NOWCAM

VIRTUAL CONFERENCE 2021

CONFERENCE WEBSITE:
http://web.uvic.ca/~nowcam/?q=nowcam_2021

MAY 14-15, 2021

NOWCAM

KEYNOTE SPEAKER

Dr. Elizabeth Kensinger
Boston College

PROGRAM
FRIDAY, MAY 14

The Zoom Link for the conference can be found <u>here</u> All paper sessions and the keynote will take place in the room found at this link. The workshops and poster session will take place in breakout rooms at this link.

9:15-9:30	Welcome/Opening Remarks
9:30-10:40	**KEYNOTE** Dr. Elizabeth Kensinger **It's not all bad: How we remember positive events and find the good in the bad**
10:40-10:50	Poster Session Breakout Room Practice
10:50-11:00	BREAK

11:00-12:00

PAPER SESSION 1
Chair: Peter Graf
Speakers: Shelbie F. Anderson, Nikola Klassen, Madison B. Harvey, Daniel G. Derksen, Jamie-Lee Barden, Petra Armstrong

12:00-13:00

LUNCH

13:00-14:30

WORKSHOPS

1)Introduction to R Workshop
Facilitators: Nicki Anderson, Kevin Roberts

2) Dissertation Writing Panel
Facilitators: Janel Fergusson, Grace Truong, Trish Varao-Sousa

3) Careers for Psychology Grads
Facilitators: Allison Brennan, Christopher Madan, Meghan Norris

14:30-14:45

BREAK

14:45-16:00

POSTER SESSION
Chair: Deb Connolly

16:00-16:15

BREAK

16:15-16:55

PAPER SESSION 2
Chair: Daniel Bernstein
Speakers: Manlu Liu, Braedon Ballance, Nada Alaifan and Angela S. Pelletier

17:00-

SOCIAL
Kumospace link here

SATURDAY, MAY 15

9:00-10:10

PAPER SESSION 3
Chair: Ira Hyman
Speakers: Patrick J. Dubois, Eric Mah, Eva Rubinova, Katie A. Berens, Alannah Wallace, Chantelle Chin and Jungwun Miranda Bahng

10:10-10:20am

BREAK

10:20-11:10am

PAPER SESSION 3
Chair: Mike Masson
Speakers: Anna Maslany, Nadja Jankovic, Kevin McKillop, Troy Q. Boucher, Zach Hamzagic

All talks are 7 minutes in length, with 3 minutes for questions.

In case of technical difficulties...

Full Zoom details:
https://ubc.zoom.us/j/9212314401?pwd=bVdBKOU2NzdrbVJGTWtrYTY4Nml5Zz09

Meeting ID: 921 231 4401
Passcode: 1945

If you have any issues during the conference, please contact Natasha at Natasha.pestonji-dixon@psych.ubc.ca for assistance .

	Title	Authours	Abstract
11:00 - 11:10	*The impact of perspective and salience on beliefs about memory in criminal contexts*	Shelbie F. Anderson (SFU), Madison B. Harvey (SFU), Heather L. Price (TRU), and Deborah A. Connolly (SFU)	Previous studies designed to measure beliefs about memory typically use surveys where participants are directly asked about memory processes. What laypersons believe about memory and forgetting can have critical implications in the justice system (i.e., eyewitness memory). Experimental research is needed to determine how laypersons apply their beliefs about memory and forgetting to criminal settings. We asked 170 participants to read crime scenarios and make predictions about the process of forgetting (e.g., what percentage of details will be remembered after 15 years?, what is the likelihood that a peripheral detail will be recalled after 5 years?). Within the scenarios, we manipulated perspective (self versus other) and salience (low versus high). Data has been collected and is in the process of being analyzed.
11:10 - 11:20	*Enhanced Memory for Setting and People Details of a Witnessed Crime After Post-Encoding/Retrieval Stress*	Nikola Klassen (SFU), Eva Rubinova (TRU), Heather Price (TRU), Laurie Sykes Tottenham (University of Regina), Ryan Fitzgerald (SFU), and Bianca Hatin (University of the West of Scotland)	Eyewitnesses rarely experience crime under non-stressful conditions, yet most of the research on witness recall does not take stress into account. The aim of this study was to examine how different levels of social stress, induced with a modified TSST procedure pre- and post-encoding/retrieval, impacted recall memory for a staged crime. Recall was coded for overall quantity, inaccuracies, and verbosity. Additionally, quantity of recall was broken down into recalled details about setting, people, sequence, and dialogue. The results indicated that participants provided more details about setting and people when stress was induced at the time of post-encoding/retrieval. Weak, or inconsistent results were found for the other recall measures, likely due to the lack of delay between encoding of the event and retrieval.
11:20 - 11:30	*Perceptions of Reason for Delay*	Madison B. Harvey (SFU), Heather L. Price (TRU), Deborah A. Connolly (SFU)	Previous research that has found a detrimental impact of delay on the perceived credibility of a witness has focused primarily on instances of a delayed disclosure (Balogh et al., 2003, Pozzulo et al., 2010). Delays may also occur due to reasons outside of the witness' control (e.g., suspect not identified). In Study 1, a delay of 1-day, 2-years or 15-years due to no suspect being identified had no negative impact on the perceived credibility of a witness. Study 2 replicated these findings with a delay of 1-day or 2-years. Study 3 compared delays (1-day, 2-years, 15-years) as a consequence of the witness' actions or as a consequence of the investigation. Preliminary results of Study 3 will be discussed.
11:30 - 11:40	*Clarifying photos do not increase the magnitude of the truthiness effect*	Daniel G. Derksen (SFU), Megan E. Giroux (SFU), Deborah A. Connolly (SFU), Eryn J. Newman, (Australian National University), Daniel M. Bernstein (KPU)	Trivia statements appearing with related photos are rated 'true' more often than trivia statements appearing without photos, even when those photos lack useful information for assessing the veracity of the trivia statements — truthiness. We examined the magnitude of the truthiness effect under conditions that should increase the fluency with which participants process photo-present trivia claim. Within-subjects, participants (N = 191) saw a still photo, a blurred photo that gradually clarified, or no photo. After identifying the contents of the photo (if applicable), participants answered related trivia questions. We observed truthiness: Participants rated still-photo and clarifying-photo trials 'true' more often than photo-absent trials. Truth ratings did not differ across still-photo and

