

The Psychology Students' Association of UBC
2020-2021 organizes:



23rd Annual

Psychology

Undergraduate

Research

Conference

April 9th-10th, 2021

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Dear Presenters, Faculty, Alumni, Students and Guests,

Welcome to Psychology Undergraduate Research Conference. This conference is an important tradition of the Psychology community at UBC. For 23 years now, it has provided a professional environment for undergraduate researchers a place to showcase their research, gain experience in conference presentations and contribute to the psychology sciences.

The work that you will see at this conference is the culmination of the hard work and dedication of these students in furthering our knowledge of the many areas of Psychology, including but not limited to, the Faculty of Arts and Faculty of Sciences at UBC.

This event would not have been possible without the generous support of the UBC Psychology Department and the Graduate Students Council. We are honoured to have Dr. Connor Kerns as our keynote speaker this year, and appreciate the time that she has given to support our event. We would also like to thank Dr. Benjamin Cheung, the faculty advisor of the Psychology Students' Association of UBC for offering us his continuous support, time and guidance in organizing today's event.

It has been a pleasure planning this enriching and interactive event. We hope that this conference will contribute to the academic experience of those involved, and will inspire everyone here today. We wish you all the best in your future endeavours.

And before you finally enjoy the conference, we want to acknowledge that UBC's Vancouver Point Grey campus is situated on the traditional, ancestral, unceded territory of the Musqueam people. We would also like to acknowledge that you are joining us today from many places, near and far, and acknowledge the traditional owners and caretakers of those lands

Best regards,

Aakanksha Bhatia, Joshua Cunningham, and the Academic Committee at PSA

Program Schedule:

Day 1

4:00 - 4:30 PM - Registration

4:30 - 5:00 PM - Opening keynote: Dr. Connor Kerns

5:00 - 7:30 PM - Oral Presentations (Oral Group 1)

1. **5:00-5:15 PM** - Abigail Yuen
2. **5:15-5:30 PM** - Chaoyi Shi
3. **5:30-5:45 PM** - Alexandra Yam
4. **5:45-6:00 PM** - Oscar Cetnarowski
5. **6:00-6:15 PM** - Griffin Rutledge
6. **6:15-6:30 PM** - Eliscia Sinclair
7. **6:30-6:45 PM** - Tianyi Pei
8. **6:45-7:00 PM** - Shrividhya Sadagopan, Shreeya Bhayana
9. **7:00-7:15 PM** - Ross Tomita
10. **7:15-7:30 PM** - Sophie Wensel

5:30-6:00PM - Registration (Poster Group 1)

6:00 - 7:00 PM - Poster Presentations (Poster Group 1)

1. Chloe Fichter
2. Darryl Liu
3. Eric Xu
4. Jacqueline Nguyen
5. Jiayin Wang
6. Koei Yang
7. Lara Radovic
8. Lauren Caswell
9. Lindy Le

7:00 - 7:30 PM - Break

7:30 - 7:45 PM - Registration (Poster Group 2)

7:45 - 8:45 PM - Poster Presentations (Poster Group 2)

1. Kateryna Voznyuk, Nathaniel Franco
2. Marisha Boyd
3. Melanie Butt, Bitu Jokar, Heather Mcfadyen
4. Rachel Dunn
5. Reina Imai
6. Sakshi Sahakari
7. Sarvenaz Oloomi
8. Spencer Pratt
9. Taarika Rajani

Day 2

10:00 AM - 10:30 AM – Registration (Oral Group 2)

10:30 AM - 1:30 PM - Oral Presentations (Oral Group 2)

1. **10:30-10:45 AM** - Sebastian Leon
2. **10:45-11:00 AM** - Brendan Smith
3. **11:00-11:15 AM** - Jia Yue He
4. **11:15-11:30 AM** - Maggie Coval
5. **11:30-11:45 AM** - Brinn Edgington
6. **11:45AM-12:00 PM** - Braedon Ballance
7. **12:00-12:15 PM** - Sue Rim Beak
8. **12:15-12:30 PM** - Miranda Bahng
9. **12:30-12:45 PM** - Tianqi Peng, Yingchi Guo
10. **12:45-1:00 PM** - Clarinne Tham, Elizabeth Krampitz, Gorkem Atilla, Kien Nguyen
11. **1:00-1:15 PM** - Yingchi Guo , Tianqi Peng

2:00 - 2:30 PM - Registration (Oral Group 3)

2:30 - 4:15 PM - Oral Presentations (Oral Group3)

1. **2:30-2:45 PM** - Victoria Wardell
2. **2:45-3:00 PM** - Young Ji Tuen
3. **3:00-3:15 PM** - Subah Sehgal
4. **3:15-3:30 PM** - Raymond Li
5. **3:30-3:45 PM** - Helen Hsiao
6. **3:45-4:00 PM** - Surat Singh
7. **4:00-4:15 PM** - Sarah Munoz-Violant

11:30 AM - 12:00PM - Registration (Poster Group 3)

12:00 - 1:30 PM - Poster Presentations (Poster Group 3)

1. Clara Granados Borreguero
2. Aanandi Sidharth
3. Aimee Lutrin
4. Avi Mehrotra
5. Bilal Aziz
6. Claire Hein-Salvi, Somi Lim, Sorella Zhang, Brigitta Ang, Izzy Yu, Jade Bayzae
7. Em Mittertreiner
8. Hannah Kim
9. Ian Daly
10. Isabella Schoettler
11. Jasleen Brar, Clarence Choy, Marianna Hsu, Sam Alighanadi, Samantha Chan
12. Joshua Cunningham
13. Kaycee Realina

3:00 - 3:30 PM - Registration (Poster Group 4)

3:30-5:00 PM - Poster Presentations (Poster Group 4)

1. Anusha Jain, Keith Cheng, Soo Yeon Kim
2. Karyn Huang
3. Olivia Huntsman
4. Priya Johal
5. Rachel Dupras
6. Ramit Seth
7. Riona Carriaga
8. Sara Singh
9. Simone Goldberg
10. Sohrab Ghassemieh
11. Stephanie Yu
12. Taylor Zaidel
13. Tianyi Tang
14. William Dalgleish

1:30 - 2:30 PM - Break

5:15 - 6:00PM - Closing/Awards

Day 1 - Friday, April 9th 2021 Oral Presentation Descriptions

In the order of presentation

1. Presenter: Abigail Yuen

Supervisor: Dr. Paul Hewitt

The relationship between perfectionistic self-presentation styles and narcissism in young adolescents

Perfectionism is a personality style that manifests through trait dimensions, self-presentation styles, and cognition patterns. There are three distinct perfectionistic self-presentation styles: perfectionistic self-promotion, nondisplay of imperfection, and nondisclosure of imperfection. Past research has found that each self-presentation style has a different relationship with narcissism. However, the majority of previous studies were conducted on adult participants only. This study examines the relationship between self-reported perfectionism and narcissism in a community adolescent sample. Bivariate correlation analyses yielded a range of results. As predicted, narcissistic superiority was negatively correlated with nondisplay and nondisclosure of imperfection. However, narcissistic exploitativeness was positively correlated with nondisclosure of imperfection, while total narcissism had no relationship with any self-presentation style. These results suggest further study into the trajectory of personality development is needed.

2. Presenter: Chaoyi Shi

Supervisor: Dr. Jiaying Zhao

Spending behavior of people living in poverty: Misconceptions and interventions

Previous research has demonstrated that people consistently dehumanize the poor and feel suspicious when delivering help to the poor. However, relatively little is known about the actual spending behavior of the poor, whether the widespread negative attitudes are mere misconceptions towards the poor, and if so, effective interventions that could be used to reduce the misconceptions. In Experiment 1, 495 Participants were recruited from Amazon Mechanical Turk (MTurk) who were over the age of 18 and located in North America. The total value of spending on temptation goods was summed according to the spending on alcohol, drugs, cigarettes, gambling, and "other" temptation goods. In Experiment 2, 341 Participants were recruited from Amazon Mechanical Turk (MTurk) who were over the age of 18 and located in North America. Participants' support for a cash transfer policy was assessed using the 5-point scale. In Experiment 1, the predicted spending on temptation goods of the 'homeless other' condition was significantly higher than the predicted spending of the other three conditions combined. In Experiment 2, only utilitarian message but not counter-stereotype message turned to be more effective than control message in terms of support of the public policy. Experiment 1 and Experiment 2 combined provided a better understanding of the actual spending behavior of the homeless and shed some light on effective interventions that could be applied to reduce any misconceptions and enhance a society's trust of vulnerable populations.

