

A photograph of a modern, multi-story building with a glass facade, illuminated from within at dusk. The building has a prominent horizontal glass section on the ground floor. The background is a dark blue sky.

# Nowcam

24th ANNUAL NORTHWEST COGNITION & MEMORY

**April 21-22, 2023**

KPU Richmond Campus

8771 Lansdowne Rd, Richmond BC

[web.uvic.ca/~nowcam](http://web.uvic.ca/~nowcam)



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## Program at a Glance

### THURSDAY, APRIL 20<sup>th</sup>, 2022

6 pm - late No Host Reception (social event), The Canadian Brewhouse and Grill

### FRIDAY, APRIL 21<sup>st</sup>, 2022

8:30 - 9:00 am Registration (light breakfast provided)  
 9:00 - 9:20 am Opening Remarks  
 9:20 - 10:20 am Paper Session 1: Memory/Eyewitness  
 10:20 - 10:35 am Break (refreshments provided)  
 10:35 - 11:50 am Paper Session 2: Perception/Attention  
 11:50 - 1:15 pm Lunch (not provided)  
 1:15 - 2:45 pm SIFT Workshop  
 2:45 - 3:00 pm Break  
 3:00 - 4:25 pm Poster Session 1 (refreshments provided)  
 4:25 - 4:40 pm Break  
 4:40 - 6:00 pm Keynote Address: Mike Caulfield  
 6:30 - 9:30 pm Gala Dinner, Gingeri Chinese Cuisine

### SATURDAY, APRIL 22<sup>nd</sup>, 2022

9:00 - 9:30 am Registration (light breakfast provided)  
 9:30 - 10:45 am Paper Session 3: Memory/Belief  
 10:45 - 11:00 am Break  
 11:00 - 12:15 pm Paper Session 4: Cognition/General  
 12:15 - 1:40 pm Poster Session II (pizza lunch provided)

## Keynote Address

Friday April 21<sup>st</sup> at 4:40 pm



**Mike Caulfield**

**Research Scientist at UW's Center for an Informed Public**

### **Beyond True and False: Perspectives from a decade teaching civic digital literacy**

Much of digital information literacy was designed with the information seeker in mind. But on the social internet we do not only seek out information – information seeks out us as well, and often arrives missing crucial context. In this keynote, information literacy expert Mike Caulfield will detail some of the ways in which pre-internet methods have not been suited to this reality, and detail insights that have emerged in the development and implementation of his SIFT methodology for “citizen fact-checking”. Discussion will include the problem of “just doing the math”, the ways in which emotional reaction can be necessary to fact-checking, and how some of the older study of rumor may provide useful insights into how individuals process online information.

### **SIFT Workshop**

A good educational intervention hides its underlying complexity from students, and lateral reading interventions are no exception. This session will go beyond the surface level of one such intervention (SIFT curricula), showing the underlying concerns and theory motivating the larger design. Issues like determining the ideal distribution of false vs true prompts, testing for discrimination (and not just accuracy), designing for transferability will be discussed, as well as some understudied issues in misinformation interventions. This workshop will be particularly useful for anyone designing educational interventions, or looking for interesting gaps in the current study of misinformation. It is also relevant to anyone looking to learn more about recent trends in educational approaches to misinformation, rumor, and conspiracy theory.

## NOWCAM MISSION STATEMENT

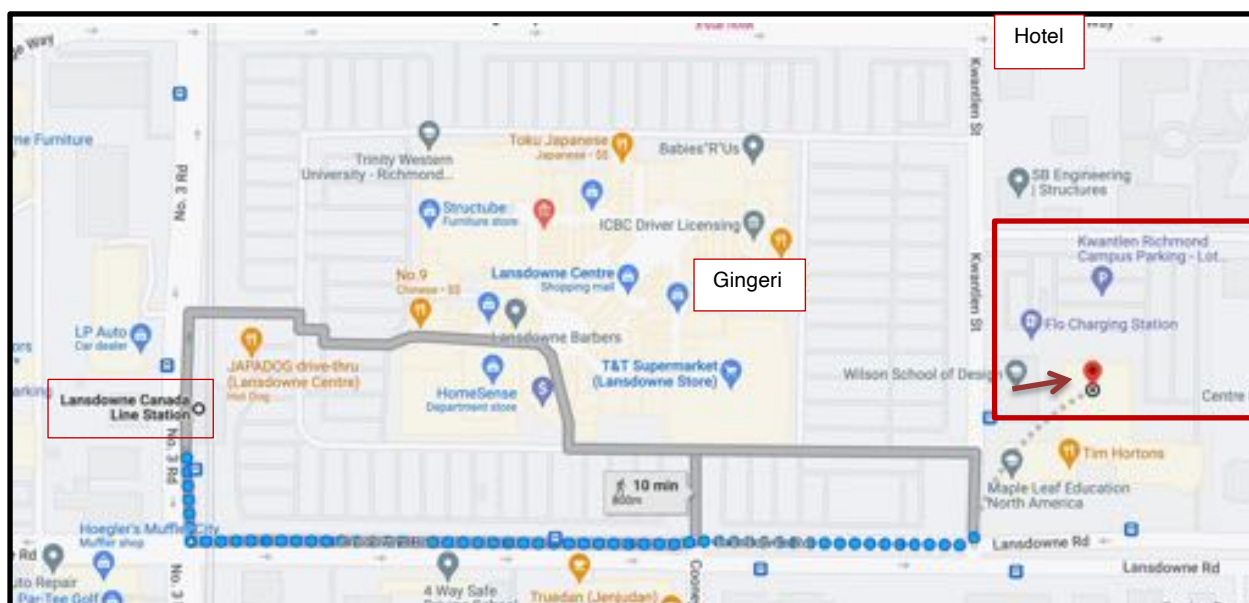
The Pacific Northwest is home to numerous wide-flung Psychology departments with strengths in cognition and memory. NOWCAM provides a forum for faculty and students from these departments to get together and discuss their latest research. Interactions with other researchers can spark innovations and 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

The conference venue is the Melville Centre for Dialogue, located in the Main building of the Richmond Campus of Kwantlen Polytechnic University (8771 Lansdowne Road, Richmond, B.C. V6X 3X7). It is located directly across from Lansdowne Centre, an 8-minute walk from the Lansdowne Canada Line Station, across from the parking lot. It is also a 4-minute walk from Gingeri Chinese Cuisine (location of the Gala Dinner).

Current schedules, route maps and fares for bus, SkyTrain, SeaBus, and West Coast Express services are available at [www.translink.bc.ca](http://www.translink.bc.ca)



## PARKING INFORMATION

There is a paid parking lot at Kwantlen Polytechnic University. (if using Google Maps, type in "Kwantlen Richmond Campus Parking"). Cost is \$5/day.

**GALA INFORMATION**

On Friday, April 21<sup>st</sup> at 6:30 pm, the Gala dinner will be held at Gingeri Chinese Cuisine at Lansdowne Centre (5300 No 3 Road, Richmond). The conference venue is across from Lansdowne Centre (see map on p. 5). All with gala tickets are invited to go to the Restaurant immediately after the keynote address.

**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 "KPU 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**

KPU does not require masks to be worn on its campuses. We do, however, encourage attendees to wear a mask when indoors and social distancing is not possible.

**ACKNOWLEDGEMENTS**

NOWCAM 2023 received financial support from the KPU Provost, the KPU Office of Research Services (ORS) and the KPU Psychology Department. We would like to thank ORS for providing the services of Keith Leung, an invaluable member of our planning team. We would also like to thank our planning team student volunteers Liam Ruel, Mehreen Mundi and Sharia Shariff, and Lifespan Cognition Lab volunteers Jeevan Bains and Dawn-Leah McDonald. Liam did an amazing job designing our poster, Eventbrite banner, nametags and program cover. Dawn-Leah M. ran and stole the whole show. Thank you to the KPU students who are staffing NOWCAM 2023. And we can't forget KPU Psychology Lab teacher Ivy Ng, who lent her expertise to everything from setting up the registration portal to translating our gala dinner requests to the restaurant manager.