			clarifying photo trials. Thus, clarifying photos do not increase the magnitude of the truthiness effect.
11:40 - 11:50	*Recognition Memory Response Bias for Line Drawings, Photos, and Words Representing the Same Objects*	Jamie-Lee Barden (UVIC), Kaitlyn Fallow (UVIC), D. Stephen Lindsay (UVIC)	We have repeatedly noted a conservative response bias in recognition memory for complex images (e.g., colourful paintings, photos of scenes) that contrasts with the neutral response bias observed for words tested using the same procedure. A study in which the images were simple line drawings of single objects, however, produced an equivalently neutral bias to that observed for words. To further test this phenomenon, we assembled a set of black-and-white photographs of the same items depicted in these line drawings. Recognition memory for these black-and-white photographs showed a conservative response bias, like that of the complex paintings. We will discuss what this suggests about the potential source of material-based bias effects.
11:50- 12:00	*Inattentional Blindness, Late Attention Capture, and Constructing Eyewitness Memories*	Petra Armstrong (WWU) Davis Collie (WWU), Cody Cordero (WWU), Macey Crooks (WWU), Abby Peterson (WWU), Lori Reyna (WWU), Ira E. Hyman (WWU)	People do not constantly watch for crimes. People may fail to notice unusual events, become aware when they start, or become aware later. We investigated how timing of awareness affects memory. We showed people a complex video with a theft and varied attention instructions. Participants received a photo lineup and answered questions about the event. The timing of awareness affected the ability to identify the thief and to answer questions.

WORKSHOPS
FRIDAY, 13:00-14:30

Location	Title	Facilitators	Description
Room 1	*Introduction to R Workshop*	Nicki Anderson, Kevin Roberts	If you want to learn about R but don't know where to start, this workshop is for you! This workshop is designed for beginners who have no or little experience in R.
Room 2	*Dissertation Writing Panel*	Janel Fergusson, Grace Truong, Trish Varao-Sousa	This panel discussion will attempt to answer questions around writing your dissertation from three UBC graduates. It will be very much an open discussion. Feel free to ask any of your own questions as well!
Room 3	*Careers for Psychology Grads Panel*	Allison Brennan, Christopher Madan, Meghan Norris	Our three panelists will discuss different career options for psychology graduates, including positions in academia, industry, and other domains. Panelists will also discuss various ways to harness and hone the skills students develop as psychology students in order to successfully obtain non-academic careers.