3. Presenter: Alexandra Yam
Supervisors: Dr. Lori Brotto

Female Sexual Interest/Arousal Disorder (FSIAD): A Validation Study

The DSM-5 introduced Female Sexual Interest/Arousal Disorder (FSIAD), which replaced the DSM-IV-TR's Hypoactive Sexual Desire Disorder for women. Screening measures have been developed for FSIAD to facilitate research, however, these screeners have yet to be empirically evaluated. The current study aims to assess the convergent and discriminant validity of the FSIAD screener. Participants across six studies completed the FSIAD assessment tool, the Female Sexual Function Index (FSFI), the Sexual Interest and Desire Inventory Female (SIDI), and the Female Sexual Distress Scale Revised (FSDS-R) and measures of relationship satisfaction. Bivariate correlations, multiple linear regression, and independent t-tests were used to investigate the FSIAD screener and its association with other measures of related constructs. Strong associations of the FSIAD screener with theoretically related measures of sexual dysfunction would suggest convergent validity, while lack of an association with relationship satisfaction would suggest discriminant validity. This work informs clinical assessment and future research relating to sexual dysfunction.

4. Presenter: Oscar Cetnarowski
Supervisors: Dr. E. David Klonsky

Gathering Initial Impressions and Feedback From Clinicians on the Newly Created Treatment for Suicide Risk Tool

Following the publishing of the Three-Step Theory of Suicide (3ST), our theoretical understanding of suicide and suicidal ideation has been refined. That new knowledge has yet to be implemented in the clinical treatment of suicidal ideation and risk. With the intention of introducing the 3ST into clinical practice, we have created the Treatment for Suicide Risk tool (TSR). As a first step we set out to determine several things, namely whether the TSR appears to have the potential to improve treatment planning and case conceptualization in therapy with suicidal patients. To do this we contacted 171 currently practicing clinical psychologists and psychiatrists, provided them with an electronic copy of the TSR, and requested they fill out an online questionnaire. Responses received indicated that the TSR appears to have the potential to improve treatment planning and case conceptualization in comparison to current best practice. In addition to that, four out of the six respondents indicated that they would utilize the TSR in their own practices. These preliminary results will be used to justify further testing of the TSR to empirically determine its ability to create effective treatment plans in comparison to current best practice.

5. Presenter: Griffin Rutledge
Supervisors: Dr. Kiran Soma, Dr. Desiree Seib

The Effect of Caloric Restriction on Motivation to Run

Anorexia Nervosa and Bulimia Nervosa are diseases characterized by insufficient caloric intake and over-activity. These diseases affect between 0.5 – 2% of Canadians. Still, little research has been conducted on the effect of food restriction on motivation to

exercise. The present pilot study seeks to establish a progressive ratio paradigm in rats to understand how dietary manipulations affect motivation to run. Specifically, we weight-restricted half the cohort to 80% of their free-feeding counterparts, and measured their motivational breakpoints. Each completed ratio was rewarded with one minute of wheel access. After 20 minutes without achieving a reward, the session would conclude. Breakpoint was measured as the highest ratio completed over three stable sessions. We found that weight restriction to 80% of ad libitum weight significantly increased pressing behaviour, number of wheel revolutions completed (total and per reward), and time spent in the operant chamber.

6. Presenter: Eliscia Sinclair
Supervisor: Dr. Darko Odic

Anchors Away: Does uncertainty affect children's use of the anchoring and adjustment heuristic?

The anchoring and adjustment heuristic is used to make decisions under uncertainty. Individuals make estimations based on an initial value (an 'anchor'), and their degree of uncertainty influences the direction and size of their adjustment. Little is known, however, about the effect of uncertainty on children's estimates when using the anchoring and adjustment heuristic. The current study asks children to complete a number line task and indicate where they believe a provided number should go on a number line (e.g., "where does 53 go?"). Children are provided either a plausible anchor (e.g., midway on the line) or an implausible one (e.g., where 20 should go). Research indicates that 6-to-7-year-old children have a sufficient understanding of numbers between 0-100, but not numbers between 0-1000. Thus, we predict children will place more emphasis on provided improbable anchors when their degree of uncertainty is high. The current study provides insight into children's development of decision-making strategies

7. Presenter: Tianyi Pei
Supervisors: Dr. Andrew Rivers

First impressions are not set in stone: Cognitive (as well as affective) implicit evaluations can rapidly change in response to new information

Early models of implicit evaluation, such as the Dual Attitudes Model (Wilson et al., 2000), proposed that implicit attitudes were more resistant to change than explicit attitudes. However, more recent work demonstrates that implicit evaluations are much more malleable than previously thought (Mann & Ferguson, 2015). Specifically, people's implicit attitudes toward a novel social target can rapidly change when they learn new, contradictory information about the target. In other words, the attitudinal, or affective, components of people's first impressions can quickly (and dramatically) change. However, there is more to implicit evaluation than affective reactions. In fact, ample research demonstrates the importance of cognitive components of implicit evaluation, like the stereotypes and beliefs we hold about social targets. The present research extends on the work of Mann and Ferguson (2015) to test whether the cognitive components of peoples' implicit evaluations is susceptible to rapid revision in the same way that affective components are. Our data show that people can rapidly revise the

cognitive components of their first impressions after learning new, contradictory information about a social target. This finding paints a more full picture of how we form and revise our impressions of social others. Rather than being slow and resistant to change, implicit cognitions quickly respond to new learning.

8. Presenter: Shrividhya Sadagopan, Shreeya Bhayana
Supervisors: Dr. Siddhi Gyan Pandey

Youths, social activism, and gender variations in protesting.

This paper is an exploration of the digital social self, vis-à-vis, their participation in digital activism and how that translates onto a non-virtual platform. We collected our data via self-reported questionnaires of 100 participants who were between the ages of 16-25 in India. The primary focus is on the gender differences that arise when it comes to the nature of activism today. We analysed the data through inferential and descriptive statistical analysis tools. We discovered that for the participants of our sample, females tend to participate more than males which is congruent with other literature of this nature. Censorship, comfort levels, and levels of freedom were used to substantiate the discovery. We provide a deeper analysis on what this data could mean for the world at large. Key words: Digital, Social Self, Gender, Activism, Comfort, Censorship.

9. Presenter: Ross Tomita
Supervisors: Dr. Andrew Rivers

Misattribution of Cognitive Dissonance: Assessing the Reliability of Extant Literature and Meta-analysis

Cognitive dissonance theory describes the aversive affective state that results from considering two conflicting cognitions. This cognitive dissonance often propels an individual to change one of these cognitions in a way that resolves the conflict. However, previous research has shown that individuals are less likely to change existing cognitions if they misattribute their dissonance to a source other than conflicting conditions. Previous research has investigated misattribution as a method that can be misattributed to a source other than the true cause - conflicting cognitions. Generally, when someone is placed in a state of cognitive dissonance, they are amenable to changing their beliefs or behavior in order to reduce dissonance. However, misattribution research finds that people are less likely to change their beliefs or behavior when given a stimulus that they can misattribute their dissonance to. As a result of the recent replication crisis, we have reason to believe that some areas of research may not be as reliable as previously thought. Even phenomena thought to be reliable, and conceptually replicated many times, have been shown to be lacking substantial evidence (e.g., ego-depletion effects). The aim of the present study was to determine the reliability of the literature investigating misattribution of cognitive dissonance. A meta-analysis of the literature was conducted to determine its reliability. The articles were tested for publication bias using the p-curve technique. Results showed that there appears to be reliable support for the misattribution phenomenon, and that there is no detectable p-hacking and/or publication bias in the extant literature.

10. Presenter: Sophie Wensel

Supervisors: Ryan Dwyer, Dr. Elizabeth Dunn

Making conversations click: The impact of using a visual turn-taking cue to improve conversations on Zoom

The subtle, nonverbal cues that humans rely on to gauge when to speak next are dampened in on-screen conversations, making conversational missteps commonplace on platforms like Zoom. This study investigated whether using a visual cue to signal a desire to speak next on video calls would improve turn-taking and conversation quality. Small groups of 4-6 unacquainted students were asked to complete a conversation task on Zoom, and they were randomly assigned to either a signalling or control condition. After the conversation, participants reported how responsive others were to their needs, their interest in the conversation, and the rapport they felt with others. We found that when participants used the cue to signal when they wanted to talk, they had higher turn-taking ratings than those in the control condition. We found some evidence to support our hypothesis; the cue improved turn-taking, but also reduced perceived productivity and satisfaction with the conversation, suggesting that a subtler cue may be needed.