# Program

**THURSDAY, APRIL 20<sup>th</sup>, 2022**

**6 pm – late: No Host Reception (social event)**, Canadian Brewhouse and Grill (Central at Garden City, Richmond)

**FRIDAY, APRIL 21<sup>st</sup>, 2022**

**8:30 – 9:00 Registration**

**9:00 – 9:20 Opening Remarks**

**9:20 – 10:20 Paper Session 1: Memory/Eyewitness**

An alternative approach to the rule-out procedure

*Crystal Huang & Ryan J. Fitzgerald*

The impact of social media exposure on eyewitness identification

*Emma Kruisselbrink, Ryan J. Fitzgerald, & Daniel M. Bernstein*

Catching crime at the border: Prospective person memory and face matching in border control decisions

*Camryn Yuen, Ryan J. Fitzgerald, & Stefana Juncu*

The impact of event similarity on recalls of repeated events

*Oliver Bontkes, Daniela Palombo, & Eva Rubínová*

**10:20 – 10:35 Break** (refreshments provided)

**10:35 – 11:50 Paper Session 2: Perception/Attention**

Motivation as a moderating variable for learning performance

*Jessica Silverman, Amy vanWell, Kyla Basbaum, & Jim Tanaka*

Testing the temporal-period model of alerting in visual search

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

How malleable are your judgements? The effect of subliminal priming on similarity judgements

*Anna Lawrance, James Tanaka, & Amy vanWell*

Does the face say it all? Examining integration in whole-person perception

*Katelyn Forner, Isabella Schopper, Amy vanWell, & Jim Tanaka*

Choosing the right measure: How complexity and affective value vary across executive function tasks

*Justin Bonnieux, Bernard Dupriez-Mitchell, & Mauricio Garcia-Barrera*

**11:50 – 1:15 Lunch** (not provided)

**1:15 – 2:45 SIFT Workshop**

**2:45 – 3:00 Break** (refreshments provided)

**3:15 – 4:30 Poster Session 1**

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**4:30 – 4:40 Break**

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**4:40 – 6:00 Keynote Address**

Beyond True and False: Perspective from a decade teaching civic digital literacy  
*Mike Caulfield*

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**6:30 – 9:30 Gala Dinner**, Gingeri Chinese Cuisine, 5300 No 3 Road, Richmond (in Lansdowne Centre)

**SATURDAY, APRIL 22<sup>nd</sup>, 2022**

**9:00 – 9:30 Registration**

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**9:30 – 10:45 Paper Session 3: Memory/Belief**

Individual differences in memory: Free recall versus cued recall  
*Eric Y. Mah & D. Stephen Lindsay*

The impact of the virtual environment in tele-forensic interviews with children  
*Nikola R. Klassen, Heather L. Price, & Deborah A. Connolly*

Negative emotionality, dissociation, and false memory susceptibility: A mediation analysis

*Hanna Erceg, M. Kyle Matsuba, & Daniel M. Bernstein*

Honesty-humility correlates positively with theory of mind

*Travis Takarangi, Daniel G. Derksen, & Daniel M. Bernstein*

Truthiness magnitude is difficult to increase

*Daniel G. Derksen, Daniel M. Bernstein, Deborah A. Connolly, Megan E. Giroux, & Eryn J. Newman*

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**10:45 – 11:00 Break** (refreshments provided)

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**11:00 – 12:15 Paper Session 4: Cognition/General**

Conceptualizing categories: How do we represent the objects we see?  
*Amy vanWell, James Tanaka, & Brett Roads*

Don't be so tough on yourself! Self-compassion reframed: Effects on interest and efficacy

*Jaenjira Janzen & Shawn Geniole*

Examining decision making and stimulant use using the drift diffusion model  
*Timothy, Friesen, Eric Mah, & Adam Krawitz*

Social media, self esteem and positive relations: Comparing self and other perspectives

*Kirti Mahato & Lauren Human*

Influence of disgust sensitivity on homelessness policy attitude

*Jenna Lee & Roger Tweed*

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**12:15 – 1:40 Poster Session 2** (pizza lunch provided)



<b>POSTER SESSION 1 (FRIDAY, 3:00 – 4:25)</b>
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- 1 Starting to stop: The influence of stimulus and response modalities on inhibition tasks for preschoolers  
*Ingrid Nielsen, Yaewon Kim, & Ulrich Müller*
- 2 Characterization of EEG after repetitive mild traumatic brain injuries (rmTBIs) in Alzheimer model mice: preliminary findings.  
*Victoria Carriquiriborde, S. Tok, J. Yue, T. Yildirim, M. Kelly, W. H. Cheng, C. L. Wellington, & B. Kent*
- 3 How do we see others? A preliminary investigation into the frequency, nature and potential impact of prosocial fantasies  
*Janaki Patel & Lara Aknin*
- 4 Perceived credibility for instances of repeated events  
*Marie Bandet, Heather Price, & Eva Rubinová*
- 5 How timing of disclosure impacts perceptions of individuals with mental illness  
*Madelyn Balough & Zoë Francis*
- 6 Perceived credibility of instances of repeated events: A replication and extension  
*Tia Blackall, Heather Price, & Eva Rubinová*
- 7 Assessing cognitive-affective sensitivity in misokinesia: An ERP study  
*Alyssa Sutherland, Sumeet M. Jaswal, & Todd C. Handy*
- 8 Generalizing the materials-based bias effect  
*Majd Hawily & D. Stephen Lindsay*
- 9 Language exposure & executive functioning in children  
*Kamaljit Bajwa, Jaskirat Bajwa, Kirandeep K. Dogra, & Daniel M. Bernstein*
- 10 A 2-Phase procedure to investigate the "Photo Truthiness" effect  
*Bennett King-Nyberg, Kaitlyn Fallow, Hartmut Blank, Eryn Newman, Timothy Friesen, Kelly Grannon, & D. Stephen Lindsay*
- 11 Improving police lineup construction using psychological embeddings: An objective measure of perceptual similarity  
*Megan Lall, Ryan Fitzgerald, Amy vanWell, Brett Roads, & Jim Tanaka*
- 12 Memory for past confidence in younger and older adults  
*Liam Ruel, Carolyn Baer, Rakefet Ackerman, & Daniel Bernstein*
- 13 What's so special about the first time? Phenomenology of first-time sexual experience memories  
*Stephanie Chen, Elena Zettelmeyer, Daniela Palombo, & Samantha Dawson*
- 14 Just asking questions: Does the generation effect increase the illusory truth effect  
*Zoe Gadbow, Alexander Speer, Kelsey Otos, Mara Brewster, Sebastian Chrysfidis, Matthew Papaly, Sofia Rosales Makela, Mira Schutz, Alison Weber, Madeline Jalbert, & Ira Hyman*
- 15 Can you be an expert? Fast and slow learning in an object categorization task  
*Amy vanWell, Kyla Basbaum, Laura Devonshire, & Jim Tanaka*
- 16 When a moment lasts forever: The influence of emotion on retrieving episodic memories  
*Vanessa Wong, Nada Alaifan & Peter Graf*
- 17 Frequent exposure to South-Korean media worsens body dissatisfaction and loneliness among young adults  
*Karin Ishida & Susan Thompson*
- 18 Change detection of adjacent and separated bicoloured blocks  
*Ryan T. deKergommeaux, Amelia A.C. Pellaers, Bonnie K. Ng, & Richard D. Wright*

- 19 Sleep and performance on tests of pattern separation and the Cambridge Neuropsychological Test Automated Battery (CANTAB)  
*Aina Elina Roenningen, Devan Gill, & Brianne Kent*