Location	Title	Authours	Abstract
Room 1	*Investigating the Time Course of Face Perception Using Web-based Eye Tracking*	Amy vanWell (UVIC) Xiaoyi Liu (NYU - Abu Dhabi Campus), Jacob Martin (Georgetown), James Tanaka (UVIC)	The evolution of personal laptop cameras and eye-tracking software have created an opportunity to expand web-based science. The current study investigates the capabilities of Gazer, developed at the University of Victoria for remote eye-tracking, in a visual search task with faces. Participants were presented a 2 x 2 array of upright and inverted faces. Their task was to detect the oddball face of either an upright face amongst inverted distractors or an inverted face amongst upright distractors. On each trial, time to saccade to the correct oddball target and manual keyboard responses were recorded. We found a face inversion effect where upright face targets were detected faster than inverted face targets. The upright face advantage was evidenced in early gaze responses and later manual responses.
Room 2	*Virtual Reality and Memory: Comparing Sense of Presence Between Digital Mediums*	David K. Murray (KPU), Kiran K. Dogra (KPU), Eric Y. Mah (UVIC), Farhad Dastur (KPU)	This study investigated the relationship between subjective experiences and stimulus modalities. We designed new stimuli for use with both "traditional" memory stimulus modalities (slideshows, 2-D videos), and 360° Virtual Reality (VR), with the aim of directly comparing subjective experiences and memory across modalities. Participants viewed one of the three modalities and rated their experiences on the ITC-Sense of Presence Inventory (ITC-SOPI), which assesses sense of physical space, engagement, ecological validity, and negative effects. We found a significant correlation between ITC-SOPI scores and memory accuracy. We discuss the design of a planned study, where we predict higher ITC-SOPI scores in VR than in other modalities. We also discuss further validation work, including testing for effects of modality on memory.
Room 3	*Using a Visual Search Task to Investigate the Effects of Orthography, Neighborhood Density, and Frequency on Word Recognition*	Ipek Cukurova (UVIC) Olivia Longpre (UVIC), Amy vanWell (UVIC), Jim Tanaka (UVIC)	We investigated single word recognition in a visual search task employing eye-tracking and manual reaction time measures. Participants were presented with a 2x2 array of words and tasked with identifying the target real word ("chair") from amongst either pronounceable ("chuir") or non-pronounceable ("cxhir") distractors. The stimuli words varied in neighbourhood density (dense/sparse) and word frequency (high/low). The results indicate that accuracy was highest when high-frequency and low-density targets were presented with non-pronounceable distractors. However, high-frequency and high-density targets amongst pronounceable distractors elicited the fastest accurate responses. Moreover, target-absent trials were associated with higher accuracy and slower response times than target-present trials. Further comparisons involving eye-movement data will be carried out to explore the potential efficacy of employing visual search tasks for single word recognition.
Room 4	*Evaluating faces and bodies: Does body information influence face perception?*	Isabella Schopper (UVIC), Katelyn Forner (UVIC), James Tanaka (UVIC)	In face perception, the composite-face effect has demonstrated a disruption of holistic processing when face representations are misaligned. The current study assessed a congruency effect through a face-body composite task that evaluated the influence of body information on face perception, as holistic or analytic.

			Participants viewed face-body combinations and were instructed to conduct "same" or "different" evaluations on the face, with reaction time (ms) and accuracy of responses (%) being recorded. Findings indicated that mean accuracy was greatest and reaction times lowest in congruent conditions, with opposite findings in incongruent conditions. No alignment effect was observed. Evidence was found to support an effect of congruency, as illustrated through accuracy of responses. The absence of an alignment effect indicates an analytic perception of faces and bodies.
Room 5	*Decision-making under chronic stress and anxiety: State and trait anxiety impact contextual updating but not feedback learning*	Juliet Rowe, Thomas Ferguson (UVIC), Dr. Olave Krigolson (UVIC)	Sub-optimal decisions made under high levels of stress and anxiety may mediate stress-related health effects. Our ERP study examined the effect of three personality traits – chronic stress, state anxiety, and trait anxiety – on contextual updating and feedback learning across 330 participants. We hypothesized a reduction in P300 (contextual updating) and reward positivity (feedback learning) amplitudes with increasing chronic stress and anxiety scores. The three personality traits had no effect on reward positivity, and chronic stress had no effect on P300. However, state and trait anxiety were negatively correlated with P300 amplitudes; decreasing anxiety score quantiles to reflect the tails of the distribution amplified this effect. Our results demonstrate the beginnings of a correlation between anxiety and neural decision-making, offering insight into anxiety-related adverse health outcomes.
Room 6	*Disentangling the Effects of Threat and Awe on Mood, Arousal, and Generosity*	Katarina Bell (UFV), Kimberly Reddicopp (UFV), Dr. Shawn Geniole (UFV) Equal contribution from all authors.	Whereas previous work suggests that awe-inducing stimuli boosts positive mood, arousal, and prosocial behaviour, few studies have teased apart the effects of more threat-based (vs positive) forms of awe on these outcomes. Here, we generate and validate a new set of awe- and threat-inducing stimuli, and test the effects of these stimuli on mood, arousal, and giving/taking behaviour (n = 95). Awe and threat did not interact to predict any of our outcome measures. Nevertheless, awe boosted arousal and threat decreased positive mood and increased giving behaviour. Thus, our work suggests awe's effects on mood and prosocial behaviour are not as robust as previous work suggests, and that the effects of threat may be independent of—rather than dependent on—awe.
Room 7	*Subjective Experiences of Cognition and Well-being*	Keith Cheng (UBC), Anusha Jain (UBC), Soo Yeon Kim (UBC), Kyle Gooderham (UBC), Todd Handy (UBC)	Currently, it is not well understood why, following physical activity (PA), young adults report increased wellbeing but show inconsistent improvement in objective cognitive performance. The present study aims to investigate whether self-report cognitive functions (SRCF) may be sensitive to PA interventions and provide the interface between wellbeing and cognitive functioning. We hypothesized that greater cumulative PA would be associated with higher SRCF. Across two studies, 2057 young adults completed self-report measures of health behaviours and SRCF. Analysis revealed that PA was not consistently associated with SRCF. However, stress and sleep habits were significantly predictive of most measured aspects of SRCF, while diet was linked to some aspects of SRCF. The results suggest that subjective experiences of cognition are susceptible to interventions targeting health behaviours.

