinda Leonard, Dipendra Mandal, Brett Roads, & James Tanaka

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This study examined the formation of rock-type categories in students enrolled in a post-secondary-level introductory geology course. Using PsiZ—a machine learning package—we assessed shifts in category structure based on participants' similarity judgments. Participants provided similarity judgments on images of rocks to assess visuoperceptual category structure, while judgments on rock type labels assessed conceptual

category structure. Exposure to course content led to significantly improved conceptual and visuoperceptual category structure, characterized by clear boundaries between categories and interpretable relative positioning of rock-type clusters. Results will be analyzed according to performance on formal academic assessments to highlight different category restructuring trajectories.

Category Learning in Virtual Reality and the Impact of Information Access Costs on Learning Outcomes and Attention-Related Behaviours

Robin Colin Alexander Barrett, Dr. Mark Blair

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Immersive virtual reality offers category learning researchers the ability to present a wider variety of interactable and maneuverable 3D stimuli. In this study, high and low levels of motor and delay-based information access costs are implemented into a VR-based category learning experiment, seeing whether the predicted impacts of information access cost on learning and attention are contingent on the type and intensity of the cost. Delay costs impacted attention-related behaviours more than motor-costs, causing participants to be more economical in their use of attentional resources. These findings can inform the design of digital learning objects and training programs.

Exploring Memory and Individual Learning Differences in the Anatomy Labs: Traditional vs. Virtual Smackdown

Leena Alkhammash , Leena Alkhammash, AJ Monroe, Aminata Condé, Emily Lo, Khushi Sharma, Lauren Belyea-Nisbet, Maya Lehman, Sean Jeon, Daniela Palombo, Jillianne Code, Claudia Krebs

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This interdisciplinary study compares learning in a traditional anatomy lab (physical specimen) and a virtual reality (VR) counterpart to evaluate teaching effectiveness. Phase 1 of the study examined whether VR versus physical learning enhances anatomy understanding among undergraduate psychology students, revealing no notable group learning performance difference when tested on the day of learning. Participants also reported comparable enjoyment levels in both lab settings. Follow-up phase 2 explores individual differences and emotional impacts on learning. Preliminary insights from longer-term memory testing (i.e., 3-day retention interval) study will be presented, providing valuable insights into the efficacy of different teaching modalities.

Cognition and Lifestyle Behaviours in Young Adults

G. Kyle Gooderham, Todd C. Handy

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Physical activity, sleep, and diet are critical determinants of cognitive function. Here we examined whether this trio of lifestyle factors are associated with two facets of cognition in young adults: subjective and metacognitive experiences of function. We found that both subjective cognitive function and metacognitive function positively improved with more healthful levels of sleep, diet, and physical activity. These indicate that young adult's cognition is labile to lifestyle, even if not observed with objective markers. We propose that cognitive function is supported in young adults by lifestyle behaviour's effects on the processes used to monitor and control our cognitive performance.

Paper Session 6: Memory/Emotion (13:15 - 14:00)

Tugging on Time Using Virtual Reality: The Effects of Emotion on Retrospective Duration Memory

Omran Safi, Yiran Shi, Tyler Lin, Christopher R. Madan, Daniela J. Palombo

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Our memories for temporal duration may be affected by the emotions experienced during an event. Prior work has faced difficulty when studying this phenomenon, leading to a trade-off between experimental control and ecological validity. We sought to bridge this gap and created a novel virtual reality paradigm to test the effects of emotion on temporal duration. Participants experienced a series of negative emotional and neutral events within virtual reality and subsequently rated emotional affect and provided retrospective duration estimates. We found that negative-emotional events were recalled as having a greater duration than neutral events despite both being underestimated.

Shades of Emotion: Memory Recall for Event Details

Nada Alaifan, Peter Graf

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Emotional events tend to be better remembered than neutral events. However, this emotional enhancement may not uniformly affect all aspects of what is remembered about events, and thus, we examined the effects of emotion on episodic memory for gist and details, and we also searched for sex differences in episodic memory. Participants viewed pictures that were selected to be emotionally neutral versus emotionally negative or positive. After a short delay, they were prompted to recall the pictures. Their recollections were transcribed and then scored using a detailed scoring protocol to assess memory for gist and the quantity and quality of details.

Metacognitive Hindsight Bias in Younger and Older Adults

Liam Ruel, Carolyn Baer, Rakefet Ackerment, Daniel M. Bernstein

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We investigated how well younger (18-39 years; n = 120) and older adults (65+ years; n = 120) recalled their past confidence. Participants identified objects in gradually clarifying images (images task), rating their confidence after each guess. Participants then completed two inhibitory control tasks (Stroop, Go/No-go). Finally, participants tried to remember their previous guesses and confidence ratings from the images task. Younger and older adults recalled greater confidence than they initially had, but age and inhibitory control ability did not affect this overconfidence. Our results suggest that the tendency to overreport past confidence ratings is present throughout adulthood.