**POSTER SESSION 2 (SATURDAY, 12:15 – 1:40)**

- 20 Change detection of targets with multiple unique features  
*Amelia A.C. Pellaers, Ryan T. deKergommeaux, Leanne R. Vibar, Qiwan Shi, & Richard D. Wright*
- 21 Change detection and scene-based vs. object-based target laterality  
*Yang Han, Ryan T. deKergommeaux, Daryl Tang, Ruiyu Zhao & Richard D. Wright*
- 22 Reliable measurements of cognitive load: A comparative analysis  
*Katherine Boere & Olave E. Krigolson*
- 23 Change detection of upright and tilted Lines: Global and local processing  
*Bonnie K. Eng, Ryan T. deKergommeaux, Yang Han, & Richard D. Wright*
- 24 Mind games: Exploring the interplay of cognitive load, prefrontal cortical activation, and performance in multitasking  
*Francesca Anderson, Katherine Boere, & Olave E. Krigolson*
- 25 Change detection of central and marginal interest objects and divided attention  
*Leanne Rose Vibar, Ryan T. deKergommeaux, Yasmeen Mezban, Daryl Tang, Ruiyu Zhao & Richard D. Wright*
- 26 Global confidence judgment in childhood  
*Marco Tommasi, Carolyn Baer, & Daniel M. Bernstein*
- 27 Missing the point: How we correct movement mistakes  
*Isaac Barss, Katherine Boere, & Olave E. Krigolson*
- 28 What do you remember about your first time? Examining the number of episodic details in first time sexual experience memories  
*Elena Zettermeyer, Stephanie Chen, Daniela J. Palombo & Samantha J. Dawson*
- 29 Timing of attention capture leads to eyewitness memory errors  
*Kirandeep K. Dogra, Sophia Sar, & Ira E. Hyman, Jr*
- 30 Assessing the role of re-entry to V1 in object substitution masking: a TMS study  
*Nadja Jandovic, Danielle Buan, Shakiba Zahabioym, Vince de Ioll*
- 31 Evaluating mobile EEG devices: Which one is right for your research?  
*Frances Copithorne, Matthew R. Hammerstrom, Katherine Boere, & Olave E. Krigolson*
- 32 Left prefrontal cortex puts the work in working memory: Portable device sheds light on hemispheric differences in brain activity  
*Andrew J. Daniels, Katherine Boere, & Olave E. Krigolson*
- 33 Emotional judgements and disgust; are remembered behaviours necessary for sustained judgement?  
*Bennett King-Nyberg & Eric Mah*
- 34 A longitudinal investigation of affective theory of mind  
*Ruby S. Dhillon, Jeevan S. Bains, Kamaljit Bajwa, Carolyn Baer, & Daniel M. Bernstein*
- 35 You better belief: The impact of control beliefs on long-term cognition  
*Em Sundby, Cole Tamburri, Cynthia McDowell, & Stuart MacDonald*
- 36 You Better Belief: The Impact of Control Beliefs on Long-Term Cognition  
*Zach Hamzagic & Tobias Krettenauer*

# Abstracts

FRIDAY APRIL 21<sup>st</sup> 2023

**Paper Session 1: Memory/Eyewitness (9:20 – 10:20)**

**An alternative approach to the rule-out procedure**

*Crystal Huang & Ryan J. Fitzgerald*

[crystal\\_huang\\_4@sfu.ca](mailto:crystal_huang_4@sfu.ca)

The rule-out procedure has been proposed to address the standard lineup's weakness of demonstrating suspect innocence. A similar procedure was employed, where participants were asked to give similarity ratings for each lineup member for their match to the eyewitness' memory of the culprit after completing the identification task. Participants were either exposed to fair or biased lineups. ROC analysis revealed that the similarity rating procedure had better discriminability, but the differences were not statistically significant. This research informs the ongoing discussion on improving the lineup procedure's ability to inculcate guilty suspects and exculpate innocent suspects.

**The impact of social media exposure on eyewitness identification**

*Emma Kruisselbrink, Ryan J. Fitzgerald, & Daniel M. Bernstein*

[emma\\_kruisselbrink@sfu.ca](mailto:emma_kruisselbrink@sfu.ca)

The current study examined exposure to an innocent suspect on social media and its effect on performance at a formal lineup procedure. Participants observed a staged crime and then were randomly assigned to view social media profiles of innocent people, a mugbook filled with innocent people, or no photos of innocent people (control). Following a short delay, participants completed a lineup procedure. The results show that exposure to social media or mugbook images had no effect on correct identification of the perpetrator. However, social media exposure increased innocent suspect identifications at a subsequent lineup compared to mugbook exposure and controls.

**Catching crime at the border: Prospective person memory and face matching in border control decisions**

*Camryn Yuen & Ryan J. Fitzgerald*

[camryn\\_yuen@sfu.ca](mailto:camryn_yuen@sfu.ca)

Border control officers are required to be on the lookout for wanted people while verifying that passport photos match their holders. In Experiment 1, participants completed a border control task, where they decided whether a person's passport matched their appearance, while simultaneously looking out for wanted people. Participants were more likely to report someone as wanted if they believed the person was using a fraudulent passport, indicating that suspicion of a fraudulent passport may serve as a reminder to look out for known wanted people. A second experiment is being conducted to replicate this finding.

**The impact of event similarity on recalls of repeated events**

*Oliver Bontkes, Daniela Palombo, & Eva Rubinová*

[oliver.bontkes@brentwood.ca](mailto:oliver.bontkes@brentwood.ca)

We hypothesized that the degree of similarity in a repeated event is 1) positively correlated with the use of semantic memory and 2) negatively correlated with the use of episodic memory. In a pre-registered (<http://osf.io/3avyx>) sample (N = 97; 291 memory observations), repeated measures correlation indicated that self-reported similarity in a repeated event is

positively correlated with self-reported use of semantic memory but not episodic memory. Latent profile analysis identified a set of distinct patterns of scores across memory reliance variables, and subsequent analyses revealed significant differences in vividness and self-reported similarity of place in these different profiles.

### **Paper Session 2: Perception/Attention (10:35 – 11:50)**

#### **Motivation as a moderating variable for learning performance**

*Jessica Silverman, Amy vanWell, Kyla Basbaum, & Jim Tanaka*

[jsilve@uvic.ca](mailto:jsilve@uvic.ca)

Individual differences in perceptual training suggest faster learners remember better (learning efficiency). This study investigates if a participant's learning efficiency is explained by task-specific intrinsic motivation. Participants (n=36) completed two separate online tasks, learning Lithuanian nouns and Mushroom species. Learning speed ( $p < .001$ ) and learning efficiency were correlated across tasks for participants (e.g., efficient Lithuanian learners were efficient mushroom learners) ( $p < .001$ ). Self-reports of intrinsic motivation indicated a negative correlation between learning speed ( $p < .001$ ) and a positive correlation between accuracy ( $p < .001$ ). Results implicate motivation as a potential moderator for learning efficiency where interest, competence, and choice may contribute to overall learning performance.

#### **Testing the temporal-period model of alerting in visual search**

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

[akg33@sfu.ca](mailto:akg33@sfu.ca)

“Alerting” (e.g., briefly brightening the screen before display onset) is known to facilitate simple visual search, which involves finding a unique target (e.g., a red item) amongst distractors (e.g., green items). Recently our lab has shown that, unlike in simple search, alerting does not facilitate compound search, which involves not only finding the unique target, but then reporting on a feature of that target (e.g., which side is cut off). The present work tests and disconfirms a prediction of the Temporal-Period model that had previously been proposed to explain alerting effects that occur in simple but not in compound tasks.