Room 8	*Semantic Structure and the (Reverse) Animacy Effect*	Kelly Grannon (UVIC), Eric Mah (UVIC), Stephen Lindsay (UVIC)	Free recall (FR) tends to be better for animal versus object words (Leding, 2020). However, Popp and Serra (2016) found that in paired-associate cued recall (CR), objects were better remembered (i.e., "reverse animacy effect"). We predicted greater within-category similarity would increase FR due to greater activation of related animal words while decreasing CR due to interference from activated non-target words. Subjects (N = 153) were assigned to "Animals-more-similar" or "Equal" similarity condition and performed CR/FR tasks. If reverse animacy is confounded by category similarity, it should not appear when similarity is equated. We conducted a 2 (Memory type: Free, Cued) X 2 (Animacy: Animals, Objects) X 2 (Within-category similarity: Animals-higher, Equal) mixed design. Contrary to our predictions, reverse animacy was significant in both conditions.
Room 9	*The Effect of Socioeconomic Status (SES) on Hindsight Bias (HB) Across the Lifespan*	Kiran K. Dogra (KPU), Iaren Rai (KPU), Daniel M. Bernstein (KPU)	Hindsight bias (HB) occurs when individuals claim in hindsight that past events were more predictable than they were in foresight. Past work has found that Socioeconomic Status (SES; i.e., education, household income) positively affects cognitive function. However, no research has investigated the effects of SES on HB. In the current study, participants (N = 491; Age range = 3 – 89 years) identified objects that clarified through a series of blurred screens, and then estimated the likelihood of a naïve peer identifying the same clarifying objects. Participants of all ages overestimated their peers' ability to identify clarifying objects; however, the effect of age on HB was U-shaped: preschoolers and older adults showed more HB than other age groups. Unlike age, SES did not affect HB.
Room 10	*The Lay Population's Beliefs around the Influence of Event Role and Event Perspective on Eyewitness Memory*	Mikaila Wedman (SFU) Madison B, Harvey (SFU), Shelbie Anderson (SFU), Heather L. Price (TRU), Deborah A. Connolly (SFU)	Research has found that individuals may have erroneous beliefs about how memory functions (e.g., process of forgetting, strength of emotionally salient memories). These same individuals may be asked to be a jury member and would use these beliefs in their assessment of a witness' credibility. The present study investigated people's beliefs about the influence of event role (victim vs. bystander) and event perspective (self vs. other) on memory for crimes. Participants were presented with eight scenarios that described various crimes and then asked about their beliefs for the memory regarding the scenarios. When an effect was found, participants rated a victim more favourably than a bystander, and their own memory more favourably than another's memory.
Room 11	*The Electronic Self-Administered Cognitive Interview (E-SACI): A Video-Based Early Recall Tool for Cooperative Eyewitnesses*	Morgan A. Biron (UVIC), D. Stephen Lindsay (UVIC), Eric Y. Mah (UVIC)	This exploratory study investigated whether the use of an electronic self-administered cognitive interview (E-SACI) based upon the principles of the cognitive interview and the self-administered interview may improve eyewitness recall while retaining some interpersonal aspects of a face-to-face interview. We hypothesised that the E-SACI would increase report length and the proportion of correct details reported, without increasing incorrect detail reports. Participants (N = 104) viewed a simulated crime and completed either a control interview or the E-SACI. Results showed that the E-SACI increased the amount of information reported; participants recalled more correct information during the free-recall section of the interview, but also more incorrect information overall. There were no significant differences in accuracy between the two interviews. These results suggest that the E-SACI may be a viable interviewing tool.

Room 12	*Death Anxiety and Spirituality Across the Lifespan: Factors and Relationships Amidst COVID-19*	Regan Thompson (UFV), Lesley Jessiman (UFV)	Death has always come with feelings of fear and anxiety. Although death anxiety can significantly impact one's quality of life, research suggests that spirituality may provide an effective buffer for death anxiety. We examined the relationships between death anxiety, spirituality, and age, amidst the COVID-19 pandemic. Death anxiety was found to negatively correlate with age, spirituality, and existential well-being, while age was positively correlated with existential well-being. Significant main effects of age and religious affiliation on death anxiety revealed that mean death anxiety was significantly lower in older compared to younger age groups, yet higher in religious compared to spiritual individuals. Qualitative findings showed that participants perceived both religiosity and spirituality as effective buffers of death anxiety amidst COVID-19, however.
Room 13	*Major Influences on Undergraduate Students' Career Considerations*	Tianyi Tang (UBC)	Career decisions are among the most difficult decisions because they are shaped by many different influences. The purpose of this study was to examine several influences on undergraduate students' career considerations during the COVID-19 pandemic. Influences examined included parents, university career resources, professors, friends and social media. Fifty undergraduate students completed an online survey, most of whom were freshmen. I found that parents were rated as the most influential to students' career considerations, while university career resources were rated as the least influential. Besides, I found no subgroup difference between the ratings given by Arts and non-Arts students.
Room 14	*Assessing the Children's Social Understanding Scale in two-to-nine-year-old children*	Zach Hamzagic (KPU), Mariah Wichmann (KPU), Daniel Bernstein (KPU)	Theory of mind (ToM) is the ability to understand another's thoughts and emotions. The Children's Social Understanding Scale (CSUS) is a parent-report measure of children's ToM. Previous research has shown that the CSUS moderately correlates with behavioural ToM measures in children aged three-to-twelve. We examined the relationship between the CSUS and children's behavioural ToM, emotion recognition, and executive functioning in a sample of 189 two-to-nine-year-old children. After controlling for age, we found no significant correlations between the CSUS and behavioural ToM. However, CSUS positively correlated with emotion recognition and executive functioning. These results suggest that the CSUS may be a better predictor of emotion recognition than behavioural ToM.
Room 15	*Object Substitution Masking in Video Game Players*	Alison Chung (SFU)	Action video game (AVG) players demonstrate enhanced abilities in cognitive domains such as visual spatial attention and speed of processing. While this enhancement has been shown in many tasks, one relevant, but unstudied task is the object substitution masking (OSM) task. One account of OSM is that it is due to the relatively late arrival of the re-entrant perceptual hypotheses in primary visual cortex. Based on this account, if AVG players can allocate attention and process stimuli faster, then the perceptual hypotheses should be generated sooner, and they should show reduced OSM relative to non-AVG players. This is precisely what was found. Therefore, these results provide additional evidence to support the notion that playing AVGs can enhance one's visual spatial attention and speed of processing.