Day 1 - Friday, April 9th 2021 Poster Presentation Descriptions (Group 1)

1. The Role of the Fear Bias in the Emergence of Empathic Behaviours in Infancy

Presenter: Chloe Fichter

Supervisors: Dr. Kiley Hamlin

The fear bias is an attentional bias to fearful faces that shows associations with later prosocial behaviours. However, it is unclear how it relates to the development of empathy. This study asks whether a fear bias at 7 months predicts empathic responses to a distressed peer at 11 months. 7-month-old infants' looking time to pairs of faces (one neutral expression and one happy, angry or fearful expression) was tracked. At 11 months, infants' empathic responses were monitored while watching a video of a peer crying. Binary logistic regression revealed that fear bias measures were not predictors for empathy or concerned affect. Post hoc analyses found no relationship between anger or happiness biases and empathy. These results indicate that the fear bias is not related to empathy as it is to other prosocial behaviours. Empathy may be distinct from prosociality and might not share the same social-cognitive foundations as prosocial behaviours.

2. Class Perceptions Influence Sources and Amounts of Anxiety in Political Discourse

Presenter: Darryl Liu

Supervisor: Dr. Kristin Laurin, Holly Engstrom

Anxiety may represent an obstacle in political discussions, stifling discourse and preventing people from opposing others. This anxiety may arise from multiple sources, and people may feel disproportionate amounts based on socioeconomic status (SES). This study focuses on three sources of anxiety triggered by political discussions: appearing incompetent, sensing disagreement, and being judged as offensive. 37 undergraduates engaged in political discussion with a confederate whose profile had been manipulated to be of either high or low SES. Participants then reported each form of anxiety. Regression analyses revealed no significant main effects, simple effects, or

interactions when using participant SES or partner SES to predict anxiety ratings. We observed a trend where generally participant SES did not seem to affect anxiety, and participants reported higher anxiety when placed in the lower-SES (versus higher-SES) partner condition. Though nonsignificant, they may suggest a stronger effect of partner SES versus participant SES on predicting anxiety, especially when the partner is of lower-SES.

3. Are People Sensitive to the Magnitude of Genetic Effects?

Presenter: Eric Xu

Supervisors: Anita Schmalor, Dr. Steven Heine

Personalized genetic information revealing predispositions for psychiatric disorders is likely to be available in the near future. The current literature reveals that receiving personalized genetic information about having a gene associated with an increased risk for depression can inflate retrospective memories of depressive symptoms (Lebowitz & Ahn, 2017). The current study examined if people are sensitive to the magnitude of genetic effects. After completing a fake genetic test, participants were randomly assigned to be told they had a gene that increased their risk for depression by 80%, 1% or they did not have a gene that increased their risk for depression. After participants completed a modified Beck Depression Inventory-II to measure levels of depressive symptoms in the past 2 weeks. Results indicated no significant effect of condition on Beck Depression Inventory-II scores $F(2, 156) = 0.25, p = .78$ and failed to replicate previous findings.

4. Smartphone and Sleep Intervention Study

Presenter: Jacqueline Nguyen

Supervisors: Dr. Christine Anderl, Dr. Frances Chen

Many researchers have looked into the negative consequences of smartphone usage relating to a person's sleep quality and well-being; however, not many studies showed a considerable improvement on these variables. This 14-day intervention study was designed to assess the potential improvements on (1) objective sleep efficiency, (2) subjective sleep quality, and (3) subjective well-being when bedtime smartphone use is reduced. Undergraduate students were asked to use their smartphones at bedtime as they normally would during the first week of the experiment. Subsequently, they were asked to reduce their bedtime smartphone use during the second week ($N = 51$, mean age = 20.65, 39 males). Results indicated no significant differences between baseline and intervention scores on all of the three variables. Thus, suggests that reduction in bedtime smartphone usage did not notably improve participants' sleep quality and well-being.

5. Exam Superstitious Rituals and OCD

Presenter: Jiayin Wang

Supervisors: Dr. Lynn Alden

In response to stressful situations, individuals may alter their behaviour. One example is superstitious rituals: strict and repetitive behaviours performed in hopes of some desired effect, when no causal link realistically exists. These rituals are commonly seen in stressful performance settings, such as by students in academic situations and exams. Pathological learned behaviours in response to a specific stressor are seen in

obsessive-compulsive disorder (OCD), where an individual may perform strict and repetitive behaviours (compulsions) in response to an intrusive and distressing thought (an obsession). Because of the theoretical overlap between superstitious rituals and OCD, we were curious about the relationship between students' engagement in exam rituals, their reasons for doing so, and relationships to OCD symptoms. The three constructs were measured with two experimental measures (the Exam Rituals Questionnaire and Ritual Reasons Questionnaire) based on previous questionnaires, as well as the pre-established Dimensional Obsessive-Compulsive Scale. Tentatively, aspects of exam rituals, as well as the ritual reason of outcome regulation, significantly predict OCD symptom severity. Possible reasons for such findings are discussed.

6. Feeling Good After Acting Immorally: a Meta-analysis of Defensive Responses

Presenter: Koei Yang

Supervisors: Dr. Kristin Laurin

How do we preserve our sense of morality in face of daily deviances? How do we reduce the stress following the deviances? This research built a theoretical framework that accounts for all possible defensive strategies people use to justify their immoral behavior and attempted to identify the most effective strategy through meta-analysis. The result of this study might improve the methodology of defensive response studies and aid scholars to study the downstream consequences of defensive responding.

7. Body Image Self-Consciousness During Sex and Sexual Function Problems in Pregnant Couples

Presenter: Lara Radovic

Supervisor: Dr. Samantha Dawson

Negative body image is linked with poor sexual function outside of pregnancy. Sexual function problems are common in pregnancy, and body image self-consciousness (BISC) may be contributing to this. Associations between body concerns during sex and aspects of sexual function other than satisfaction have not been examined in pregnant individuals or couples, despite the interpersonal nature of sexual relationships. Objective: To investigate how one's BISC during sex is linked with their own and their partner's sexual function in pregnancy. We hypothesized that higher BISC would be associated with poorer sexual function for both partners. Methods: We sampled first-time parent couples at 20-weeks (N = 64). Both partners completed validated measures of sexual function and BISC. Analyses were informed by the Actor-Partner Interdependence Model. Results: There were no links between one's own BISC and sexual function. Pregnant individuals with higher BISC had partners with poorer sexual function ($p = 0.02$). Conclusions: Pregnant individuals with higher BISC may be less comfortable engaging in certain usual sexual activities, lowering their partners' levels of sexual function.

8. Twelve-month-old infants' ability to tell different voices apart

Presenter: Lauren Caswell

Supervisors: Adriel John Orena, Dr. Janet F. Werker

The ability to tell voices apart is critical for social communication and speech processing. However, little is known about how children learn face-voice pairings at young ages. Recent work in our lab found that, in the context of seeing their mother and an unfamiliar

woman, 8-month-olds can map novel voices on to novel faces (Orena & Werker, under review). In the current study, we extended this work to examine whether 12-month-olds show this disambiguation effect with two unfamiliar speakers, and whether they are sensitive to phonetic content when discriminating voices. We recruited 12-month-old infants (N = 28) to participate in our online study. Infants were exposed to one of two speakers uttering a non-word three times on a screen. Then, the speakers' mouths were occluded from view and infants heard one of the two speakers utter the same non-word. Preliminary data reveal that infants looked towards the target speaker when they were producing words with high talker information, but not with words with low talker information. These results reveal how infants are tracking voice quality in speech early in development.

9. It's all in the Details : Rumination and Autobiographical Memory in Functional Cognitive Disorder

Presenter: Lindy Le

Supervisors: Dr. Noah Silverberg, Dr. Daniela Palombo

Most individuals who sustain a concussion recover within 1-2 months. However, some will continue to complain of chronic memory impairment despite normal performance on objective memory measures. These subjective complaints are thought to be driven by misinterpreting everyday memory errors as impairment due to increased monitoring, rumination and concern over memory performance. Indeed, metacognitive biases such as rumination have been found to relate to chronic complaints post-concussion. The present study explored how rumination impact memories for past events that involve forgetting in a sample of participants with chronic memory complaints post-concussion. We collected self-reports of subjective memory complaints and rumination, as well as narrative recollections of past events that did and did not involve forgetting. Narrative recalls were scored for metacognitive and semantic information. Although data collection is ongoing, we hypothesize that participants will recall more metacognitive and semantic information when describing events from their past that involved forgetting than events that did not. Furthermore, we predict that increases in metacognitive and semantic information will be positively predicted by rumination and subjective memory complaints.