#### **How malleable are your judgements? The effect of subliminal priming on similarity judgements**

*Anna Lawrance, James Tanaka, & Amy vanWell*

[annalawrance@uvic.ca](mailto:annalawrance@uvic.ca)

Similarity judgements are a fundamental component of cognition. In this experiment, we investigated the malleability of similarity judgements to priming. Participants indicated the similarity of seemingly unrelated images of objects. Before judgements, participants were primed with an ad-hoc category (“waterproof”) or a nonword for 17ms. The psychological embedding software PsiZ was used to generate 2D similarity spaces where distance between items reflects perceived similarity for judgements with the word or nonword primes. Items formed two distinguishable clusters in the similarity space, separated by perceived membership in the primed ad-hoc category of “waterproof.” Hence, conceptual priming influenced mental representations of similarity.

#### **Does the face say it all? Examining integration in whole-person perception**

*Katelyn Forner, Isabella Schopper, Amy vanWell, & Jim Tanaka*

[katelynforner@uvic.ca](mailto:katelynforner@uvic.ca)

In our everyday world, people are recognized as integrated, whole “persons” rather than as isolated faces and bodies. In three experiments, we investigate the integration of face and

body information in perception. Specifically, we test the influence of body information on face perception and the influence of face information on body perception. Participants made “same-different” face or body decisions to sequentially presented composite images based on their congruency and alignment (Experiments 1 & 2) or head orientation (Experiment 3). Our results indicate an asymmetry in person perception where the face more strongly influences body judgements than the reverse.

### **Choosing the right measure: How complexity and affective value vary across executive function tasks**

*Justin Bonnieux, Bernard Dupriez-Mitchell, & Mauricia Garcia-Barrera*

[bonnieux@uvic.ca](mailto:bonnieux@uvic.ca)

Executive Function (EF) researchers often use theoretically-derived “lower/higher-order” (i.e., complexity) and “hot/cold” (i.e., affective value) binary classifications to describe EF tasks. However, these assumed classifications may be better understood as continua, suggesting the need for further inquiry. To highlight consensus and disagreement on this topic, we surveyed 130 experts in EF assessment from 9 countries as part of the REFRAME study conducted by the Cortex laboratory at the University of Victoria. Results will be presented, emphasizing how understanding task complexity and affective value will enable researchers and clinicians to make better-informed task selection decisions.

## **Poster Session 1 (3:00 – 4:25)**

### **1. Starting to stop: The influence of stimulus and response modalities on inhibition tasks for preschoolers**

*Ingrid Nielsen, Yaewon Kim, & Ulrich Müller*

[ingridnielsenro@gmail.com](mailto:ingridnielsenro@gmail.com)

Tests of inhibition during the preschool period have been found to predict academic outcomes, and Attention-Deficit/Hyperactivity Disorder diagnoses. The present study investigated the effects of both stimulus and response modality on children’s performance across two inhibition tasks (Luria’s Tapping task, Grass/Snow task). Participants (36-60-month-old preschoolers; projected N=64) were assigned to one of four stimulus-response modality conditions: verbal-verbal, verbal-manual, manual-verbal, and manual-manual. A mixed-factorial ANOVA was used, with stimulus and response modalities as between-subject factors and inhibition tasks as within-subject factors. We expect the results of these analyses to expand definitions of inhibition and help researchers design less biased inhibition tasks.

### **2. Characterization of EEG after repetitive mild Traumatic Brain Injuries (rmTBIs) in Alzheimer model mice: preliminary findings**

*Victoria Carriquiriborde, S. Tok, J. Yue, T. Yildirim, M. Kelly, W. H. Cheng, C. L. Wellington, & B. Kent*

[vcarriqu@sfu.ca](mailto:vcarriqu@sfu.ca)

Traumatic Brain Injury (TBI) is a known risk factor for neurodegenerative diseases such as Alzheimer’s disease (AD). However, the relationship between repetitive mild TBIs (rmTBIs) and AD is still not well understood. This study aims to compare the effects of rmTBIs on two mouse models of AD: APP/PS1 and APP/NL-F. The TBI group received 2 – 3 closed-head impacts and brain activity was recorded for 72 hours using an EEG/EMG headset. EEG sleep, power spectra, and seizure activity were analyzed, comparing the TBI and sham groups between the two AD model mice. The poster will present the preliminary findings from this study.

### **3. How do we see others? A preliminary investigation into the frequency, nature and potential impact of prosocial fantasies**

*Janaki Patel & Lara Aknin*

[janakip@sfu.ca](mailto:janakip@sfu.ca)

Are humans ultimately self-serving? While past research suggests that many people think cynically by assuming that others are purely self-interested, these views are largely unfounded. Indeed, our data collected from both a large university sample (N=491; pre-registered) and online sample of adult ex-offenders (N=25) suggest that many people engage in prosocial fantasies by daydreaming, fantasizing, or imagining themselves helping others. In a pre-registered experimental study with a nationally representative panel of Americans (N=637), we found that sharing information about prosocial fantasies did not improve views of humanity by lowering cynicism and heightening optimism and trust.

### **4. Perceived credibility for instances of repeated events**

*Marie Bandet, Heather Price, & Eva Rubinová*

[mbandet@live.com](mailto:mbandet@live.com)

Are humans ultimately self-serving? While past research suggests that many people think cynically by assuming that others are purely self-interested, these views are largely unfounded. Indeed, our data collected from both a large university sample (N=491; pre-registered) and online sample of adult ex-offenders (N=25) suggest that many people engage in prosocial fantasies by daydreaming, fantasizing, or imagining themselves helping others. In a pre-registered experimental study with a nationally representative panel of Americans (N=637), we found that sharing information about prosocial fantasies did not improve views of humanity by lowering cynicism and heightening optimism and trust.

### **5. How timing of disclosure impacts perceptions of individuals with mental illness**

*Madelyn Balogh & Zoë Francis*

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While much research examines stigmas towards people with mental illnesses in the workplace, little research examines how – and specifically when – these individuals should disclose their mental illnesses. The present study examines how severity of mental illness and timing of disclosure impacted ratings of trustworthiness and competence via a randomized vignette study. Disclosure during the interview was perceived as most appropriate, whereas accidental disclosure was perceived as least appropriate. Those who disclosed early were perceived as more trustworthy than those who disclosed later or accidentally. Future research should examine how implicit bias may moderate these perceptions of early and late disclosure.

### **6. Perceived credibility of instances of repeated events: A replication and extension**

*Tia Blackall & Heather Price*

[blackallt18@mytru.ca](mailto:blackallt18@mytru.ca)

Analyses of reports of repeated events indicate that individuals remember more accurate details from first and final instances, and that accuracy and consistency decrease across repeated recall. To investigate whether such effects are reflected in evaluators' perceptions, we presented participants (N = 83) with two reports of instances of a repeated event and asked them to rate characteristics including credibility. The results showed that first instances were perceived as more credible and consistent than reports of other instances. Moreover, first reports were rated as more credible than second reports, suggesting that differences in memory reports can be detected by evaluators.

### **7. Assessing cognitive-affective sensitivity in misokinesia: An ERP study**

*Alyssa Sutherland, Sumeet M. Jaswal, & Todd C. Handy*

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Little is known about the neurocognitive mechanisms of misokinesia, which is a challenging visual-based phenomenon defined by a strong emotional response to the sight of someone else's small and repetitive fidgeting-like movements. The present study examined whether those self-reporting misokinesia sensitivity may manifest atypical cognitive-affective reactivity to visual stimuli. Participants (N = 46) were recruited from a student population, and were asked to (1) perform an emotional oddball task while their EEG responses to the visual targets (angry, happy, or neutral faces) were recorded, and (2) complete the Misokinesia Assessment Questionnaire (MkAQ) to quantify the extent to which they experience negative thoughts, feelings, and emotions to visual triggers.

### **8. Generalizing the materials-based bias effect**

*Majd Hawily & D. Stephen Lindsay*

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In recognition memory tests, subjects may demonstrate liberal, conservative, or no response biases based on the principles of signal detection theory. Across several studies, we found that subjects showed a conservative bias when presented with complex images (e.g., paintings) as stimuli. When stimuli were English words, bias tended to be liberal or neutral. Here we will discuss our ongoing efforts to better understand this materials-based bias effect. Specifically, we explore whether Canadian and Japanese participants show differences in response bias for new materials called "diffeomorphs". With that, we test the generality of the materials based bias effect into other cultures.