Room 16	*How Does Emotional Arousal Affect the Temporal Reconstruction of a Naturalistic Experience?*	Deea K Dev (UBC), Christopher R. Madan (University of Nottingham), Alessandra A. Te (UBC), Katherine J. Checknita (UBC), Daniela J. Palombo (UBC)	The relationship between emotion and memory is especially nuanced, considering the complexity of the interactions between different aspects of emotion (e.g., valence, arousal) and components of memory (e.g., item, spatial, temporal memory). This research aims to investigate the influence of emotional arousal on temporal memory by studying chronological order. A sample of 276 participants were randomly assigned to watch either a high arousal or a low arousal video. They were then tasked to sort randomly presented scenes in the order that they recollected watching in the video. We hypothesize that the strength of temporal memory for an event would differ for high and low arousal states. Our results show that participants perform better on the order task in the high arousal condition ($p < 0.0001$).
Room 17	*Does Harshness Influence the Recall of Past and Future-Oriented Feedback? A Replication Study*	Kelly E. Grannon, Allison B. Rolle, Alayna C. Gretton, Kira L. Dolhan, … Megan Graham, Bella Priore, Andres F. Ballesteros, Jenna Butterworth, Taylor Johnson, Yvonne Mason, Eric Mah, Stephen Lindsay	Nash et al. (2018) assessed undergraduates' recall of (simulated) feedback from instructors. They found better recall for evaluative than directive feedback regardless of harshness. We report four parallel attempts to replicate. Participants (N = 183) were randomly assigned to read either a "Directive-harsher" (N = 87) or "Evaluative-harsher" (N = 96) script in which directive and evaluative comments were intermixed, and later attempted to recall the feedback. We measured the number of comments recalled, and whether they were recalled in their original style. We did not replicate Nash et al.'s central finding of better recall of evaluative than directive feedback. Subjects were biased to recall feedback in evaluative form, whether the feedback had been presented in evaluative form or in directive form.
Room 18	*Genuine versus posed expressions: Using web-based eye tracking for emotion recognition*	Tahirih Altair (UVIC) James Tanaka, Amy Dawel (The Australian National University), Amy VanWell (University of Victoria)	In everyday life emotions may be genuine (e.g. smiling at a loved one) or posed (e.g. smiling to be polite). We investigated how perceived sincerity influences emotion recognition, using a collection of naturalistic expressions, taken from real-world media. Participants were presented a 2 x 2 array of faces, each with a different expression and were prompted to identify one of six target emotions. The target was either a genuine expression amongst posed distractors, or a posed expression amongst genuine distractors. Gazer, a web-based eye-tracking software, was used to record gaze. No reliable differences were found between genuine and posed expressions for either response time or accuracy measures, which suggests that emotions of naturalistic stimuli are equally recognizable when posed and genuine.
Room 19	*Attractiveness: In the Eye of the Beholder*	Natasha Pestonji-Dixon (UBC), Peter Graf (UBC)	The mere exposure effect (MEE) is the finding that repeated, unreinforced exposure to a stimulus (e.g. an ideograph, a picture) is sufficient to increase preference for it or its perceived attractiveness. Although regarded as a solidly-established finding, meta-analyses analyses (e.g. Bornstein, 1989) and our lab work on the MEE shows it to be fickle and critically dependent on factors such as visual angle and exposure duration. The present study examined the MEE via an online survey of yearbook portraits differing in attractiveness; it also examined the reliability of the ratings typically used as the dependent variable for the MEE. The results showed the effect due to one pre-exposure depends on a portrait's initial attractiveness.