Poster List

Poster Session 1 Friday, May 3rd (13:15 - 14:30)	
1.	**An Investigation of Vascular Brain Health and Cognition in Veterans with Traumatic Brain Injury and Post-Traumatic Stress Disorder** *Hayley Casey, Supervisors - Erin Mazerolle (St. Xavier University) & Jodie Gawryluk (University of Victoria)*
2.	**Developing an mHealth Psychoeducation Intervention for Promoting Cognitive Health** *Zoë Gilson, Devon Rees, Morgan J. Schaeffer, Jonathan Rush, Sam Liu, & Theone S.E. Paterson*
3.	**Exploring Indigenous-Led Approaches to Healthy Ageing: A Scoping Review Protocol** *McKenna Knox, Emily Haigh*
4.	**Improving Physiology to Foster Healthy Cognitive Aging: Exploring the Impacts of a Community-Based Walking Intervention** *Mackenzie McNiven, Dr. Stuart MacDonald, Cole Tamburri*
5.	**Motor Errors Make Brain Go Brrr** *Isaac Barss, Katherine Boere, Dr. Olave Krigolson*
6.	**Does Sleep Quality and Age Predict Risky Decision-Making?** *Mehreen Mundi, Utkarsh Mundi, Vince Jasper M. Dizon, Daniel G. Derksen, Daniel M. Bernstein*
7.	**Feedback Dynamics in Self-Control: A Replication of Wallace & Baumeister (2002)** *Emily Whittaker, Zoë Francis*
8.	**Moral identity scaffolding in early–middle childhood** *Sam Messmer, Dr Madison Pesowski*
9.	**Effects of Cognitive Reappraisal and Rumination on Recognition Memory for Facial Expressions of Emotion** *Amelia Branco, Hayleigh Armstrong , Faridah Adeyemi-King, Catherine Ortner*
10.	**Effects of a brief emotion regulation intervention on emotion beliefs and emotion regulation flexibility** *Jenna Spencer, Vanessa Rilkoff, Dr. Patti C. Parker, Dr. Catherine NM Ortner*

11.	**Looking Through the Heart: Analyzing Verbal Descriptions to Explore Perception of Emotional Pictures**
	* Sophie Pantel, Hannah Kotsaftis , Nada Alaifan, Peter Graff*
12.	**Effect of Off-season Program Compliance on 30-15 IFT Scores in Soccer Players**
	Reese Peacock, Katherine Boere, Olave Krigolson
13.	**Exploring Cognitive Functioning Following Endurance Exercise Through Heart Rate Variability Measures**
	Jessica Kraft, Katherine Boere, Olave E. Krigolson
14.	**HRV: Barely There or Fully Covered**
	Rae Fletcher, Katherine Boere, Mathew Hammerstrom, Olav Krigolson
15.	**Unlocking Athletic Potential: How Skin Exposure Impacts the Brain and Performance**
	Declan Sanders, Declan Sanders, Katherine Boere, Mathew Hammerstrom & Olave E. Krigolson
16.	**The Category Structure of Fast and Slow Learners**
	Kiera Ludlow, Kiera Ludlow, Johannes Schultz-Coulon, Anna Lawrance, Eric Y Mah, James Tanaka
17.	**Enhancing Truth Discernment through Gamification: A Replication and Extension**
	Bennett King-Nyberg, D. Stephen Lindsay
18.	**Exploring Expectations of Meditation**
	Ramandeep Heer,
19.	**Eyewitness beliefs and their effect on the confidence-accuracy relationship**
	Rhiannon Batstone, Dr Jamal Mansour, Dr Pia Pennekamp
20.	**Nothing About Us Without Us: How To Educate the Litigator and Gatekeeper on Issues with Eyewitness Identification Evidence**
	Eva Ribbers,
21.	**Potential Barriers in Creating the Weapon Focus Effect**
	Michelle Reinink, Jamal K. Mansour, Pia Pennekamp, Dilhan Toredi, Holly Clark, Grant Chapman
22.	**The relationship between memory quality, confidence, and eyewitness accuracy.**
	Anushka Mohite, Tori Westgard, Emma Dietz, Adam James, Cam Jackle, Supreet Bal, and Jamal Mansour
23.	**Beyond truthiness: The role of processing ease in shaping perceptions of consensus**
	Kirandeep K. Dogra, Madeline Jalbert, Eryn Newman, Norbert Schwarz

Poster Session 2

Saturday, May 4th (12:00 - 13:15)

1. **Children track confidence across multiple trials**

   Arshnoor, Carolyn Baer & Daniel M. Bernstein

2. **Mood, Arousal, and Stress: Impacts on Future Performance Beliefs**

   Ekam Banipal, Dr. Shawn Geniole

3. **Trick Shot Videos and Metacognitive Judgments Among Children**

   Aidan Sammel, Carolyn Baer

4. **Bridging the Gap - A Novel Paradigm for Investigating Memory**

   Omran Safi, Yiran Shi, Tyler Lin, Theodore Yu, Akash Grewall, Christopher R. Madan, Daniela J. Palombo

5. **Evaluating Typical Participant Characteristics for EEG Studies on Learning and Working Memory**

   Alix Chong, Allison Plamondon, Francesca Anderson, Mathew Rocha Hammerstrom, Olave E. Krigolson

6. **Functional Brain Networks Underlying Autobiographical Memory and Imagination**

   Ava Momeni, Donna Addis, Florentine Klepel, Maiya Rasheed, Abhijit Chinchani, Todd Woodward

7. **Large Language Models in Psychology Research**

   Cristobal Ramirez, Nada Alaifan, Peter Graf

8. **The Schema Dictionary Approach: A Method to Quantify Schematic Content in Narrative-Based Studies**

   Amanda McGillivray, Ruben Van Genugten, Jordana Wynn

9. **Visual stimulus competition: May the best chips win**

   Dynah Parlee, Jonathan Kiss, Abbigail Hunter

10. **An Implication is Enough: The Generation Effect Creates Illusory Truth**

    Gwen Pane, Jasmine Balmelli-Morales, Macallan Enns-Ford, Annika Fiala, Zoe Gadbow, Macy Kneipp, Isabel Nguyen, Maddie Jalbert, Ira Hyman

11. **Misremembering Sharing of Misinformation**

    Kamaljit Bajwa, Jaskirat Bajwa, Gordon Pennycook, Edgar Erdfelder, Daniel Bernstein

12. **Muddying the Waters: Disinformation Disrupts Truth Judgments and Consensus Beliefs for Classic Conspiracy Theories**

    Vi Ly, Ellie Mack, Serena Calkins, Kirandeep K. Dogra, Niko Newbould, Ira E. Hyman Jr.