Day 1 - Friday, April 9th 2021 Poster Presentation Descriptions (Group 2)

1. Claudin-5 degradation in a cognition-based mouse model of chronic traumatic encephalopathy

Presenter: Kateryna Voznyuk, Nathaniel Franco

Supervisors: Lauren Forgrave

Claudin-5, the most abundant tight junction protein of the blood brain barrier (BBB), is vital to the BBB's maintenance of brain homeostasis and has been implicated in the progression of chronic neurodegenerative disorders. Despite the increased study of multiple traumatic brain injuries (mTBI) and their role in the development of chronic traumatic encephalopathy (CTE), there's been limited research investigating claudin-5. Given cognitive decline is a marked symptom of CTE, this study aims to address the degradation of claudin-5 in a model for mTBI-induced CTE using a cognition-based mouse model which will be assessed by Morris Water Maze cognitive assessment,

immunofluorescence microscopy BBB tight junction visualization, and Western Blot BBB-localized claudin-5 densitometric analysis. mTBI-induced mice are anticipated to have lower memory retention paired with claudin-5 degeneration and tight junction fragmentation. Further investigations will expand on the potential diagnostic power of cognition-paired claudin-5 analysis in diagnosis of mTBI-induced CTE.

2. Development of Metacognitive Training for Substance Use

Presenter: Marisha Boyd

Supervisor: Dr. Michael Krausz

Metacognitive Training (MCT) is a therapeutic approach that aims to provide insight on dysfunctional thought patterns and coping strategies for various psychiatric disorders, and engages individuals through media and activities to find more realistic alternatives. These programs have successfully reduced symptoms in people with pathological gambling, schizophrenia, depression and psychosis. MCT is often administered in a group format, but has been proven to reduce symptoms and be engaging individually. People with substance use disorders (SUD) often present with concurrent psychiatric disorders and can experience similar cognitive distortions as other psychiatric disorders. However, the unique cognitions and life experiences faced by people with SUD have not been addressed by a current MCT program. The present work focuses on developing an MCT guide for Substance Use Disorder. This guide is being created based on the existing MCT frameworks for other populations and literature reviews. The majority of content is being based on MCT for Pathological Gambling, as these two populations have similar diagnostic features, difficulty in controlling their thoughts, and some altered executive functions. Unique experiences to SUDs are addressed through techniques derived from existing literature. Future work will focus on adapting the MCT for SUD program to online formats and conducting studies on its efficacy in reducing symptoms of SUD. The creation of an online MCT for SUD will increase access to effective management tools for complex, and often concurrent, disorders for vulnerable populations.

3. Online Learning Platforms: Comparing Learning between Tapestry and Canvas Use

Presenter: Melanie Butt, Bitu Jokar, Heather Mcfadyen

Supervisors: Dr. Steven Barnes

The goal of Tapestry, a UBC-developed online learning tool, is to encourage interaction to promote greater student engagement. Content (e.g., videos, PDFs) are presented in nodes, which connect to form a tapestry. Past research has indicated increased student engagement in online learning environments can lead to improved learning outcomes (Chi, as cited Dodson et al., 2018). This experiment investigates whether using Tapestry, a non-linear tool, leads to greater retention (and thus learning) of content, versus Canvas, a linear tool. Participants were randomly assigned to view content on one platform, and retention was tested via a multiple-choice quiz. We hypothesize that participants using Tapestry will score higher relative to those using Canvas.

4. Perceiving Children: The Impression Formation Process

Presenter: Rachel Dunn

Supervisors: Dr. Mark Schaller

Our study systematically examined what sort of information people preferentially seek out when forming impressions of an infant. In a within-subjects repeated measures experimental design, participants viewed photos of adults and infants and reported on a 7-point likert scale how interested they were in finding out information pertaining to personality traits and physical health. Our primary hypothesis is that when viewing photos of infants, relative to adults, participants will be more interested in learning about physical health and neediness. These results are expected to support the notion that due to the functionally different relationship between adult and child, adults will seek out information more relevant to protection and caregiving.

5. Parent-Infant Olfactory Communication: Will Mom and Dad's Scent Make Babies Sleep Tight?

Presenter: Reina Imai

Supervisors: Marlise Hofer, Dr. Frances Chen

This study explores the effect of parent's scent on infant sleep. Moreover, how an infant's sleep affects the parent's quality of sleep. Firstly, a scent collection phase was conducted whereby parents wore crib sheets around their torso overnight for five nights. Next, the infant slept on mom's, dad's, and a control sheet for one week each, totalling three weeks. Infant's sleep quality was measured using an Actiwatch device secured to their ankle monitoring movement overnight. Short daily questionnaires were also completed by parents about their infant's sleep along with their own. We hypothesize that the scent of a parent functions as a cue for comfort and familiarity improving the infant's sleep. Further, that the maternal scent will have a more positive effect. Finally, that improved infant sleep results in better parental sleep. We aim to unveil the complexity between scent and sleep while advancing accessible and evidence-based infant sleeping methods.

6. Experiencing Inferiority: The Association of Income Inequality, Socioeconomic Status, and Feelings of Inferiority.

Presenter: Sakshi Sahakari

Supervisors: Anita Schmalor

Low socioeconomic status (SES) is typically associated with feelings of inferiority (e.g., shame). We tested if: 1) SES was associated with feelings of inferiority and 2) income inequality and SES interacted to influence these feelings. Study 1 investigated the interaction of SES and perceptions of inequality in predicting these feelings (N=476 American participants). Study 2 utilized Gini coefficients to measure country-level inequality (N=49519 participants in the 2018 wave of the European Social Survey). SES was negatively associated with feelings of inferiority in the first study (self-doubt; $\beta=-0.18$, 95%CI: = [-0.28, -0.06], $p<.001$) but not associated in the second ($\beta=-0.01$, 95%CI: [-0.02, 0.002], $p=.15$). In Study 2, income inequality and SES interacted to predict higher feelings of inferiority ($\beta=-0.004$, .95%CI: [-0.007, 0.001], $p<.001$). These findings indicate that higher income inequality, not its perceptions, strengthens the association between SES and feelings of inferiority.

7. Exploring Mechanisms of Phonetic Category Learning Through Perceptual Attunement

Presenter: Sarvenaz Oloomi

Supervisors: Dr. Janet Werker

Acquired distinctiveness (AD) and acquired equivalence (AE) are perceptual learning mechanisms that enhance (AD) or reduce (AE) discrimination of two similar stimuli, by consistently (in AD) or inconsistently (in AE) pairing them with two easily discriminable stimuli. In an online study, we investigate AD and AE efficacy across the first year (5-12 months), using a difficult native speech contrast (English ra/la). If AE/AD are domain-general learning mechanisms operating across the lifespan, then infants of all ages will use them to change their speech discrimination; if their efficacy is age delimited, or influenced by linguistic input, then the results will differ systematically across age.

8. The Role of Empathy in COVID-19 stressors

Presenter: Spencer Pratt

Supervisor: Dr. Anita DeLongis

Psychological well-being is deteriorating in the general population as higher levels of stress, anxiety, and depression have resulted from the COVID-19 pandemic. While individuals, families, and communities are attempting to engage in adaptive health behaviours, multiple regions are experiencing elevated levels of depression compared to before the disease outbreak (Pierce et al. 2020; Salari et al. 2020; Vindegaard and Eriksen-Benros, 2020). Recent longitudinal findings have demonstrated a likely pathway in which depression manifests during COVID-19. Here, COVID-related stressors are directly and independently associated with subsequent depressive symptoms (Zheng et al. 2020). Thus, the present study was prompted by the following question. How can we reduce the effects of pandemic-related stressors on depressive symptoms? While empathy is understood to be generally beneficial to the provider, few studies have looked at the possible stress-buffering effect of empathy. Further, no study to date has looked at this response over time within the context of the COVID-19 pandemic. Objective: The current study explores how empathic responding may function as part of a stress- buffering response during the COVID-19 pandemic. Method: A sample of 2463 residents from the US and Canada completed both the baseline and follow-up survey during the data collection period between March and May 2020.