| Room 20 | *Differences in Oxygenated Hemoglobin Concentration Between Healthy Older and Younger Adults During the Multi-Source Interference* | Heather Kwan (UVIC), Vanessa Scarapicchia, M.Sc (UVIC), Drew Halliday, Ph.D (UVIC), Stuart MacDonald, Ph.D (UVIC), Jodie Gawryluk, Ph.D (UVIC) | Although normal cognitive changes with age are well understood, further research is needed to examine the neurobiological underpinnings of cognitive performance in older adulthood. The current study used functional near infrared spectroscopy (fNIRS), a neuroimaging technique that measures oxygenated hemoglobin (HbO), to examine differences between healthy younger adults (YA) and older adults (OA) during the Multi-Source Interference Task (MSIT). It was hypothesized that OA would show increased HbO in the prefrontal cortex during the control condition and decreased HbO during the interference condition, in comparison with YA. There were 34 participants who were split into YA (Mean age =28.1 years, SD=2.8, F=9) and OA (Mean age =70.9 years, SD=5.4, F=9) groups matched on sex and education level. All participants were native English speakers, healthy, and had normal or corrected to normal vision. The fNIRS data were acquired from a TechEn CW6 system with a 34-source-detector channels over the anterior prefrontal cortex while participants completed the MSIT. The functional data were preprocessed using Homer3, and oxygenated hemoglobin values were compared using independent t-tests between groups for each channel. The results demonstrated a significant age-related increase in activation in older adults in both the control and interference conditions. During the control condition, the OA group had significantly greater oxygenated hemoglobin compared to YA in 10 channels, including the anterior PFC and the left dlPFC. During the interference condition, the OA group had significantly greater activation compared to YA in 6 channels, including the anterior PFC. The results from this study align with cognitive aging theories such as the compensation-related utilization of neural circuits hypothesis (aka CRUNCH). The findings suggest that OAs require additional functional resources to compensate for aging related declines in brain function during the MSIT; although, these compensation mechanisms may not be as effective as the task difficulty increases. Understanding changes in the brain that accompany normal changes in cognition will be increasingly important as the aging population continues to grow. |

PAPER SESSION 2
FRIDAY, 16:15-16:55

	Title	Authours	Abstract
16:15 - 16:25	*Are you looking at me? An objective state of mind reduces sensitivity to other's emotional expressions*	Manlu Liu (UBC), Jamie Dunkle (UBC), Noor Brar (UBC), Veronica Dudarev (UBC), James T. Enns (UBC)	An objective state of mind refers to a mental state in which people perceive themselves as the object of another's observation. Few studies have investigated how it influences one's social perception during an encounter. Here we examine how the perception of others' emotion is influenced by triggering an objective mental state. We developed an online experiment using webcams, questions, and pre-programmed conversations to manipulate participants' mental states. We then measured their accuracy in reading the emotional expressions of people they believed they were interacting with. The results showed that participants with an objective mental state were significantly less accurate in classifying emotions than others. This finding supports the view that an objective mental state reduces the ability to read other's emotional cues.
16:25 - 16:35	*Imagination, Emotion, and Decision-Making*	Braedon Ballance (UBC), Daniela Palombo (UBC), Young Ji Tuen (UBC), Aria Petrucci (UBC), William Orwig (UBC), Omran Safi (UBC), Christopher Madan (University of Nottingham).	How does imagining the future – whether positive or negative – influence our choices in the present? Previously, it was thought that positive episodic future thinking (EFT; the act of simulating future events in vivid detail) reduces delay discounting (the tendency to devalue future rewards), while negative EFT increases it. However, recent research has reported discrepant findings, suggesting that negative EFT may similarly reduce delay discounting. As such, it has become unclear how the emotional valence of EFT influences our decisions. In this presentation, I will discuss our study, which sought to replicate these recent findings and thereby elucidate how the emotional content of imagination manifests in decision-making.
16:35 - 16:45	*"Ah, Yes, I remember It Well": Sex Differences in Episodic Memory for Emotional Events*	Nada Alaifan (UBC), Peter Graf (UBC)	A study with 188 undergraduate students (96 females) was designed to investigate whether there are sex differences in memory for emotional events. Participants were presented with negative, neutral, and positive pictures. After a brief delay, memory was assessed with a free recall test. Results showed that episodic memory for emotional pictures was significantly better than memory for neutral pictures. Significant sex differences occurred in memory for positive and neutral pictures.
16:45- 16:55	*Effects of Rumination on Theory of Mind in Participants with High Trait Depression*	Angela S. Pelletier (KPU), Daniel G. Derksen (SFU), Daniel M. Bernstein (KPU)	We explored whether rumination affects theory of mind in community participants with or without depressive traits. Participants (N = 77) completed the Depression Anxiety Stress Scales that measure trait depression, then completed a rumination induction (i.e., they focused on a recent stressful experience), a relaxation induction (i.e. a breathing exercise), or a filler task (i.e. an audiobook recording). Finally, participants completed two measures of theory of mind (ToM): a shortened version of the Movie for the Assessment of Social Cognition (MASC) and the Reading the Mind in the Eyes tasks. Rumination did not affect ToM performance but those with high traits of depression performed more poorly on the MASC. Thus, temporary mood induction does not affect ToM, but high traits of depression adversely affect ToM. We explored whether rumination affects theory of mind in community participants with or without depressive traits.