13. **Alerting in a triple-step compound visual search task.**

    Nadja Jankovic, Nadja Jankovic, Amanjot Grewal, Vincent Di Lollo, Thomas M. Spalek

14. **An eyetracking investigation of task demand effects on pattern separation**

    Maggie Porterfield, Jordana Wynn, Tarek Amer

15.   **Change Blindness and Single versus Multiple Feature Changes**

Morgan Lowe, Amelia Pellaers, Ryan deKergommeaux, Daniela Purvica, & Richard Wright

16.   **Change Blindness and Target Colour and Shape**

Yang Han, Ryan deKergommeaux, Alyssa Doerksen & Richard Wright

17.   **Change Blindness and Upright versus Diagonal Line Orientation Changes**

Alyssa Doerksen, Daniela Purvica, Ryan deKergommeaux, Yang Han, & Richard Wright

18.   **Low-Level Influences in the Social-Perceptual Domain: Two Approaches**

Jenna Nilsson, Sydney Anhorn-Reinbold, Javid Sadr

19.   **Multi-Feature Flicker Task**

Amelia Pellaers, Ryan deKergommeaux, Morgan Lowe, Dr. Richard Wright

20.   **Salient visual distractors can be suppressed even when their colours are unpredictable**

Aidan Barker, Daniel Tay, John J. McDonald

21.   **Unveiling the Impact of Fatigue: A Comprehensive Analysis of Attention and Reward Processing**

Francesca Anderson, Allison Plamondon, Ali Chong, Mathew Rocha-Hammerstrom, Olave E. Krigolson

22.   **Traumatic stress predicts associative memory: Moderation by autistic traits & socioemotional content**

Olive Huang, Veronica Dudarev, Daniela J. Palombo, Connor M. Kerns

Poster Abstracts

Poster Session 1 (Friday, May 3rd: 13:15 - 14:30)

1. An Investigation of Vascular Brain Health and Cognition in Veterans with Traumatic Brain Injury and Post-Traumatic Stress Disorder

Hayley Casey, Supervisors - Erin Mazerolle (St. Xavier University) & Jodie Gawryluk (University of Victoria)

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The Alzheimer's Disease Neuroimaging Initiative – Department of Defense database includes 315 Vietnam war Veterans aged 60-80 years old with history of 1) TBI, 2) PTSD, 3) TBI+PTSD and 4) neither TBI nor PTSD. The objectives of this project are to examine differences in vascular brain health (measured with MRI metrics) between these groups and to examine the association between vascular brain health and cognitive performance within groups. It is hypothesized that people with TBI+PTSD will have the poorest vascular brain health and that poorer vascular brain health will be associated with lower cognitive performance.

2. Developing an mHealth Psychoeducation Intervention for Promoting Cognitive Health

Zoë Gilson, Devon Rees, Morgan J. Schaeffer, Jonathan Rush, Sam Liu, & Theone S.E. Paterson

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We tested the feasibility of an mHealth app-based psychoeducation intervention targeting modifiable lifestyle factors for promoting cognitive health in older adulthood. Participants (N = 12, Mage = 65.8 years) completed six asynchronous mobile learning modules, each targeting a specific modifiable risk factor (e.g., diet, sleep, etc.), as well as a weekly survey about their engagement in the targeted health behaviours. Pre-post neuropsychological assessment and a feedback exit interview were also conducted. Descriptive statistics and multilevel modeling will assess feasibility and participants' adherence to the intervention, as well as within- and between-person differences in behaviour change.

3. Exploring Indigenous-Led Approaches to Healthy Ageing: A Scoping Review Protocol

McKenna Knox, Emily Haigh

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Previous research indicates an increased prevalence of dementia in Indigenous populations compared to non-Indigenous populations. Current Western focused interventions are failing to improve the health of Indigenous populations. With the rapidly growing Indigenous older adult population, there is a pertinent need to explore effective Indigenous led approaches to healthy ageing to target symptoms before the onset of cognitive decline. Utilizing a mixed methods Western-Indigenous approach, this protocol for a scoping review will seek to provide an overview of Indigenous-led approaches to healthy ageing in collaboration with knowledge users (i.e. Elders, Knowledge Keepers, Indigenous older adults).

4. Improving Physiology to Foster Healthy Cognitive Aging: Exploring the Impacts of a Community-Based Walking Intervention

Mackenzie McNiven, Dr. Stuart MacDonald, Cole Tamburri

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Considering limited dementia treatments, and connections amongst gait, cerebrovascularity and cognition, this study explores a walking intervention for cognitive decline of older sedentary individuals. Recruited from "Healthy Bodies Healthy Minds", participants' (Mage=72.81, SDage=5.24, rangeage=65-87) physiological health was indexed using heart rate recovery (HRR) and step velocity from the GAITRite® instrumented walkway. Cognitive performance was measured using the Trail Making Test A, Groton Maze Learning Test, and a phonemic fluency test. Cognition was inversely correlated with intraindividual variability of physiological measures. Time-varying covariation between gait and cognition was mediated by HRR. These findings support interventions and self-monitoring strategies for cognitive health.