9. The Effect of Altruistic Behaviours on Self-Esteem

Presenter: Taarika Rajani

Supervisor: Dr. Mark Lam

Self-esteem is a crucial determinant of mental health. While previous research has explored the positive effects of practicing compassionate behaviours and self-reporting altruism on mental well-being, this study investigates the link between altruistic behaviours and self-esteem. Using an independent groups post-test only design, the study randomly assigned participants to recall an altruistic memory (experimental condition) or a neutral memory (control condition) before responding to the Rosenberg Self-Esteem Scale. It was hypothesized that recalling an altruistic memory (occasion where one displayed an altruistic behaviour), as opposed to recalling a neutral memory, would result in higher levels of self-reported self-esteem. After examining the results, it was found that participants in the experimental condition did in fact obtain a higher mean self-esteem score compared to those in the control condition. Thus, this study's results

supported the research hypothesis. The finding that recognizing one's own altruism can increase self-esteem has important implications for the promotion of individual self-esteem and mental well-being.

Day 2 - Saturday, April 4th 2020 Oral Presentation Descriptions (Group 2)
In the order of presentation

1. Presenter: Sebastian Leon

Supervisor: Dr. Kristin Laurin, Gordon Heltzel

Leaving the Echo Chamber: How Normativeness and Publicness Guide Political Perspective-Seeking

Understanding the viewpoints of political adversaries can reduce inter-group animosity and bolster civic engagement. Yet how to reliably incentivize the public to seek opposing political perspectives remains unclear. In an online experiment undergoing pilot testing, undergraduate students supporting the use preferred gender pronouns read information characterizing perspective-seeking as socially desirable, undesirable, or neither, and were given the impression they would either publicly share their opinions about pronouns or not. It was hypothesized that describing perspective-seeking as a socially desirable practice and lacking the expectation of an evaluative audience would make participants choose to expose themselves to significantly more news articles denoting opposition to pronoun usage.

2. Presenter: Brendan Smith

Supervisor: Dr. Simon Lolliot

For Whom the Screen Tolls: Online Intergroup Contact and Support for Social Change in Different Ethnic Groups

An online questionnaire was administered to undergraduate students at the University of British Columbia over a two-month period. The questionnaire included items for intergroup contact, support for social change and participants were assigned to either the White, Asian or minority group based on their self-reported ethnicity from the questionnaire. Path analyses revealed that online intergroup contact significantly predicted willingness to work in solidarity, support for empowering policies and low-cost collective action for Asian and White groups. These results provide evidence that online intergroup contact can directly influence support for social change among different ethnic groups. Future research should investigate how online intergroup contact can lead to changes in support for social change among different ethnic groups. Further, the present study raises the possibility that online intergroup contact can be used as an intervention for promoting social change among various ethnic groups that could help improve intergroup relations.

3. Presenter: Jia Yue He

Supervisor: Dr. Toni Schmader, Katharina Block

Influences of Gender Norms and Societal Acceptance on the Career Preferences of Heterosexual and Non-Heterosexual Individuals

Across the world, men and women tend to choose careers that they perceive as normative for their own gender. However, prior research primarily focuses on heterosexual individuals, though some evidence shows that gender role norms may affect non-heterosexual individuals less strongly than heterosexual individuals. The

current research examined whether sexual orientation moderated the relationship between perceived gender roles norms and own career interest in different cultural contexts. To examine this question, 18,351 (3318 non-heterosexual) participants from 119 data collection sites in 46 countries completed a survey about their career interests and perceptions of gender norms. Multilevel models were created to fit the data. We found that for non-heterosexual individuals, gender role norms predicted their career interests less strongly than they did the interests of heterosexual individuals, and this was not affected by the level of LGBT acceptance in their countries.

4. Presenter: Maggie Coval

Supervisor: Dr. Frances Chen

Cognitive Biases in Female Adolescents: Social Stress, Depression, and the Potential Role of Emotion Recognition

Female adolescents are vulnerable to both social stressors and depression. Impaired emotion recognition ability may be a potential mechanism linking these two phenomena, for it has been implicated in both interpersonal dysfunction and low mood. The current study examines the potential for emotion recognition ability to mediate the relationship between negative affect following a social stressor and symptoms of depression in a sample of female adolescents (N = 8; Age Range = 13-15). Participants reported their negative affect after they underwent the Trier Social Stress Test (Kirschbaum, Pirke, & Hellhammer, 1993). They also completed an emotion recognition task and self-reported symptoms of depression. Although not statistically significant, the mediation model revealed a small indirect effect of negative affect following a social stressor on symptoms of depression through emotion recognition ability ($\beta = -0.08$; 95% CI: -0.56, 3.59). Given the small sample size, conclusions cannot be drawn about the magnitude of emotion recognition's role in the relationship between responses to social stress and symptoms of depression. Thus, future research ought to continue examining this potential relationship, as well as other factors that may mediate this relationship.

5. Presenter: Brinn Edgington

Supervisor: Dr. Alan Kingstone

Posttraumatic Stress and Growth: Potential Mediators of Cognitive Impairment in Cancer Survivors

Cancer survivors show cognitive impairment (CI) that persists beyond the cessation of treatment. Evidence suggests that posttraumatic stress disorder (PTSD) may mediate the relationship between cancer and CI during cancer treatment. We tested the hypothesis that PTSD symptoms would play a similar mediating role in cancer survivors. We also explored whether posttraumatic growth may be an additional mediator. Adult cancer survivors completed online self-reports of cognitive functioning, PTSD symptoms, and posttraumatic growth. Results are in the process of being collected. Findings will either support or conflict with previous studies and they will extend the current knowledge on this relationship from cancer patients to cancer survivors.

6. Presenter: Braedon Ballance

Supervisor: Dr. Daniela Palombo

Emotion, Imagination and Decision Making

How does our interpretation of the future – whether we imagine positive or negative outcomes – 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, making this relationship less clear. In this presentation, I will discuss our study which sought to further elucidate the nature of this relationship while improving upon methodological limitations of the past.

7. Presenter: Sue Rim Baek

Supervisor: Dr. Jason Snyder

The Impact of Tauopathy on Hippocampal Spine Density

Alzheimer's disease (AD), one of the leading causes of death in North America, is a neurodegenerative disease and does not show symptoms of cognitive decline until irreversible damage has been done. These cognitive deficits have been crucially linked to synaptic loss throughout the brain. Compensatory mechanisms play an important role in delaying the onset of AD symptoms and slowing AD progression. This study investigates the effect of tau pathology on hippocampal synaptic density and the possible mechanisms that may play a role in dealing with synapse loss. Previous tau animal models exhibited widespread tau pathology and didn't resemble the specific patterns of tau expression in human AD patients, however, in this study, a tau model was created to follow these patterns by restricting tau expression at the entorhinal cortex (EC), the region in which tau appears first in AD. The results of the study showed an increase in synaptic density and decreased mushroom spine density in the presence of tau relative to controls. This suggests adult-born dentate gyrus (DG) neurons exhibit a compensatory strategy of creating more synapses in response to tau but may not be very functional as it lacks mushroom spines, synapses important for long-term learning. Therefore, it can be hypothesized that tau is altering synapses early on in AD and could be a possible target in mitigating AD symptoms and/or delaying the progression of AD.

8. Presenter: Miranda Bahng

Supervisor: Dr. Todd C. Handy

Physical Activity and Cognitive Function: Preliminary Evidence for Public Health Messaging in Young Adults

The lifestyle factors of physical activity and sleep have been found to be critical when it comes to cognitive functioning and long-term health benefits. However, the immediate effects of these lifestyle factors in real-life situations, such as on scholastic achievement, are still unclear. 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).

9. Presenter: Tianqi Peng, Yingchi Guo

Supervisor: Dr. Toni Schmader

Music Priming Effect: Music Evoked Authenticity and Cultural Connectedness with Congruent Culture

As we embrace diversity on North American university campuses, understanding how to experimentally manipulate the key antecedent to fit – a sense of identification with mainstream North American culture – among first-generation immigrant students is central for understanding the distinct experiences of immigrant students. The current project seeks to use music as a priming tool to evoke cultural identification, state authenticity, and state nostalgia. The results from 313 Chinese immigrants demonstrated that 1) students felt more connected to mainstream North American culture when listening to English songs, whereas feeling more connected to Chinese culture when listening to Chinese songs; 2) a higher level of state authenticity and state nostalgia was induced by Chinese songs; 3) the connectedness to North American culture would buffer the negative effect of disconnectedness with Chinese culture on state authenticity. Our study validated that auditory signals can be used as experimental stimuli in culture research.