### **9. Language exposure & executive functioning in children**

*Kamaljit Bajwa, Jaskirat Bajwa, Kirandeep K. Dogra, & Daniel M. Bernstein*

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We examined the effects of language exposure on executive functioning abilities. Past research suggests that individuals exposed to more than one language have better executive function compared to monolinguals. Parents reported their child's (Age Range = 6-17 years) language exposure. Children completed the Stroop (N = 48) and Forward Digit Span Task (N = 65) as measures of their executive functioning abilities. Although multilinguals did not outperform monolinguals in these two executive functioning tasks, our results were inconclusive due to lack of power.

### **10. A 2-phase procedure to investigate the "photo truthiness" effect**

*Bennett King-Nyberg, Kaitlyn Fallow, Hartmut Blank, Eryn Newman, Timothy Friesen, Kelly Grannon, & D. Stephen Lindsay*

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In previous studies, presenting related but non-probative photos alongside obscure claims increased participants' rated belief in the claims. This "photo truthiness" effect is replicable but it's tiny. Here, we used a two-phase procedure designed to make the source of the truthiness effect less salient by separating exposure to photos from truth judgments. We thought that might increase the size of the effect. Participants were shown claims with and without related photos. Later, they judged the truth of the claims. Results were compared to the standard one-phase procedure in which truth judgments were made to claims presented with and without photos.

### **11. Improving police lineup construction using psychological embeddings: An objective measure of perceptual similarity**

*Megan Lall, Ryan Fitzgerald, Amy vanWell, Brett Roads, & Jim Tanaka*

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In police lineup construction, the selection of filler faces is a critical factor that can profoundly impact the reliability of eyewitness identification. We collected likeness judgements for a database of mugshots to infer a psychological embedding and similarity face space using PsiZ, an open-source Python package. From this face space, we constructed a series of lineups where the fillers parametrically varied in their appearance to a designated suspect. We believe psychological embeddings provide a promising technique for developing an objective, science-based procedure for lineup construction that has the potential to reduce false identifications in eyewitness testimony.

## 12. Memory for past confidence in younger and older adults

*Liam Ruel, Carolyn Baer, Rakefet Ackerman, & Daniel Bernstein*

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How does our ability to reflect on past confidence change as we age? Here, we investigate the accuracy with which younger and older adults remember their past confidence.

Participants will identify gradually clarifying objects, rate their confidence in each guess, and later recall these values. We expect that accurate memory of past confidence states will decline in older adults, with older adults remembering higher confidence than they initially had. These findings will help us understand the reliability of memory for past confidence, which has important implications for eyewitness identification.

## 13. What's so special about the first time? Phenomenology of first-time sexual experience memories

*Stephanie Chen, Elena Zettelmeyer, Daniela Palombo, & Samantha Dawson*

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A person's first sexual experience is one of the most pivotal, though no research has explored how people remember and make meaning of this experience. To address this gap, we examined if a person's first sexual experience is remembered differently than other memories. Participants ( $n = 201$ ) recalled three events (i.e., first sex, temporal control event, most recent sex). Consistent with our hypothesis, first sexual experience memories were associated with greater emotional intensity, negative valence, and vividness compared to the temporal control event. Inconsistent with our hypotheses, first-time sexual experience memories were not associated with greater levels of positive valence.

## 14. Just asking questions: Does the generation effect increase the illusory truth effect

*Zoe Gadbow, Alexander Speer, Kelsey Otos, Mara Brewster, Sebastian Chrysfidis, Matthew Pabaly, Sofia Roasles Makela, Mira Schutz, Alison Weber, Madeline Jalbert, & Ira Hyman*

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The media often asks leading questions, guiding audiences to generate implied answers. We investigated how this instance of the generation effect (Slamecka & Graf, 1978); might increase the illusory truth effect (Hasher et al., 1977). People were exposed to trivia questions with either true or false answers. For some, they simply read, but for others, they were led to generate an implied answer. Participants made truth judgments for trivia question answers that were new, previously read, or previously generated. We hypothesize that participants will be more likely to rate self-generated answers as true compared to answers simply read.

## 15. Can you be an expert? Fast and slow learning in an object categorization task

*Amy vanWell, Kyla Basbaum, Laura Devonshire, & Jim Tanaka*

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During perceptual training, participants learn to categorize objects to a predetermined level of accuracy. In this study, we investigate individual differences for participant's rate of learning to determine if learning performance for one visual category predicts performance for another. Participants underwent online incremental training (to a 90% accuracy criterion) and retention



testing for four species of warblers and mushrooms. Based on their trials-to-criterion (TTC), participants were split into “fast” or “slow” learning groups. Despite having required fewer training trials, participants in the “fast” group were more accurate than the “slow” group (fast: 95% versus slow: 88%,  $p < .02$ ).

#### **16. When a moment lasts forever: The influence of emotion on retrieving episodic memories.**

*Vanessa Wong, Nada Alaifan, & Peter Graff*

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It is widely believed that emotional events are better remembered than neutral events, and convincing evidence for this claim is mainly available from research on autobiographical memory. However, findings from episodic memory studies remain inconsistent. A study with undergraduate students was designed to explore such evidence in episodic memory. Participants were presented with positive, negative and neutral images. After a short delay filled with unrelated tasks, they were prompted to orally recall the previously presented images. Responses were transcribed and scored to assess memory. The results showed that participants had better memory for emotional pictures compared to the neutral pictures.

#### **17. Frequent exposure to South-Korean media worsens body dissatisfaction and loneliness among young adults**

*Karin Ishida & Susan Thompson*

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During the lockdown period of COVID-19, people relied on social media to cope with loneliness. Consequently, people were more exposed to platforms that promoted the thin-ideal, including South-Korean media (SKM). The current study addressed whether: 1) increased feelings of loneliness predict Body Dissatisfaction and 2) frequent exposure to SKM influenced the relationship between loneliness and BD. Two linear regression analyses demonstrated that loneliness did not predict BD for both young (18-25 years old) and old (25-30 years old) participants. However, frequent exposure to South-Korean media worsened body dissatisfaction and loneliness among younger adults. Future researchers should consider recruiting younger participants.

#### **18. Change detection of adjacent and separated bicoloured blocks**

*Ryan T. deKergommeaux, Amelia A. C. Pellaers, Bonnie K. Ng, & Richard D. Wright*

[rdekergo@sfu.ca](mailto:rdekergo@sfu.ca)

We used a flicker task to examine how change detection is affected by manipulation of bicoloured blocks. Changes took longer to detect when the locations of the original two colours were swapped than when they were replaced by two different colours. In addition, separating the blocks led to faster change detection when the colours were swapped, presumably because this reduced uncertainty about their locations. On the other hand, separating the blocks led to slower change detection when the original colours were replaced, presumably because this reduced the overall salience of this type of change.

#### **19. Sleep and performance on tests of pattern separation and the Cambridge Neuropsychological Test Automated Battery (CANTAB)**

*Aina Elina Roenningén, Devan Gill, & Brianne Kent*

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Sleep disturbances are considered both a risk factor for and symptom of dementia. To identify cognitive tests sensitive to sleep-dependent cognition, we monitored rest and activity for 7 days (N = 88) to assess natural patterns of sleep or experimentally sleep deprived

participants (N= 28 rested, N= 14 deprived). We assessed cognitive performance using the Mnemonic Similarity Task to assess pattern separation processes and the Cambridge Neuropsychological Test Automated Battery, which was developed to aid the diagnosis of dementia. Tests sensitive to sleep-dependent cognition could be used as clinical trial outcome measures for sleep promoting treatments.