5. Motor Errors Make Brain Go Brrr

Isaac Barss, Katherine Boere, Dr. Olave Krigolson

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Movement corrections require detection and evaluation of errors. Electroencephalography (EEG) research has demonstrated posterior activity tied to the onset of movement errors, but does this represent a process that contributes to online movement correction or is it simply error detection? Participants moved a cursor to hit a target which jumped during the movement. Posterior activity was greater when participants actively corrected the movement than when corrections were computer-controlled. We suggest the observed posterior activity represents spatial processing that contributes to movement corrections.

6. Does Sleep Quality and Age Predict Risky Decision-Making?

Mehreen Mundi, Utkarsh Mundi, Vince Jasper M. Dizon, Daniel G. Derksen, Daniel M. Bernstein

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This study explored whether sleep quality and age predict risky decision-making (N = 108; Ages 20-98). We measured sleep quality using self-report. We measured total number of risky decisions and Expected-Value (EV) Sensitivity (i.e., # of wise vs unwise risks) using a risky decision-making task. Neither age nor sleep quality predicted total number of risky choices. However, the age x sleep quality interaction predicted EV sensitivity. As age increased, poor sleep quality was associated with worse EV sensitivity. Conversely, in young people, poor sleep quality was associated with better EV sensitivity. This puzzling pattern warrants replication.

7. Feedback Dynamics in Self-Control: A Replication of Wallace & Baumeister (2002)

Emily Whittaker, Zoë Francis

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The current study is a replication of a previous self-control experiment that failed to meet research quality standards. In this study, online undergraduate psychology students (n = 340) were asked to complete a self-control task, and then were given false feedback on their performance. Then, participants were shown an impossible task to measure their prolonged use of self-control. It was hypothesized that the feedback participants were given would affect how long they persisted on the impossible task. However, the relationship was statistically insignificant; this opens discussion on the nature of feedback, especially in online spaces.

8. Moral identity scaffolding in early–middle childhood

Sam Messmer, Dr Madison Pesowski

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Moral persons identify with their sense of morality. The need to validate this identity allows them to promote moral actions and resist immoral actions. Recent research shows that the moral identity emerges at age 9. The development of moral identity requires that children view peers as equals so that they can learn to share a social world. This study investigates the question: if it is true that children need to be treated as equals, is it possible that children younger than nine are merely lacking in experience and can their moral identity therefore be scaffolded?

9. Effects of Cognitive Reappraisal and Rumination on Recognition Memory for Facial Expressions of Emotion

Amelia Branco, Hayleigh Armstrong , Faridah Adeyemi-King, Catherine Ortner

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The effects of cognitive reappraisal on memory are inconsistent. The memory control framework proposes that memory for reappraised details of a negative event should be worse than if the stimulus had been unaltered (Engen & Anderson, 2018). To test this prediction, participants (N = 101) viewed 60 vignettes (control, reappraisal, or rumination) and a negative facial expression (mild or moderate). Next, they identified which of two facial expressions (mild or moderate) they saw earlier, for each trial. Results did not support the prediction. Future research could modify the vignette and face presentation order to better test the memory control framework.

10. Effects of a brief emotion regulation intervention on emotion beliefs and emotion regulation flexibility

Jenna Spencer, Vanessa Rilkoff, Dr. Patti C. Parker, Dr. Catherine NM Ortner

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Few studies have tested the effects of learning about effective emotion regulation on emotion beliefs. We assessed the effect of an emotion regulation intervention on emotion controllability beliefs and emotion regulation flexibility. Adult student participants from Prolific (N = 97) were randomly assigned to a brief psycho-educational intervention (video plus activity) about emotion regulation or goal-setting (control). Recipients of the emotion regulation intervention reported higher negative emotion controllability beliefs than control recipients, when controlling for baseline beliefs, but showed no difference in emotion regulation

flexibility. The results highlight the need to examine bidirectional relationships between emotion regulation and beliefs.

11. Looking Through the Heart: Analyzing Verbal Descriptions to Explore Perception of Emotional Pictures

** Sophie Pantel, Hannah Kotsaftis **, Nada Alaifan, Peter Graff

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The perceptual system is highly emotionally motivated, and it plays a role in cognitive assumptions and biases we hold towards the world (Stefanucci et al., 2011). The present study investigates the influence of emotions on perception and potential sex differences. Participants viewed and orally described pictures varying in emotional valence (negative, neutral, and positive). The descriptions were transcribed, then coded according to a detailed protocol to explore the quantity and type of details, as well as any sex differences. The findings contribute to our understanding of how emotions shape our cognitive interpretations of the environment. Reference: Stefanucci, Jeanine K., et al. "Follow your heart: Emotion adaptively influences perception." Social and Personality Psychology Compass, vol. 5, no. 6, June 2011, pp. 296–308, https://doi.org/10.1111/j.1751-9004.2011.00352.x.

12. Effect of Off-season Program Compliance on 30-15 IFT Scores in Soccer Players

Reese Peacock, Katherine Boere, Olave Krigolson

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Traditionally, soccer relies on in-direct VO2max assessments such as the 30-15 IFT to predict individual performance. However, few have explored whether a relationship exists between individual off-season aerobic program compliance and post-intervention VO2 max test outcomes. This study of the UVic women's soccer team investigated whether a relationship exists between off-season program compliance and performance on the 30-15 IFT. Our results indicated no significant difference in program compliance between high and low performers on the 30-15 IFT. Future research should investigate if motivation-based factors like intentionality and supervision better predict success on aerobic tests.