10. Presenter: Clarinne Thamm, Elizabeth Krampitz, Gorkem Atilla, Kien Nguyen

Supervisor: Dr. Frances Chen, Dr. Gu Li

Social Integration and Well-Being Project

Past research has found large mental health disparities between LGBTQ+ and heterosexual youth, due to threatened domains of self-integrity, which according to self-affirmation theory, may be repaired by affirming one's values in unthreatened domains. Pre-screened first-year LGBTQ+ undergraduate students attended two sessions, at the beginning of the school year and six weeks later. Participants either wrote about a chosen value that was important to them (self-affirmation intervention) or to others (control condition) and changed their laptop password to a phrase that reflected their writing. We assessed participants' levels of internalized homophobia and psychological wellbeing at both time points. Supporting our hypotheses, internalized homophobia of LGBTQ+ students decreased between the time points for participants in the intervention condition. Students who used their self-affirming passwords more frequently saw greater increases in their psychological well-being.

11. Presenter: Yingchi Guo, Tianqi Peng

Supervisor: Dr. Toni Schmader

Stereotypes in Academic Settings: The Influence of Ethnicity on Students' Academic Choice

Efforts to promote the equal status of minority instructors require a clearer understanding of students' expectations toward instructors. The present study utilized the online survey to examine 1) how perceived ethnic match (compared to a mismatch) between students and instructors influences students' choice of instructor; 2) the role of stereotypical perception of warmth and competence underlying the instructor selection process. Data from 1924 students (40.5% East Asian, 22.0% White, 37.5% others) showed that 1) Asian males were the most favourable instructors ($p < .001$) regardless of student's own ethnicities; and prior experiences with different instructors did not affect this pattern ($p = .33$); 2) The mediation effect of warmth and competence in students' choosing process was not substantial ($|b| < 0.04$). The results contribute to the understanding of the student-instructor relationships in a holistic way, with emphasis on racial bias and stereotype perceptions.

Day 2 - Saturday, April 10th 2021 Poster Presentation Descriptions (Group 3)

1. Bad Neighbours: How Relational Contexts Could Influence Third-Party Punishment Goals

Presenter: Clara Granados Borreguero

Supervisor: Kate Wen Guan

Moral judgment has been studied within different relational and cultural contexts and under different conceptualizations of punishment. However, there is a lack of research in the literature that rigorously connects types of relational orientations, such as relational mobility, to punitive goals. We discuss how punitive goals have been studied across cultures. We utilize and review relational mobility to understand relational contexts that could affect moral judgment. Moreover, we measure third-party perspective punishment goals and attitudes toward a perpetrator. Our study provides some support for the idea that different punitive behaviors are elicited from distinct relational contexts.

2. Cognitive Control on Reward-seeking behaviour

Presenter: Aanandi Sidharth

Supervisor: Dr. Rebecca Todd

The possibility of reward naturally and automatically triggers positive behaviors, such as working hard in a competition to win an award (Ikemoto and Panksepp, 1999). Humans aim to perform active or inhibitory reward-seeking behaviors, i.e. they either perform or suppress an action in order to receive a reward (studying more or not staying out too late so they can get into their favorite school). Capuzzo and Floresco (2020) found that in rats, inhibitory reward-seeking - but not active reward-seeking - was an action against their automatic process. While this suggested a difference in cognitive control between the two mechanisms in animals, it is important to understand the phenomenon in humans. Our research question focuses on finding differences in cognitive control between active and inhibitory reward-seeking. Participants will perform an action (press

a key repeatedly) in an active trial or withhold an action (not press the key at all) in an inhibitory trial. They will be rewarded points each time they correctly follow instructions

3. The Benefits of Utilizing Comparative Tasks in Childhood Metacognitive Research

Presenter: Aimee Lutrin

Supervisor: Dr. Darko Odic

The ability to doubt one's own knowledge, also known as metacognition, has been a multi-disciplinary topic of interest for centuries (Descartes, 1637). Most research in developmental psychology argues that metacognition is a late milestone for children, not emerging until 8-9 years of age (e.g., Piaget, 1953). However, the traditional paradigms used to measure metacognition in children could be responsible for these findings. We hypothesize that implementing a "comparative" task of metacognition, in which children are presented with two trials and then identify which one they feel more confident about, will reveal earlier emergence of metacognitive abilities in young children. In our study, 3–8-year-old children completed both a traditional and a comparative metacognitive task. We find that comparative tasks confirm an earlier emergence of such abilities, and we believe curricula design could build upon these findings in order to best capture childhood metacognitive skills and maximize learning acquisition in children.

4. Stop fidgeting, I Can't Focus: Exploring The Effects of Misokinesia on Attention

Presenter: Avi Mehrotra

Supervisor: Dr. Todd C. Handy

Misokinesia is characterized by strong emotional distress at the sight of another person's small repetitive movements. No research exists that explores misokinesia at a cognitive and behavioral level. This study uses verbal-working memory as a quantitative measure of verbal comprehension to inform on how misokinesia affects attention; specifically, we investigate whether comprehension of verbal information is impacted in the presence of a small repetitive visual distraction in individuals self-reporting high incidence of misokinesia sensitivity. To test the effects of misokinesia on attention, participants are shown two videos where the instructor fidgets and does not fidget. Following each video, participants answer a memory questionnaire on video content and then complete self-reported misokinesia assessment questionnaires. We predict that if misokinesia is associated with heightened attention to fidgeting, individuals reporting misokinesia symptoms would perform worse on the memory test due to reduced attention towards video content. These findings would lay the groundwork for future research on misokinesia's effects on attention.

5. TSST-O: An Online Alternative for Stress Research

Presenter: Bilal Aziz

Supervisor: Bitu Zareian, Dr. Frances Chen

The Trier Social Stress Test (TSST) is a reliable in-person procedure used to induce and study psychosocial stress. Regarded as the gold standard of stress testing, the TSST elicits robust biological and psychological reactions. Due to the Covid-19 pandemic, however, in-person is not feasible. Thus, we have created an online TSST (TSST-O) variant. We aim to assess its validity and reliability in eliciting psychological stress. Participants complete a job interview and arithmetic task in front of a judging panel over Zoom. They also rate their psychological response at 7 time points prior and after the

stress test, using a 5-item visual analogue scale. In a sample of 8 participants (7 female, Mage = 19.14), mean stress at each of the 7 time points was analyzed using one-way repeated measures ANOVA. There was a significant effect of measurement time point on stress ratings ($F(2.693, 18.848) = 8.650, p = .001$), with stress levels being highest immediately following judging. These results demonstrate that the TSST-O does successfully elicit a psychological stress response. A validated TSST-O will facilitate stress data collection during and after the covid-19 pandemic, increasing the diversity of research samples and improving the generalizability of findings.

6. Monkey See, Monkey Do: Does Wearing a Face Mask Increase Pro-sociality in Others?

Presenter: Claire Hein-Salvi, Somi Lim, Sorella Zhang, Brigitta Ang, Izzy Yu, Jade Bayzae
Supervisor: Dr. Mark Lam

Given the current global context of COVID-19, wearing a face mask has become an integral aspect of our everyday lives. While the act of wearing a face mask itself may be considered an example of prosocial behaviour, we were interested in examining whether a person's exhibition of pro-sociality would change when someone else wears a mask. By presenting participants ($N = 51$) with images of people either wearing face masks or not wearing face masks, we measured their levels of pro-sociality using an online survey. We found that pro-sociality was higher when participants were presented with mask-wearing individuals, compared to mask-less individuals. This implies that the action of wearing a face mask may encourage others to act more pro-socially.

7. The Allyship Network LIVE Study: Encouraging gender equity through virtual messaging

Presenter: Em Mittertreiner
Supervisor: Tara C. Dennehy, Dr. Toni Schmader

Women on male-dominated teams are more likely to be asked to volunteer for tasks that benefit the collective at a cost to the individual. Women may be perceived as self-interested when resisting this norm, suggesting that men are better positioned to promote workplace gender equity. In this study, participants ($N = 2400$, 30% women) communicate via virtual chat while conducting a task where maximum earnings require one teammate per round to give up their bonus. Select teammates from two "ally" conditions will be incentivized to promote gender-equal volunteering. Compared to the controls, we predict that ally participants' messages will exert less pressure on women to volunteer, and more pressure on men. Given the social license granted by male privilege, we expect male allies will be more willing than female allies to request that male teammates volunteer. These findings may inform workplace strategies for more effective onboarding of men as allies for gender equity.