			Participants (N = 77) completed the Depression Anxiety Stress Scales that measure trait depression, then completed a rumination induction (i.e., they focused on a recent stressful experience), a relaxation induction (i.e. a breathing exercise), or a filler task (i.e. an audiobook recording). Finally, participants completed two measures of theory of mind (ToM): a shortened version of the Movie for the Assessment of Social Cognition (MASC) and the Reading the Mind in the Eyes tasks. Rumination did not affect ToM performance but those with high traits of depression performed more poorly on the MASC. Thus, temporary mood induction does not affect ToM, but high traits of depression adversely affect ToM.

	Title	Authours	Abstract
9:00 - 9:10	*The Diagnosticity of Error: When False Alarms tell us more than Hits*	Patrick J. Dubois (UBC)	Using linear regression instead of signal detection theory, my research explores intrapersonal "exaggeration" of ability (e.g. thinking you know something you don't) unrelated to demonstrated ability, and finds that errors made on either knowledge or memory tests can (with appropriate analysis) uniquely predict academic performance, and show significant personality correlates, such as narcissism, entitlement, overconfidence, gullibility, and impatience. Such exaggeration appears to be largely distinct from conventional intelligence and personality measures, suggesting unexplored territory between cognition and identity.
9:10 - 9:20	*Variability across Subjects in Free Recall versus Cued Recall*	Eric Mah (UVIC), D. Stephen Lindsay (UVIC)	Imagine that subjects complete both a free recall (FR) task (study individual words, recall as many as possible at test) and a paired-associates cued recall (CR) task (study cue-target pairs and recall targets when cues are presented). For which memory task do you think variability across subjects would be greater? We investigated this question in four experiments (N = 460) using a variety of wordsets with student and online community samples. Interindividual variability was consistently greater in CR performance than in FR performance. In a fifth experiment (data collection ongoing), we investigate a possible mechanism--differential FR and CR variability in test strategies. We argue that comparisons of variability across subjects can yield insights regarding the mechanisms underlying task performance.
9:20 - 9:30	*Sources and Destinations of Confusions in Recall of Instances of Repeated Events*	Eva Rubinova (TRU), Feni Kontogianni, (University of Winchester)	Confusion of details across instances frequently occurs when remembering repeated events. The typically reported pattern suggests greater proportions of aggregated confusions in the middle instances than at the boundaries. We investigated trajectories of these source attribution errors. Using data from six experiments, we examined the sources of confusions within recall of individual instances and the destinations of confusions based on instances of origin. Our findings revealed that there is a method to the pattern of confusions likely resulting from information about the relative position of instances in the repeated event that is anchored by the boundary instances. This higher-level structure then manifests as primacy, recency, and proximity effect: people less frequently confuse details of the boundary instances and more frequently confuse details of adjacent instances.
9:30 - 9:40	*Examining Memory Organization of an Instance of a Repeated Event Using a Reaction Time Paradigm: The Effects of Retrieval Cues*	Katie A. Berens (SFU), Emily Slinger (SFU), Dr. Heather L. Price (TRU), Dr. Deborah A. Connolly (SFU)	Research is mixed as to whether children are capable of accurately retrieving a memory of one instance of a repeated event. Fuzzy trace theory posits separate memory traces are linked to individual instances, while script theory posits general scripts overpower instance-specific information. Study 1 examined children's memory organization of variable details depicted in six stories using a computerized memory recognition task that cued responses based on variable detail categories or stories. Children responded more quickly and were more accurate when cued by variable detail categories than by stories, offering support to script theory. Study 2 will attempt to replicate and extend Study 1 by presenting target details in magic show videos instead of stories. Data collection is still ongoing, but potential implications will be

			discussed.
9:40-9:50	*Strategy Awareness and Use Questionnaire (SAUQ): Confirmatory factor analysis with UK and Canadian university students*	Alannah Wallace (SFU), David Turk (University of Bristol), Todd Handy (UBC)	Students typically utilize a repertoire of different behavioural strategies to stay focused and ignore distractions during class, while completing assignments and when studying for exams. The Strategy Awareness and Use Questionnaire was developed to measure strategy use among university students. Results from a previous exploratory factor analysis suggests the following factor structure; Comprehension Monitoring, Planning/Organization, Self-Reward, Self-Regulation, Organization with Mobile Phone Technology, Regulating Technology, and Organization of Materials. In the current study, two confirmatory factor analyses were conducted with 1) 223 Canadian students, and 2) 198 students from the United Kingdom. Results confirmed the initial factor structure. This measure will likely benefit students, counsellors, and executive functioning based coaches interested in improving student strategy use within and potentially outside of North America.
9:50-10:00	*Student Wellbeing and Course Engagement*	Chantelle Chin (UBC)	COVID-19 has changed many aspects of students' experiences, and for this reason, we investigated whether it also changed their wellbeing and the link between wellbeing and engagement with course activities. To assess wellbeing, we collected ratings on stress, worry, and sleep disruption as well as about feelings and motivation to complete course work. As a proxy for course engagement, we used participant's course grade and the number of voluntary contributions made to a course forum. Results from 59 participants showed moderate negative associations between wellbeing and course engagement; for stress, the r was -.37 and -.36, respectively, for Piazza contributions and course grade. The results also showed social support was positively related to course engagement, with r .20 and .33, respectively, for Piazza contributions and course grade.
10:00-10:10	*Physical Activity and Cognitive Function: Public Health Messaging in Young Adults*	Jungwun Miranda Bahng (UBC), Kyle Gooderham (UBC), Simon Ho (UBC), Todd C. Handy (UBC)	Are there immediate effects of certain lifestyle factors on scholastic achievement? A brief survey was administered after the completion of a university final exam, which assessed students' levels of physical activity, the duration and quality of their sleep, and the quantity of studying done a day prior to their respective final exams. Sleep duration and quality, along with hours spent studying were found to positively predict exam performance. Exploratory analyses were also conducted alluding to a mediating relationship between physical activity and exam performance. These findings support the need to promote lifestyle behaviors in young adults based not on its longer-term consequences for improved physical and mental health, but on its more immediate effects (i.e. scholastic achievement).