13. Exploring Cognitive Functioning Following Endurance Exercise Through Heart Rate Variability Measures

Jessica Kraft, Katherine Boere, Olave E. Krigolson

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Heart rate variability (HRV), the autonomic variability in beat-by-beat heart period, is influenced by acute and chronic stress. This relates to physical and cognitive states, and lower HRV and inefficient vagal recovery has been associated with cognitive decline. Using mobile electroencephalography (EEG) and a heart rate monitor, this study explores how a 2-hour treadmill run impacts cognitive function and HRV over the course of a 24-hour recovery period. Specifically, what is the association between HRV and cognitive function post-exhaustive exercise? If HRV is associated, understanding impacts of prolonged exercise on cognition may have practical implications for professionals working long hours.

14. HRV: Barely There or Fully Covered

Rae Fletcher, Katherine Boere, Mathew Hammerstrom, Olav Krigolson

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Maximal skin exposure may enhance sensory input, which potentially informs higher-order cognitive functions such as attention, decision-making, and optimizing performance. This study examines if modern athletic attire's maximal skin coverage may restrict sensory feedback. It seeks to understand how such clothing affects the autonomic nervous system's (ANS) reaction to environmental stimuli, measured by heart rate variability (HRV). HRV mirrors the balance between fight-or-flight and rest-and-digest. To investigate tactile information, we measured HRV during maximal or minimal clothing conditions. Despite expectations, HRV doesn't differ significantly between clothing conditions, implying similar processing of tactile sensory information regardless of attire.

15. Unlocking Athletic Potential: How Skin Exposure Impacts the Brain and Performance

Declan Sanders, Declan Sanders, Katherine Boere, Mathew Hammerstrom & Olave E. Krigolson

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A new line of inquiry considers whether the extensive skin coverage of modern athletic attire could limit sensory feedback essential for peak performance. We investigated this using electroencephalography (EEG) to measure sensory evoked potentials (SEPs), brain responses to tactile stimuli, during standing and incline walking on a treadmill. Participants wore four clothing conditions with varying levels of skin exposure. Our results showed no significant differences in SEP amplitudes between clothing conditions, suggesting that skin exposure level does not affect sensory processing and, by extension, performance. Regardless, this study lays the groundwork for further research into how clothing influences athletic performance.

16. The Category Structure of Fast and Slow Learners

Kiera Ludlow, Kiera Ludlow, Johannes Schultz-Coulon, Anna Lawrance, Eric Y Mah, James Tanaka

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Individuals vary in learning speed, impacting how they grasp new concepts, such as languages or bird species identification. This study investigates how fast and slow learners differ in their conceptual representations. Participants judged similarities among Warbler bird images before and after training to categorize them accurately. Fast learners are expected to show greater within-category compression post-training, while slow learners may exhibit heightened between-category differentiation. These differences highlight the intrinsic nature of individual learning styles and their influence on category training outcomes.

17. Enhancing Truth Discernment through Gamification: A Replication and Extension

Bennett King-Nyberg, D. Stephen Lindsay

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Proponents of "gamification" interventions such as the Bad News Game have claimed that such exercises build cognitive resistance to misinformation. In this approach, participants first evaluate the truthfulness of various true and false tweets on a 7-point scale. After playing the game, which teaches techniques used in misinformation, they reassess the tweets. Typical results suggest that the game reduces belief in both fake news and real news approximately equally. A recent study by Leder et al. (2023) found that a small feedback exercise improved truth discernment. Here we present a replication and extension of Leder et al. (2023) experiment 1.

18. Exploring Expectations of Meditation

Ramandeep Heer,

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Mindful meditation benefits psychological well-being. However, its effects on memory vary, influenced by individual expectations. This study explores mindfulness's impact on memory recall and beliefs' role. Participants share demographics and meditation expectations in the first session, completing stress and well-being questionnaires. In the second session, they perform memory tasks and a guided meditation. The hypothesized results are that individuals who expect their memory to increase will outperform their baseline results and those who do not, will perform about the same as their baseline results. The potential conclusions are that expectations play as a moderator when looking at meditation and memory.

19. Eyewitness beliefs and their effect on the confidence-accuracy relationship

Rhiannon Batstone, Dr Jamal Mansour, Dr Pia Pennekamp

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We examined eyewitness' beliefs about what affected their accuracy using hypothesis disconfirmation. Participants generated reasons why they may have been incorrect in their lineup decision. We then explored whether the reasons they gave related to their accuracy, confidence, and the confidence-accuracy relationship. Participants generated quite varied beliefs, but only statements about being not very confident were related to identification accuracy. Statements about low confidence and viewing conditions were associated with reduced confidence in identifications while feeling compelled to pick and self-doubt were associated with reduced target-present lineup accuracy. Verbal comments following a lineup, other than confidence, can be informative.

20. Nothing About Us Without Us: How To Educate the Litigator and Gatekeeper on Issues with Eyewitness Identification Evidence

Eva Ribbers,

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Eyewitness misidentifications contribute to most wrongful convictions. To reduce the impact of misidentifications in court, the judge serves as a gate keeper and instructor of the jury. Little research has explored what difficulties judges face when performing these important roles. Additionally, judges cannot litigate the case, so prosecutors and defence lawyers will need to know what issues to raise. The challenges that come with performing this role, too, are under-researched. I propose a knowledge mobilization approach to examine the challenges legal actors experience when assessing eyewitness identification evidence and how the academic community can best help address these challenges.