8. Social Media and Loneliness: Does Social Media Really Make You Lonelier?

Presenter: Hannah Kim
Supervisor: Dr. Amori Mikami

Loneliness is correlated with negative physical, psychological, and cognitive outcomes (Boss et al., 2015; Caspi et al., 2006; Goldsmith et al., 2002). With the recent technological boom and the rising prevalence of loneliness in the population (Coombs, 2020), one area that researchers have focused on to learn more about loneliness is social networking sites (SNS). However, the data do not provide a clear answer about

the nature of the relationship between the loneliness and SNS use. Based on conclusions from longitudinal studies and meta-analyses (Aalbers et al., 2019; Kross et al., 2013; van der Velden et al., 2019), this study hypothesizes a unidirectional relationship where higher levels of loneliness predicts greater SNS use. Additionally, research suggests that Fear of Missing Out (FOMO) is associated with feelings of isolation (Beyens et al., 2016; Reagle, 2015), upward social comparison (Reer et al., 2019; Weaker & Swank, 2019) and in turn, feelings of loneliness (Reer et al., 2019). Therefore, this study examines the mediating role of FOMO in the relationship between loneliness and SNS use. To address a measurement limitation in social media research, a combination of observational and self-report measures are used in this study. Conclusions and implications are discussed.

9. Symptoms of depression relate to greater inhibitory response bias in an appetitive go/no-go task.

Presenter: Ian Daly

Supervisor: Dr. Rebecca Todd

The promotion of action and action inhibition are behavioural strategies used by all species to maximize preferred outcomes. Although altered reward-seeking is associated with depression, studies of depressive symptoms in humans have not discriminated between active and inhibitory reward-seeking. We created a multi-stage appetitive go/no-go task using visual cues and a monetary reward, which was used alongside several questionnaires. We hypothesized that people higher in depressive symptoms would engage in fewer effortful behaviours aimed at obtaining a reward. Our results support this hypothesis, demonstrating that higher depressive symptoms relate to inhibitory response bias in our task.racial bias and stereotype perceptions.

10. Comparing Children's Confidence in Memory and Perceptual Decision-Making

Presenter: Isabella Schoettler

Supervisor: Dr. Darko Odic

When it comes to making decisions, confidence plays a key role in how we evaluate our reasoning and preference for particular choices. Previous research has shown that adults' level of confidence in their decision-making appears to be similar and correlated across several cognitive domains, such as in memory and perception. However, it's unknown whether children's confidence is correlated or independent between perception and memory. In our study, 4-7-year-olds complete two tasks: a memory confidence task and a perception task. In the memory task, children are shown images and then must choose one of two pictures offered that they remember seeing before. In the perception task, children must compare yellow and blue shapes to determine which shapes is bigger than the other. Children then choose between which of the two trials they felt most confident in their answers. On half the trials, children evaluate their confidence within-domains (e.g., perception versus perception), and, critically, on the other half, between-domains (e.g., perception versus memory). We predict that children, like adults, will also display similar levels of confidence in perception and memory decision-making tasks independent of trial type.

11. COVID-19 & Social Connectedness in the Online Post-secondary Learning Environment

Presenter: Jasleen Brar, Clarence Choy, Marianna Hsu, Sam Alighanadi, Samantha Chan
Supervisor: Punit Virk

Higher education is a crucial period of social development for young people, allowing students to connect with new people, expand their social network, and build a sense of community. Indeed, social support and connections are key contributors to students' well-being and perceived academic success. During the COVID-19 pandemic, the shift to online learning has drastically restricted students' in-person and proximal social interactions. It remains unclear how this shift has subsequently impacted students' social connectedness and interpersonal relationships. Hence, this study will explore undergraduate students' perceptions of their sense of belonging and peer-to-peer interaction in the online learning environment, during the COVID-19 pandemic. We will conduct a virtual, mixed-methods study combining survey and photovoice methodologies. Participants will complete an online questionnaire with demographic items, a validated self-report scale measuring social connectedness, and open-response questions on their social interactions in the learning environment. Students will upload representative images of perceived barriers and promoters to social belonging in the online learning space. Students' open-text responses and images will be coded and interpreted using thematic analysis that identifies high-level themes relating to students' sense of belonging. The findings from this study will provide valuable insights into the impact our current online learning methods are having on students' well-being. Our findings may support educational institutions in designing the online learning space through a student-centred lens, ensuring that it fosters community and students' social and academic needs.

12. Developmental Nociceptive Stimulation: How Learning is Influenced by Pain during Development

Presenter: Joshua Cunningham

Supervisor: Dr. Catharine Rankin

The environmental impacts of stress during animal development on cognitive and behavioural functions has been a subject of study for decades in rats, and more recently in simpler organisms like *Caenorhabditis elegans* through the deprivation of sensory stimulus. What has yet to be explored is the impact of sensory overstimulation, in particular nociceptor (pain receptor) stimulation, during animal development on cognitive and behavioural traits. This study conducted optogenetic stimulation of the highly branched, nociceptive PVD neuron in the *C. elegans* model organism throughout various stages of development and tracked adult animal cognition in the form of habituation, a simple learning mechanism. Overall, significant effects were only observed in the habituation of a reversal response to a tap stimulus in adult *C. elegans* groups who received nociceptive stimulation in the fourth larval developmental stage and not in the earlier larval stages. This result demonstrates that nociceptive stimulation may exert short term influences on the overall excitability of pathways contributing to the *C. elegans* touch withdrawal reflex circuit.

13. Transfer Effects in Humans: The Replicability of Pavlovian-to-Instrumental Transfer Procedures Using Aversive Stimuli

Presenter: Kaycee Realina

Supervisor: Dr. Luke Clark, Mario Ferrari

Although Pavlovian-to-instrumental transfer (PIT) — the ability of a Pavlovian conditioned stimulus to elicit or influence responses — has been studied for decades, past research has neglected PIT in aversive contexts. The current study aims to examine the validity of a space-war task that uses aversive stimuli to elicit PIT (Garofalo and Robbins, 2017). We implemented a three-stage procedure in which participants learned various associations between stimuli, outcomes, and/or responses. The congruency (a match between response and stimuli) and the vigour of responses was measured. We hypothesize that there will be a greater number of congruent responses than incongruent responses, and that specific transfer will be observed in the congruence of responses, while general transfer will be observed in the vigour of responses. The successful replication of this task would provide support for its validity, prompting fellow researchers to incorporate it into future studies on PIT, and possibly to examine the role of aversive stimuli in habit formation.

Day 2 - Saturday, April 10th 2021 Oral Presentation Descriptions (Group 3)

1. Presenter: Victoria Wardell

Supervisor: Dr. Noah Silverberg

Remembering Forgetfulness

Although forgetting is relatively common, people with chronic symptoms post-concussion may perceive everyday memory errors to be reflective of impairment. We hypothesized that such perceptions would enhance memories for instances of forgetting, by increasing the emotional salience of memory errors. In a sample of participants who had experienced a concussion one to three years ago, we collected self-reports of the frequency and severity of memory errors as well as narrative recollections of events from participants' pasts that involved and did not involve forgetting. Simple linear regression was used to assess the relationship between memory complaints and detail generation in narrative recall for both types of events. We found that memory complaints predicted generation of details related to emotions felt during the event for memories that involved forgetting. This finding supports the notion that memory complaints post-concussion may be driven by emotional memories of events involving everyday forgetfulness.

2. Presenter: Young Ji Tuen

Supervisor: Dr. Amori Yee Mikami

Gender Differences in the Peer Relationship Domains of Children with Attention-Deficit/Hyperactive Disorder

Children with ADHD commonly struggle with their peer relationships. However, little is known about how peer relationship problems differ between girls and boys with ADHD. Current literature also tends to focus on single aspects of peer relationships, despite its multi-faceted nature. In this study, we examined how child gender relates to dyadic friendships, social skills, peer status, victimization and bullying, and overall social

impairment. Observational and questionnaire data were collected from 213 children with ADHD (66 girls, aged 6-11). Results suggested that girls had more positive friendship quality and less negative friendship behaviours than boys. On the other hand, girls were reported as having poorer social skills and greater overall social impairment. Crucially, a gender difference in social skills appeared only among children with more severe hyperactivity/impulsivity. The present study highlights the distinction between different peer relationship outcomes, as well as the possible moderating role of hyperactivity/impulsivity in social skills deficits. These findings may have clinical implications with regards to the assessment and treatment of children with ADHD.