### Keynote Address (4:40-6:00)

#### **Beyond True and False: Perspectives from a decade teaching civic digital literacy**

Mike Caulfield, Research Scientist at UW's Center for an Informed Public

Much of digital information literacy was designed with the information seeker in mind. But on the social internet we do not only seek out information – information seeks out us as well, and often arrives missing crucial context. In this keynote, information literacy expert Mike Caulfield will detail some of the ways in which pre-internet methods have not been suited to this reality, and detail insights that have emerged in the development and implementation of his SIFT methodology for “citizen fact-checking”. Discussion will include the problem of “just doing the math”, the ways in which emotional reaction can be necessary to fact-checking, and how some of the older study of rumor may provide useful insights into how individuals process online information.

**SATURDAY, APRIL 22<sup>nd</sup>, 2023**

### Paper Session 3: Memory/Belief (9:30 – 10:45 am)

#### **Individual differences in memory: Free recall versus Cued recall**

*Eric Y. Mah & D. Stephen Lindsay*

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Two common memory tasks are free recall (study a list of words and later attempt to recall as many as possible) and cued recall (study a list of randomly or meaningfully paired cue and target words and later attempt to recall targets given cues). Do you think individuals differ more from one another on free recall performance or cued recall performance? What would greater individual differences on one task versus another imply for theories of item and associative memory? We investigated these questions in a series of six experiments (N = 1,108) probing individual differences in free and cued recall.

#### **The impact of the virtual environment in tele-forensic interviews with children**

*Nikola R. Klassen, Heather L. Price, & Deborah A. Connolly*

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The use of online investigative interviews (tele-forensic interviews) with children who have been a victim or witness to a crime could have major benefits for isolated communities that may not have access to trained forensic interviewers without significant delays. However, the empirically tested guidelines for how to conduct these interviews are currently limited. Specifically, it is unknown how the virtual environment, and the distractions that come with it, may impact children’s recall. Thus, the current project explored how the virtual environment may impact children’s memory completeness and accuracy for an experienced event.

#### **Negative emotionality, dissociation, and false memory susceptibility: A mediation analysis**

*Hanna Erceg, M. Kyle Matsuba, & Daniel M. Bernstein*

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False memory affects legal and personal decisions; yet we don’t know who is most susceptible. Research has revealed correlations between dissociative tendencies (e.g., feeling disconnected from oneself or one's

surroundings) and false memory, and between certain personality traits (e.g., neuroticism) and false memory. No work has examined these factors together. We examined whether non-pathological dissociation mediates the link between negative emotionality and false memory susceptibility (N = 360). Negative emotionality correlated positively with susceptibility to misleading information, and dissociation partially mediated this link. The findings provide a starting point for exploring how negative emotionality interacts with dissociation to influence false memory susceptibility.

### **Honesty-humility correlates positively with theory of mind**

*Travis Takarangi, Daniel Derksen, & Daniel M. Bernstein*

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We explored links between personality and theory of mind (ToM). Our main personality trait of interest, agreeableness, did not relate to ToM. However, honesty-humility correlated positively with the Strange Stories task, which measures understanding of nonliteral speech. Honesty-humility is antonymous with dark personality traits (e.g., psychopathy; narcissism) which are associated with ToM deficits. Our findings support the negative association between dark traits and ToM. Honesty-humility may aid in interpreting nonliteral speech. We are currently replicating the unexpected correlation that we observed.

### **Truthiness magnitude is difficult to increase**

*Daniel G. Derksen, Daniel M. Bernstein, Deborah A. Connolly, Megan E. Giroux, & Eryn J. Newman*

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Participants rate statements as true more often when the statements appear with non-probative but related photos (truthiness). In four experiments, we varied semantic processing to increase truthiness' magnitude. We manipulated the format (blurry-to-clear clarification; still photo; no photo) and whether participants had to identify the subject of the photos. We observed truthiness, but neither clarification nor identification increased truthiness' magnitude. We also manipulated relative processing fluency by varying the frequency of photo-present trials. The latter also did not affect truthiness' magnitude. Though a small effect, truthiness' magnitude is hard to increase.

## **Paper Session 4: Cognition/General (11:00 – 12:15)**

### **Conceptualizing categories: How do we represent the objects we see?**

*Amy vanWell, James Tanaka, & Brett Roads*

[amyvanwell@gmail.com](mailto:amyvanwell@gmail.com)

Humans perform categorization automatically; we tend to see objects as something, as opposed to just seeing them. To investigate the formation of visual perceptual categories, we used the psychological embedding algorithm "Psiz" to generate two 2D similarities spaces for a set of 160 Warblers (Cape May, Magnolia, Prairie, and Townsend) where distance between items represents their similarity. We compared the similarity spaces of participants who were trained to identify the four species (n=63) to a novice group (n=120). Our results indicate the trained group showed category alteration through greater between-species differentiation and increased differentiation of items within a species.

### **Don't be so tough on yourself! Self-compassion reframed: Effects on interest and efficacy**

*Jaenjira Janzen & Shawn Geniole*

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Life is full of unexpected events/setbacks. Self-compassion—involving self-kindness, mindfulness, and common humanity—appears to reduce stress and rumination in response to such setbacks. Despite these benefits, studies suggest self-compassion exercises/workshops are underutilized/attended by men and that reframing self-compassion (e.g., with more masculine-stereotypical language) may boost interest/participation. Here, however, such reframing had little effect on men's interest (sign-up rates) and dramatically reduced women's

sign-ups. Nonetheless, high self-compassion individuals—regardless of workshop (vs control) participation—showed lower rumination. Thus, alternative strategies to boost self-compassions appeal should be explored as these may ultimately improve men’s wellbeing in response to setbacks.

### **Examining decision making and stimulant use using the drift diffusion model**

*Timothy Friesen, Eric Mah, & Adam Krawitz*

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We looked at the effect of stimulant use on perceptual decision making. Participants included with stimulant users (N=18) and undergraduate students (N=32). We used the Drift Diffusion Model (DDM), a cognitive computational model that examines underlying decision-making mechanisms (e.g., evidence needed to make a decision, decision-making speed). Previous research using the DDM found that stimulant use negatively impacted decision-making processes (Howlett et al., 2021). In the current study, we found limited evidence for differences between groups for DDM parameters. Stimulant users were slower and more affected by varying levels of task difficulty compared to students, but no less accurate.

### **Social Media, self esteem and positive relations: Comparing self and other perspectives**

*Kirti Mahato & Lauren Human*

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Previous research has found mixed results regarding how personal and interpersonal well-being relate to social media use. Since past literature has relied primarily on self-reports to investigate these relationships, this study brings a close-other perspective to shed new light on the associations between the variables.

The research found that self-report perspective indicates that greater social media use is unrelated to self-esteem and positive relations with others, but close-others show a positive association. Whether these links are purely within the close-other’s mind, or the close-other is providing a more valid perspective is an essential question for future research.

### **Influence of disgust sensitivity on homelessness policy attitude**

*Jenna Lee & Roger Tweed*

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The present study attempts to replicate a finding that pathogen disgust sensitivity is positively related to people's level of support for exclusionary homelessness policies yet does not impact their support for policies that provide aid. This study extends upon the original research by also examining the influence of moral disgust sensitivity. The findings revealed that pathogen disgust sensitivity is indeed positively correlated to the support for exclusionary policies however is also somewhat negatively related to the support for aid. To a lesser extent, moral disgust sensitivity was similarly related to the support for exclusion but was not related to aid.

## **Poster Session 2 (12:15 – 1:40)**

### **20. Change detection of targets with multiple unique features**

*Amelia A.C. Pellaers, Ryan T. deKergommeaux, Leanne R. Vibar, Qiwan Shi, & Richard D. Wright*

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We used a flicker task to examine how change detection is affected by the number of feature dimensions that differentiate the two versions of a changing target object when compared across displays. Participants required significantly more time to detect changes when targets differed only in terms of a single feature dimension (e.g., colour, size, or orientation) than to detect changes when targets differed by three feature dimensions (e.g., colour, size, AND

orientation). The results indicate that there is a similarity effect on the efficiency of target comparisons across flickers when serially searching for targets in flickering displays.