21. Potential Barriers in Creating the Weapon Focus Effect

Michelle Reinink, Jamal K. Mansour, Pia Pennekamp, Dilhan Toredi, Holly Clark, Grant Chapman

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We examined the weapon focus effect (WFE). Videos depicted a culprit brandishing a gun or stuffed animal, with a holstered gun, or with a camera on his belt (control). Surprisingly, no WFE was found, even though participants judged objects as threatening and/or unusual in expected ways. Follow-up analyses indicated participants were unsure about what was on the culprit's belt in the control condition, presumably leading them to focus heavily on it- suggesting another mechanism for the WFE: ambiguity. Memory was similar when the gun was brandished verses holstered: mere presence of a weapon is likely to product a WFE.

22. The relationship between memory quality, confidence, and eyewitness accuracy.

Anushka Mohite, Tori Westgard, Emma Dietz, Adam James, Cam Jackle, Supreet Bal, and Jamal Mansour

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Eyewitness identification accuracy is affected by memory quality and can be predicted from eyewitness confidence. Thus, we were surprised to find in our study that neither memory quality ($r = -.04$, $p = .73$) nor confidence ($r = .01$, $p = .93$) were related to identification accuracy. One reason may be that participants' memory quality was poor: only 16% made a correct identification. Perceived memory quality was unrelated to actual memory quality or accuracy (ps > .13) but was related to confidence ($r = .45$, $p < .001$). Thus, eyewitness-participants may have a poor understanding of their memory quality.

23. Beyond truthiness: The role of processing ease in shaping perceptions of consensus

Kirandeep K. Dogra, Madeline Jalbert, Eryn Newman, Norbert Schwarz

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Prior research suggests that information that is easier (vs. more difficult) to process is judged to have broader consensus. We tested whether presenting information with a nonprobative photo — a manipulation which facilitates processing ease — increases two different perceptions of consensus: how many Americans would believe (Exp. 1-2), or already know (Exp. 3-4) that information. Participants judged a series of trivia claims (half true, half false Exp. 1-2; all true, Exp. 3-4), half of which appeared with photos. Photos increased judgments of many others would believe information, but did not affect judgments of how well known that information already is.

Poster Session 2 (Saturday, May 4th: 12:00 - 13:15)

1. Children track confidence across multiple trials

Arshnoor, Carolyn Baer & Daniel M. Bernstein

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How do children realize they are good at a task? Young children have a sense of trial-level confidence (Baer & Odic, 2019). We wondered whether children track confidence over multiple trials. Children aged 5-12 (N= 80) estimated how many out of 10 items per block they answered correctly. When blocks were easy, children gave higher estimates; however, this effect increased when children received feedback about their accuracy on each trial. These results elucidate potential discrepancies between children's actual abilities and their perceived competence.

2. Mood, Arousal, and Stress: Impacts on Future Performance Beliefs

Ekam Banipal, Dr. Shawn Geniole

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Winning and losing streaks are not uncommon, but little is known on how mood, arousal, and stress change in response to them and influence subsequent performance-related cognitions, such as confidence in upcoming contests. In rigged virtual reality boxing matches, winners experienced heightened mood and reduced stress post-victory, leading to beliefs they would perform better in future performances (greater confidence), whereas losers reported similar mood levels, but heightened stressed, and beliefs they would perform poorly in future performances. These findings suggest that mood, arousal, and stress play a key role in developing confidence for future performance after participating in competitive environments.

3. Trick Shot Videos and Metacognitive Judgments Among Children

Aidan Sammel, Carolyn Baer

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Research has demonstrated that children are consistently overconfident, and that watching videos of successes increases confidence among adults. However, it is unknown whether watching failures can reduce confidence. Here, we test whether watching successful or unsuccessful trick shot videos affect children's belief they can perform a shot. Children aged 5-12 (N=12) gave baseline ratings of trick shot difficulty, and then saw videos depicting either success or failures, before giving another rating. Pilot results indicated that children's ratings increased from pretest estimates after watching successes but remained the same after watching failures. These findings provide preliminary evidence that confidence in children can be manipulated through videos.

4. Bridging the Gap - A Novel Paradigm for Investigating Memory

Omran Safi, Yiran Shi, Tyler Lin, Theodore Yu, Akash Grewall, Christopher R. Madan, Daniela J. Palombo

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The extent to which laboratory experiments can emulate the natural world has been a long-standing challenge within cognitive science. In an attempt to narrow the gap between the lab and the real world, we developed a novel virtual reality (VR) paradigm wherein participants can experience naturally unfolding and immersive events while allowing for the retention of experimental control. Our paradigm was able to successfully elicit negative emotion and proved to be sensitive enough to capture several mnemonic phenomena. We present this work as a proof of concept demonstrating the effectiveness of VR as tool to study cognition.

5. Evaluating Typical Participant Characteristics for EEG Studies on Learning and Working Memory

Alix Chong, Allison Plamondon, Francesca Anderson, Mathew Rocha Hammerstrom, Olave E. Krigolson

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Multifaceted participant variability within electroencephalography (EEG) data is unavoidable, yet is often ignored when studying a healthy population. Are there certain participant characteristics that researchers shouldn't disregard? Here, we analyzed a large-sample dataset of participants who completed experiments probing learning, decision-making, and working memory while EEG data were recorded. We compared the observed neural responses to several participant characteristics, such as age, gender, and vision correction. Our results showed that certain biological characteristics, such as age and gender, had a noticeable effect on neural data, indicating they should be considered in the interpretation of EEG results.