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10:20-10:30	*Does Attention Broaden to the Forest and Narrow to a Particular Tree? An Investigation of the Flanker Task*	Anna Maslany (UBC), Peter Graf (UBC)	An experiment was conducted to determine if the flanker task measures attention scope (Eriksen & Eriksen, 1976). Attention scope was manipulated using a Navon Task (Goodhew & Plummer, 2019) and measured using the flanker task. Participants made a decision about the middle letter in letter strings. The strings were congruent (e.g., AAAAA), incongruent (e.g., HHAHH) or control (e.g., XXAXX). If attention is broad, interference occurs on incongruent trials relative to control/congruent trials. If attention is narrow, no differences are expected. Results of both experiments showed that attention was manipulated to be broad or narrow. The flanker task measured the scope of attention in the expected manner in some, but not all conditions.
10:30-10:40	*Alerting and priming in compound visual search.*	Nadja Jankovic (SFU), Thomas M. Spalek (SFU), Vincent Di Lollo (SFU).	In simple visual search, a target (e.g., a square shape) must be singled out as a unique item from distractors (e.g., ring shapes). Generally, two effects are known to facilitate search performance: "alerting" (e.g., briefly brightening the screen before display onset) and "priming" (e.g., repeating the unique item on successive trials). Unlike simple search, compound search has two steps. For example: (a) locate the unique object in the display and (b) identify the tilt of a line inside that object. In the present work we examined the joint effects of alerting and priming in compound search. We found that alerting does occur in simple search but not in compound search, unless conditions allow the compound search to be performed as a simple search.
10:40-10:50	*Exposure and Congruency Effects in Preference and Memory for Auditory and Vibrotactile Stimuli*	Kevin McKillop (University of Lethbridge), Javid Sadr (University of Lethbridge)	The mere exposure effect (MEE), in which previously experienced stimuli tend to be preferred, is likely a consequence of increased processing fluency, as has been studied uni-modally and cross-modally. Here we tested the MEE for complex auditory stimuli as well as for vibrotactile stimulation to the hand, both uni-modally and cross-modally using congruent (same frequency) and incongruent cross-modal stimuli, across three experiments studying exposure, cross-modal facilitation, and subjective preference. In addition to examining the classic exposure/fluency preference effect in these two modalities, individually and combined, we also relate these findings to memory effects for the same stimuli and exposure paradigm, through a parallel examination of subjects' explicit recognition of previously experienced stimuli in both modalities.
10:50-11:00	*Examining the presence, characteristics, and correlates of misophonia and hyperacusis in autistic and non-autistic adults*	Troy Q. Boucher (SFU), Nichole Scheerer (Western University), Grace Iarocci (SFU), Behnaz Bahmei (SFU), Siamak Arzanpour (SFU), Elina Birmingham (SFU)	Misophonia (sensitivity to specific sounds, often human-produced such as chewing) and hyperacusis (reduced tolerance to sound) have been investigated in populations of non-autistic adults. Auditory hypersensitivities and sensory-perceptual abnormalities are more prevalent in autistic adults, but the prevalence and characteristics of misophonia and hyperacusis are not understood in autistic populations. Questionnaires assessing auditory hypersensitivities, mental health, and quality of life were completed by non-autistic (n = 102) and autistic adults (n = 62) recruited from the community and non-autistic undergraduate students (n = 61). Prevalence of

			misophonia and hyperacusis symptoms, associated characteristics, and the resulting behavioural and emotional responses by autistic and non-autistic participants are discussed.
11:00-11:10	*Developmental change in the sunk-cost effect from age six-to-nine.*	Zach Hamzagic (KPU), Kyle Matsuba (KPU), Daniel Bernstein (KPU)	The sunk-cost effect (SCE) is the tendency to continue pursuing a venture due to previous unrecoverable investments, despite uncertain or unfavorable outcomes. Developmental research concerning the SCE in childhood is mixed. Some studies suggest that children are highly susceptible to the SCE until early adolescence. Other research suggests that children do not experience the SCE. To date, all research on the SCE in childhood has been cross-sectional. We examined the SCE longitudinally over three years in a group of six-to-nine-year-olds and found a linear increase in the SCE. These results challenge cross-sectional research that suggest the SCE does not change during childhood.