### **21. Change detection and scene-based vs. object-based target laterality**

*Yang Han, Ryan T. deKergommeaux, Daryl Tang, Ruiyu Zhao & Richard D. Wright*  
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We used a flicker task to examine how change detection is affected by whether the target is presented in the left or right visual hemifield, and also by whether the change occurs on the left or the right side of the target. We found a scene-based effect that caused targets to be detected faster when on the left side of the display. We also found an object-based effect that caused targets to be detected faster when the change occurred on the left side of the target object. These results are consistent with previous hemispheric laterality findings.

### **22. Reliable measurements of cognitive load: A comparative analysis**

*Katherine Boere & Olav E. Krigolson*  
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Measuring cognitive load - how much our brains are working to process information - is important for understanding how to optimize learning and improve performance. Current methods have limitations that make it hard to differentiate between load types (extraneous, intrinsic, and germane), rely on subjective self-reporting or physiological measures with multiple influencing factors, and often fail to capture the dynamic nature of cognitive load. This poster compares current approaches for estimating cognitive load, highlighting the most reliable measurements for each load type and key methodological considerations for task design.

### **23. Change detection of upright and tilted lines: Global and local processing**

*Bonnie K. Ng, Ryan T. deKergommeaux, Yang Han, & Richard D. 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 square boxes, we found the opposite -- changes to vertical lines inside boxes were detected faster than changes to titled lines inside boxes. This difference may be due to whether the line orientation change involves the global shape of the target or the local details of the target.

### **24. Mind games: Exploring the interplay of cognitive load, prefrontal cortical activation, and performance in multitasking**

*Francesca Anderson, Katherine Boere, & Olav E. Krigolson*  
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This study used mobile functional near-infrared spectroscopy (fNIRS) to examine the relationship between cognitive load, prefrontal cortical activation, and performance during multitasking. Participants played Tetris under two conditions: one-game and three-game simultaneously. The hypothesis was that the three-game condition would result in higher oxyhemoglobin concentrations, indicating a greater cognitive load. However, results showed that [HbO<sub>2</sub>] was higher in the one-game condition, and a weak negative relationship between scores and [HbO<sub>2</sub>] was found in both conditions. This suggests that attentional shifts may be responsible for limiting cognitive capacity and performance, which is relevant to pilots and others in complex environments.

### **25. Change detection of central and marginal interest objects and divided attention**

*Leanne R. Vibar, Ryan T. deKergommeaux, Yasmeen Mezban, Daryl Tang, Ruiyu Zhao, & Richard D. Wright*

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We used a flicker task to examine how change detection is affected by the degree of interest of target objects, as well as how the search for these targets would be affected by performing a concurrent cognitive load task. We found that central-interest targets were found faster than marginal-interest targets, and that search for both types of targets was slower whenever participants performed the concurrent task. In addition, we found that performing the concurrent task had a greater inhibitory effect on the time to detect marginal-interest targets than on the time to detect central-interest targets.

## **26. Global confidence judgment in childhood**

*Marco Tommasi, Carolyn Baer, & Daniel M. Bernstein*

How do children form “Global” confidence judgments (“I got a lot of these right”) about their performance across multiple trials? Thirty-two children aged 5-12 compared their performance between an easy and hard group of trials. We explored whether the presence of feedback on either the easy or the hard trials helped children discriminate trial difficulties between groups. Pilot data reveals a different effect of feedback on younger children (5-8) compared to older children (9-12). Our findings will elucidate how children integrate multiple performance cues (e.g., feedback and trial difficulty) over time to form global confidence beliefs.

## **27. Missing the Point: How We Correct Movement Mistakes**

*Isaac Barss, Katherine Boere, & Olav E. Krigolson*

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Low-level errors in motor control occur during movement and represent a discrepancy between the ongoing motor plan and a successful outcome. Electroencephalography (EEG) was used to measure brain responses while participants moved a cursor to hit a target. The target jumped during the action to generate a low-level error, which elicited posterior neural activity. Activity was greater during trials in which participants had full control of cursor movement than in partial control conditions. We suggest the observed posterior activity represents the brain’s process of updating its internal model of the environment which enables the correction of motor movements.

## **28. What do you remember about your first time? Examining the number of episodic details in first time sexual experience memories**

*Elena Zettelmeyer, Stephanie Chen, Daniela J. Palombo, & Samatha J. Dawson*

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Anecdotal evidence suggests that a person’s first sexual experience is a highly memorable life event. Using a within-subjects retrospective design, participants (n = 374) recalled three autobiographical memories: first sexual experience, a temporal neutral control event, and their most recent sexual experience. We hypothesized that first sexual experience memories would contain more episodic details (i.e., details specific in time and place) compared to the two other memories. Using natural language processing we found that episodic details were greatest in the most recent sexual experience memory, followed by the first sexual experience memory, and then the temporal neutral event memory.

## **29. Timing of attention capture leads to eyewitness memory errors**

*Kirandeep K. Dogra, Sophia Sar, & Ira E. Hyman, Jr.*

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Attention is crucial when watching for crimes and accidents. However, people may fail to notice details from these events as they occur, experiencing a form of inattention blindness. Sometimes, witnesses who experience late attention capture may report voluntary confabulations for events that never occurred. We examined how the timing of attention

capture affects eyewitness memory. Participants watched a video depicting a theft and answered questions about the thief's early and late behaviors. Some noticed the thief early, some later, and some missed the theft completely. People who noticed the crime later provided voluntary confabulations about early aspects of the event.

### **30. Assessing the role of re-entry to V1 in object substitution masking: a TMS study**

*Nadja Jankovic, Danielle Buan, Shakiba Zahabioun, Vincent Di Lollo, & Thomas M. Spalek*  
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Object substitution masking (OSM) is a form of masking in which the continued presence of a four-dot mask impairs the visibility of a briefly presented target compared to when the four-dots offset at the same time as the target. To investigate the role of re-entrant processing in OSM, single pulses of transcranial magnetic stimulation (TMS) were applied to the primary visual cortex at different time-points during stimulus processing. It is hypothesized that, if re-entry is involved in OSM, then the delivery of TMS to the visual cortex at the time of re-entry may lead to attenuated masking.

### **31. Evaluating Mobile EEG Devices: Which One is Right for Your Research?**

*Frances Copithome, Mathew R. Hammerstrom, Katherine Boere, & Olave E. Krigolson*  
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Advances in mobile electroencephalography (EEG) technology provides a convenient and inexpensive way to measure decision-making, feedback, and other cognitive functions outside of traditional laboratory settings. Our study compared a series of mobile EEG systems (MUSE, Brain Bit, Emotiv Epoc, Neurosity Crown, CGX Dev Kit, CGX Patch, and the Brain Products X.on) for their ability to capture raw EEG data, record event-related potentials and capture known electrophysiological phenomena. This study aims to provide a guide of considerations for mobile EEG system use and a series of standards to test device data quality. Findings support adoption of mobile EEG for data collection.

### **32. Left Prefrontal Cortex Puts the Work in Working Memory: Portable Device Sheds Light on Hemispheric Differences in Brain Activity**

*Andrew J. Daniels, Katherine Boere, & Olav E. Krigolson*  
[AndrewDaniels2026@gmail.com](mailto:AndrewDaniels2026@gmail.com)

This study used the portable fNIRS Mendi device to measure prefrontal oxyhemoglobin concentrations during a working memory task. Results showed that increased task difficulty led to greater left prefrontal oxyhemoglobin levels, highlighting the importance of the left prefrontal cortex in working memory. These findings suggest that mobile fNIRS could be used to identify hemispheric differences in brain function, informing the development of more targeted interventions for individuals with cognitive impairments. In addition, the Mendi device shows promise as a tool for measuring these differences in brain function, contributing to a better understanding of the neural basis of working memory.