6. Functional Brain Networks Underlying Autobiographical Memory and Imagination

Ava Momeni, Donna Addis, Florentine Klepel, Maiya Rasheed, Abhijit Chinchani, Todd Woodward

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The current study provided an updated analysis of the whole-brain functional networks involved in autobiographical event simulation, measured using a Functional Magnetic Resonance Imagining (fMRI) task that involved participants recalling past events, imagining past events, and imagining future events. The analytical approach, called Principal Component Analysis for fMRI (fMRI-CPCA), resulted in four brain networks being derived. Two networks, the default mode and multiple demand networks, reproduced and extended the previously published results and two networks, the maintaining internal attention and response networks, were novel and provided new information about the Blood Oxygenation Level Dependent (BOLD) changes underlying autobiographical event simulation.

7. Large Language Models in Psychology Research

Cristobal Ramirez, Nada Alaifan, Peter Graf

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Psychology research often requires data coding that is manual, time consuming and error prone. For this study, the data were participants' descriptions of emotionally valenced (i.e. positive, negative) and neutral pictures. Our study will compare the coding results from trained research assistants with the results from a specifically trained GPT-4. Our goals are to reveal the type and extent of the training needed for GPT-4 to produced valid and reliable – usable – coding results, and to identify whether those aspects of the data which required more extensive GPT-4 training also were especially difficult to code by human coders.

8. The Schema Dictionary Approach: A Method to Quantify Schematic Content in Narrative-Based Studies

Amanda McGillivray, Ruben Van Genugten, Jordana Wynn

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Schemas are influential to cognition and behaviour, but a direct measurement for schemas in narrative studies has been lacking. This study investigates the accuracy of the schema dictionary approach using a natural language processor to quantify schema content in narrative-based studies through two experiments. Experiment 1 (N=26) showed a significant correlation (Spearman's rho = 0.43, p = 0. 0195) between typicality and schema dictionary scores. Experiment 2 (N=20) demonstrates a significant correlation (Pearson's r = 0.41, p = 0. 0292) between schema dictionary and data-driven dictionary outcomes. These findings support the schema dictionary approach to measure schematic-content in narrative research.

9. Visual stimulus competition: May the best chips win

Dynah Parlee, Jonathan Kiss, Abbigail Hunter

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Do people visually fixate on things they like or dislike? We explore this question using a two-choose-one experiment that tasks participants with making choices between easily recognizable chip brands. We used jsPsych's Webgazer tool to track gaze as they make these choices and created heatmaps for each trial. Based on previous research, we expect that if WebGazer is comparable to in-person lab technology it will show participants focus on the stimuli they prefer before making their selection. This experiment serves as

validation for eye-tracking studies outside of the lab and is focused on promoting the globalization/accessibility of eye-tracking studies.

10. An Implication is Enough: The Generation Effect Creates Illusory Truth

Gwen Pane, Jasmine Balmelli-Morales, Macallan Enns-Ford, Annika Fiala, Zoe Gadbow, Macy Kneipp, Isabel Nguyen, Maddie Jalbert, Ira Hyman

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Self-generated information undergoes deeper processing and is easier to recall than information that is exclusively read (Slamecka & Graf, 1978). Additionally, statements encountered more frequently are reliably rated as more true than statements people only see once (Hasher et al., 1977). In our research, we asked participants to read and generate true or false trivia answers. Participants then made truth judgments for items that were new to them, previously read, and previously generated. We found that participants rated self-generated answers and read answers as true more than new. People come to believe implied false information.

11. Misremembering Sharing of Misinformation

Kamaljit Bajwa, Jaskirat Bajwa, Gordon Pennycook, Edgar Erdfelder, Daniel Bernstein

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We explored sharing behaviour for true and false news headlines on social media. Participants viewed news headlines with the option to share. Ten minutes later, participants completed a source-recognition test of old and new headlines. In two experiments, including a direct replication (N = 512), participants had good to excellent source memory for shared and unshared headlines. Our results indicate that people can recognize headlines that they shared several minutes prior.

12. Muddying the Waters: Disinformation Disrupts Truth Judgments and Consensus Beliefs for Classic Conspiracy Theories

Vi Ly, Ellie Mack, Serena Calkins, Kirandeep K. Dogra, Niko Newbould, Ira E. Hyman Jr.

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Disinformation often leads people to adopt false and doubt true information. Disinformation may also disrupt views about the consensus on a topic. We examined how flooding individuals with conflicting information about popular conspiracy theories affected their perceptions of truth and expert consensus. Participants either read true statements, false statements, or both, regarding conspiracies about aliens, 9/11, the moon landing, and big pharma. We predicted that people flooded with disinformation would be less confident about the truth and doubt expert consensus. We expected the disinformation to muddy the waters even when presenting true statements.

13. Alerting in a triple-step compound visual search task.

Nadja Jankovic, Nadja Jankovic, Amanjot Grewal, Vincent Di Lollo, Thomas M. Spalek

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Alerting (e.g., briefly brightening the screen before a display) improves performance during tasks that can be completed in one step. Recent work has shown that tasks requiring two steps require a longer delay between the alerting stimulus and the search display than in one-step tasks. In the present work, we examined whether the complexity of the task influences the optimal delay for observing alerting by using a task that requires

three steps to complete. Contrary to the complexity account, alerting was observed at similar delays in the three-step task as in the two-step task.

14. An eyetracking investigation of task demand effects on pattern separation

Maggie Porterfield, Jordana Wynn, Tarek Amer

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The present study used eye-tracking to investigate whether manipulating cognitive control processes influences pattern separation—the ability to discriminate highly similar stimuli. Participants were shown similar objects belonging to two object categories and were asked to count the number of unique objects from only one of the categories, making one category "relevant" (requiring greater attention) and the other "irrelevant." Lower gaze similarity was observed for relevant category indicating more pattern separation relative to the irrelevant category. Relative category objects were also recalled with greater accuracy in a subsequent memory retrieval task. Therefore, cognitive control processes influenced pattern separation and memory.

15. Change Blindness and Single versus Multiple Feature Changes

Morgan Lowe, Amelia Pellaers, Ryan deKergommeaux, Daniela Purvica, & Richard Wright

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We used a flicker task to examine how change detection is affected by the way that target line orientation changes. In particular, participants searched for a target line that changed orientation back and forth by 45 degrees and for a target line that changed orientation with a sequence of four 45 degree rotational increments. The sequential change (clockwise rotational increments) targets were detected faster than single change (back and forth) targets. The results indicate that visual working memory plays a greater role in detecting flicker task targets that change in multiple ways as opposed to a single way.

16. Change Blindness and Target Colour and Shape

Yang Han, Ryan deKergommeaux, Alyssa Doerksen & Richard Wright

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We used a flicker task to examine how target localization is affected by manipulation of stimulus colours and shapes. Participants took longer to detect changes to targets when the locations of its original two colours were swapped than when the locations of its original two shapes were swapped. The results suggest that while searching for these targets in flickering displays, the colours of their parts are more likely to "free float" than the shapes of their parts. This finding may be related to a perceptual error called an illusory conjunction.

17. Change Blindness and Upright versus Diagonal Line Orientation Changes

Alyssa Doerksen, Daniela Purvica, Ryan deKergommeaux, Yang Han, & Richard Wright

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We used a flicker task to examine how change detection is affected by the orientation of target lines. In one experiment, we found that changes to titled lines were detected faster than changes to vertical lines. In another experiment in which the lines were contained inside bounding circles, we found the opposite: changes to vertical lines were detected faster than changes to titled lines when these lines were inside another object.

This difference may be due to whether the global shape of the target is the line itself versus a bounding object that encompasses the target line.

18. Low-Level Influences in the Social-Perceptual Domain: Two Approaches

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A key focus of our lab's research is on low-level stimulus influences on high-level perception, evaluation, and behaviour. Here, we present two distinct proposals for experimental research in this domain, specifically examining human social perception, memory, and affective response. First, we describe a simple experiment weighing the memorability and attractiveness of faces (e.g., Vokey & Read, 1992) against classic serial-order effects (e.g., Atkinson & Shiffrin, 1971). Second, we outline a study examining whether affective priming by attractive faces (e.g., Olson & Marshuetz, 2005) may unexpectedly produce negative-contrast effects for novel probe faces. Feedback, critiques, and suggestions are kindly invited.

19. Multi-Feature Flicker Task

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We used a flicker task to examine how change detection is affected by the nature of target presentation. Participants required significantly more time to detect changes to target lines that involved three features (colour, size, orientation) when these features changed one at a time (sequentially) across flickers than when all three features changed simultaneously across a single flicker. The results indicate that while participants search for these targets in flickering displays, visual working memory plays a greater role in target detection when multiple features change sequentially across flickers than when they change simultaneously.

20. Salient visual distractors can be suppressed even when their colours are unpredictable

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Suppression of visual distractors is believed to be based on first-order features (e.g. red). We tested this hypothesis by recording event-related potentials (ERPs) during visual search. Participants searched arrays of mostly green circles for a green diamond. On half of the trials, one of the green circles was replaced by a magenta, red, orange, blue, or cyan circle. According to the feature-suppression hypothesis, this unpredictable colour singleton should elicit an N2pc component (reflecting attentional selection), but instead it was found to elicit a PD component (reflecting suppression). We conclude that suppression can occur without foreknowledge of a distractor's defining feature.

21. Unveiling the Impact of Fatigue: A Comprehensive Analysis of Attention and Reward Processing

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This study employed electroencephalography (EEG) to investigate cognitive fatigue, reward processing (rewP), and attention. Neural activation was evaluated through oddball and gambling tasks, while fatigue was quantified based on sleep duration and time spent awake. Longer durations were hypothesized to correlate with higher event-related potential (ERP) amplitudes, specifically the P300 and rewP. Despite observing a

weak positive correlation between durations and P300 amplitudes, no significant effects were found between duration and ERP latencies. This indicates that sleep duration may not significantly influence cognitive fatigue and processing capabilities, and instead suggests the potential importance of sleep quality and circadian rhythm metrics.

22. Traumatic stress predicts associative memory: Moderation by autistic traits & socioemotional content

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Poorer associative memory–a form of episodic memory–has been related to autistic traits (AT) and traumatic stress symptoms (TSS). But how these characteristics may interact is poorly understood. Participants endorsing a potential trauma (n=177) encoded image pairs and completed a delayed surprise memory test. Mixed-effect regressions found people reporting elevated TSS showed worse memory overall. However, this association depended on autistic trait levels and the stimuli's social and emotional nature. Results suggest that one's ability to put memories into context is contingent on the interaction of autistic traits with event characteristics (namely, the presence of social cues and emotional valence).