### **33. Emotional judgements and disgust; are remembered behaviours necessary for sustained judgement?**

*Bennett King-Nyberg & Eric Mah*  
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We investigated whether emotional judgments of strangers persist even after forgetting their emotion-eliciting behaviours. Participants viewed person-behaviour pairs that elicited positive, negative, or neutral emotional judgments, and were instructed to remember or forget each pair. In experiment 1 they made emotional judgments of the pairs, then performed a cognitive task. After, they saw the faces again, made emotional judgments anew, and performed behaviour recall. In experiment 2, follow-up emotional judgements and behaviour recall attempts were separated. Participants showed directed forgetting of negative behaviours

only. We found evidence that emotional judgements were partially sustained for forgotten negative—but not forgotten positive—person-behaviour pairs.

#### **34. A Longitudinal Investigation of Affective Theory of Mind**

*Ruby S. Dhillon, Jeevan S. Bains, Kamaljit Bajwa, Carolyn Baer, & Daniel M. Bernstein*  
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The Eyes Test assesses affective theory of mind, or one's ability to interpret others' emotional states. We aimed to address the lack of longitudinal research on this task. Participants (N = 172, Age Range = 11 to 96 years) selected descriptors matching images of eyes displaying emotional states. Participants completed the task again 1+ years later (Mdelay = 17.2 months). Scores were positively correlated across timepoints ( $r = .44$ ). This correlation remained after controlling for age and time between testing (partial  $r = .43$ ). This suggests that affective theory of mind abilities remain stable over time.

#### **35. You Better Belief: The Impact of Control Beliefs on Long-Term Cognition**

*Em Sundby, Cole Tamburri, Cynthia McDowell, & Stuart MacDonald*  
[esundby9210@gmail.com](mailto:esundby9210@gmail.com)

Control beliefs (CB) are subjective beliefs regarding the amount of control one exerts over their lives and environment. Previous literature has linked increasing age to lower CB, a concern since lower CBs have been implicated in cognitive decline. The present study examined CB's impact on classification of cognitive status (cognitively impaired not demented). Participants were community-dwelling older adults in a longitudinal measurement burst study (Project MIND) spanning 8 years. All four CB subscales exhibited significant 4-year change, with individual differences in change for the Present Ability subscale associated with an increased likelihood of cognitive impairment at year 8.

#### **36. Dishonesty and unfairness reduce the sunk-cost effect**

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The sunk-cost effect (SCE) is the tendency to continue an unsuccessful activity after devoting resources to it. We examined the SCE in moral scenarios that violated honesty and fairness, and non-moral scenarios that did not. People were more likely to indicate they would continue an activity when sunk costs were high compared to when sunk costs were low, and this effect (SCE) was lower when continuing the activity was dishonest or unfair. Further, internal moral identity – the self-importance of being a moral person – decreased the likelihood to continue activities in moral scenarios but not non-moral scenarios.



**Food Options:**

*Katte Poke Don & Japanese Curry* – Lansdowne Mall Food Court • Travel time: 6 mins walk, 2 mins drive • Speciality: poke bowls, curry, and seafood

*A&W* – Lansdowne Mall Food Court • Travel time: 6 mins walk, 2 mins drive • Speciality: burgers and breakfast

*Bubble Waffle Cafe* – Lansdowne Mall Food Court • Travel time: 6 mins walk, 2 mins drive • Speciality: bubble waffles

*Fresh Elements* – Lansdowne Mall Food Court • Travel time: 6 mins walk, 2 mins drive • Speciality: bubble tea and juice

*Fusion Curry & Donair* – Lansdowne Mall Food Court • Travel time: 6 mins walk, 2 mins drive • Speciality: shawarma, curry, and donair

*Fusion Feast Pizza and Curry* – Lansdowne Mall Food Court • Travel time: 6 mins walk, 2 mins drive • Speciality: pizza, curry, and pasta

*Grill King* – Lansdowne Mall Food Court • Travel time: 6 mins walk, 2 mins drive • Speciality: Korean BBQ

*KFC* – Lansdowne Mall Food Court • Travel time: 6 mins walk, 2 mins drive • Speciality: fried chicken and burgers

*My Coffee* – Lansdowne Mall Food Court • Travel time: 6 mins walk, 2 mins drive • Speciality: espresso and baked goods

*Old Street Express* – Lansdowne Mall Food Court • Travel time: 6 mins walk, 2 mins drive • Speciality: Asian cuisine

*R&H Chinese Food* – Lansdowne Mall Food Court • Travel time: 6 mins walk, 2 mins drive • Speciality: Chinese food and Asian fusion

*Shogun* – Lansdowne Mall Food Court • Travel time: 6 mins walk, 2 mins drive • Speciality: sushi

*Taco Luis* – Lansdowne Mall Food Court • Travel time: 6 mins walk, 2 mins drive • Speciality: tacos and burritos

*Villa Vietnamese* – Lansdowne Mall Food Court • Travel time: 6 mins walk, 2 mins drive • Speciality: Vietnamese cuisine

*Fair Bee Coffee & Tea* – Lansdowne Mall • Travel time: 6 mins walk, 2 mins drive • Speciality: bubble tea

*Icy Bar* – #115 4940 No 3 Road • Travel Time: 11 mins walk; 4 mins drive • Speciality: Taiwanese cold dessert

*Snowy Village Dessert Café* – 8571 Alexandra Rd • Travel time: 6 mins walk; 3 mins drive • Specialty: bingsoo and taiyaki

*Banzai Sushi House* - 8251 Westminster Hwy • Travel time: 12 mins walk; 2 mins drive • Specialty: sushi

*Gmen Ramen Shop* - Unit 1160 - 8391 Alexandra Rd • Travel time: 5 mins; 2 mins • Specialty: Japanese ramen and izakaya plates

*SETO Japanese Restaurant* - #155 8460 Alexandra Rd • Travel time: 7 mins walk; 1 mins drive • Specialty: sushi

*No. 9 Restaurant* – Lansdowne Mall (E side) • Travel time: 6 mins walk, 2 mins drive • Specialty: Hong Kong style cuisine

*Ebisu* – 8111 Ackroyd Road • Travel time: 12 mins walk; 2 mins drive • Specialty: sushi

*Hanok Korean Restaurant* – 8400 Alexandra Road • Travel time: 8 mins walk; 2 mins drive • Specialty: Korean food

*Felicos Restaurant* – 8140 Leslie Road • Travel time: 13 mins walk; 2 mins drive • Specialty: Mediterranean cuisine

*Shanghai River* - 7831 Westminster Highway • Travel time: 3 mins drive; 12 mins bus • Specialty: Chinese cuisine, noodles

*Bánh Mì Trèo Bon* - #1840-4720 McClelland Road • Travel time: 9 mins walk; 2 mins drive • Specialty: Vietnamese coffee and sandwiches

*AAA Restaurant* - 8053 Alexandra Road • 3 mins drive; 9 mins walk • Specialty: Chinese soups

### **Pub and Bar Options:**

*Monster L Karaoke* - 8400 Alexandra Road • 3 mins drive; 6 mins walk • Karaoke bar

*V+ Club* - 140-8171 Ackroyd Road • 3 mins drive; 10 mins walk • Karaoke bar

*Millenium Karaoke* - 4451 No 3 Road #201 • 5 mins drive; 15 mins walk • Karaoke bar

*Zodiac Karaoke and Pub* - 8191 Alexandra Road • 3 mins drive; 8 mins walk • Karaoke bar

*Tasty BBQ and Beer Bar* - 7771 Westminster Hwy #180 • 4 mins drive; 15 mins walk • Bar and Chinese hot pot

*Legends Pub & Restaurant* - 9031 Blundell Road • 6 mins drive; 20 mins bus • Pub food

*Fogg N Sudds* - 10720 Cambie Road • 7 mins drive; 11 mins bus • Pub food