3. Presenter: Subah Sehgal

Supervisor: Dr. Michael Daniels

The Effect of Leader Humility in Times of Crises as Perceived by Followers

As made evident by the COVID-19 pandemic, people look to their leaders in times of crisis. However, little research examines whether leader characteristics affect how they are evaluated by their subordinates during different types of crises. In this study we explore the role that leader humility plays during crises that are either more technical or more adaptive in nature. We argue that high leader humility is perceived as more effective in adaptive crises than technical ones. To test this model, we developed an online experimental protocol that employs vignettes to manipulate leadership (high humility vs. low humility) and the nature of the crisis (no crisis, adaptive, or technical) to measure the perceived effectiveness of the leader by the followers. This has important implications for leadership during times of crisis, such as the COVID-19 crisis, where leaders have to gain the confidence of their followers in order to be influential and succeed.

4. Presenter: Raymond Li

Supervisor: Dr. David Klonsky

Interventions for Reducing Self-Injurious Behaviours, Non-Suicidal Self-Injury, or Suicidal Thoughts and Behaviours In Autism Spectrum Disorder - A Scoping Review

Self-injurious behaviour (SIB) is any action that is directed towards one self that injures. Non-suicidal self injury (NSSI) is deliberate action towards the self that injures, often used to regulate intense emotions. Suicidal thoughts and behaviours (STB) are thoughts or deliberate actions towards the self with the desire to die. Autism Spectrum Disorder (ASD) populations are at great risk of all the aforementioned phenomena. SIB interventions have been well established in ASD populations, but more research is needed for NSSI and STB interventions. The present scoping review seeks to map the existing evidence for interventions that reduce SIB, NSSI, and STB in ASD populations.

5. Presenter: Helen Hsiao

Supervisor: Dr. Todd Woodward

fMRI analysis of functional brain networks involved in three memory tasks in healthy individuals

Certain processes tend to be specialized to one side of the human brain or the other. This project aims to investigate task-based brain networks and patterns in whole-brain activation in the functional MRI (fMRI) Midnight Scanning Club dataset. 10 healthy subjects completed three Incidental Memory tasks: Memory faces, Memory scenes, and Memory words. Constrained Principal Component Analysis for fMRI (fMRI-CPCA) was used to determine functional brain networks and associated hemodynamic responses engaged in the memory tasks. Statistical significance of hemodynamic responses was determined with repeated measures ANOVAs. Lastly, the functional brain networks underlying each cognitive task was identified and interpreted. This study will improve our understanding of the lateralization of functional brain networks. This will contribute to the future use of neuromodulation to increase or decrease activation of brain networks as a possible intervention to treat brain disorders affecting a certain hemisphere of the brain.

6. Presenter: Surat Singh

Supervisor: Dr. Liisa Galea

The effect of chronic unpredictable stress on fearful responses during a fear-based cognitive bias task in male and female rats

Negative cognitive bias is an increased perception of neutral situations or objects as negative, and stress enhances negative thinking. Here, we examined whether there were sex differences in cognitive bias after chronic unpredictable stress (CUS). Adult male and female Sprague-Dawley rats underwent either 2 weeks of CUS or no stress. Two days later, all rats began an 18-day fear-based cognitive bias task. After 16 days of training, rats were placed in an ambiguous context on day 18 and coded for positive (low freezing/fear) or negative (high freezing/fear) cognitive bias. On day 1 of cognitive bias training, male and female rats that underwent CUS displayed enhanced fear generalization in both contexts. By the end of cognitive bias training (day 16), rats exposed to CUS displayed a potentiated fear response in all contexts compared to non-stressed rats, and males displayed a greater fear response than did females. While all rat groups had a neutral cognitive bias score on day 18, CUS male rats displayed greater fear to an ambiguous context than did no-stress males, not found in females. These findings indicate that CUS potentiates fear responses to a neutral context and to a greater extent in adult males than in adult females.

7. Presenter: Sarah Munoz-Violant

Supervisor: Dr. Klonsky

The relationship between Childhood Maltreatment and Suicide Behaviour: A Systematic Review of the Literature

Suicide is a significant global public health issue. Multiple aspects have been studied with the aim of identifying potential risk factors for suicide such as childhood maltreatment. Methods: the objective of this systematic review is to explore the

relationship between childhood maltreatment and suicidal behaviour in the adult population. The literature was searched in the PubMed database and included articles published between November 2011 and November 2020. Results: From the 185 articles found, 17 were eligible. Results: Generally, all subtypes of childhood maltreatment are significantly associated with suicide risk later in life; however, childhood sexual abuse and emotional abuse and neglect seem to further impact the likelihood to engage in suicide attempt. Being a female individual and experiencing multiple maltreatment experiences are associated with an increased probability to engage in suicidal behaviour. Conclusion: This systematic review shows that childhood maltreatment increases the risk of suicidal behavior. Future research indications and limitations of this review are explored.

Day 2 - Saturday, April 10th 2021 Poster Presentation Descriptions (Group 4)

1. Subjective Experiences of Cognition and Well-Being

Presenter: Anusha Jain, Keith Cheng, Soo Yeon Kim

Supervisor: Kyle Gooderham, Dr. Todd Handy

Engagement in physical activity (PA) is associated with enhanced cognitive performance and greater self-reported psychological wellbeing. Research has consistently demonstrated positive psychological effects of PA in developing and aging populations; however, there remains a lack of consensus regarding cognitive benefits in young adults 1 . Specifically, it is not well understood why, following PA, young adults report increased wellbeing but show inconsistent improvement in objective cognitive performance 2 . The aim of the present study was to investigate whether self-reported assessments of one's own cognitive performance 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 subjective ratings of cognitive performance. Across two studies, 2057 young adults ($M = 20.7$, $SD = 2.42$) completed self-report measures of PA, and the covariates of stress, sleep, and diet, in addition to questionnaires measuring executive control, attention, and memory function. Analysis revealed that PA was not consistently associated with subjective cognitive function. However, stress and sleep habits were significantly predictive of executive function, attention, and memory performance, while diet was linked to executive control and some aspects of memory performance. These findings provide novel evidence that engagement in health behaviours for young adults is positively associated with self-reported perceptions of cognitive functioning and suggests that subjective experiences of cognition are susceptible to interventions targeting health behaviours. PA is yet to be proven a significant mediator or moderator of the observed relationships and is an avenue for future research.

2. Exploring the Association Between Socioeconomic Status and Children's Imagined Future: a Study Using Machine Learning

Presenter: Karyn Huang

Supervisor: Dr. Kristin Laurin

In 1969, over 10,000 11-year-old children were asked to write an essay on their imagined future at age 25. This study investigates the relationship between children's socioeconomic status (SES) and their imagined future as reflected by the topics in their essays identified by machine learning algorithms. We ask three questions: (1) Do children with different SES write about different topics when imagining their futures?, (2) What are these SES-linked topics?, and (3) Why do these patterns exist? We adopt Structural Topic Model – a data-driven, machine learning based topic modelling technique– to extract topics and measure associations. Ten out of twelve extracted topics are significantly associated with SES. Results show that from a young age, individuals of lower SES focus more on everyday responsibilities and family life, while their higher SES peers focus on exploring their interests and maximizing their enjoyment.

3. Developing a Personal Carbon Footprint Calculator for BC Residents

Presenter: Olivia Huntsman

Supervisor: Dr. Jiaying Zhao

In 2015, individual action was responsible for 64% of global emissions (Gore, 2015). Personal carbon calculation may play an important role in reducing environmentally noxious behaviours at the individual level. We designed a carbon calculator for BC residents and tested it in two studies. Study 1 involved a personal carbon footprint calculation based on behaviours that participants engaged in over the previous year, while Study 2 calculated participants' carbon footprints based on behaviours they intended to engage in over the coming year. A correlation matrix will be used to explore the relationship between demographic information and carbon emissions, and to provide validation for the calculator. The calculation results from both studies will be compared and a qualitative analysis of participant feedback will be performed. Actionable feedback will be identified to improve future iterations of the calculator.

4. Heart Rate Variability Reactivity: A Predictor of Social Engagement & Indicator of Adaptability

Presenter: Priya Johal

Supervisor: Dr. Frances Chen, Charlotte Roddick

Heart rate variability (HRV), the variation in time between successive heartbeats, indexes the parasympathetic nervous system's ability to facilitate engagement in social behaviours and adaptively respond to environmental demands. Prior research has shown that adaptive HRV reactivity to cognitive challenge is associated with sociable behaviours, and that maladaptive HRV reactivity to cognitive challenge and negative emotions is associated with poorer emotional functioning and health. However, relationships between HRV reactivity to cognitive challenge and (a) social engagement, and (b) HRV reactivity to negative emotions, have yet to be established. In this study, I investigate these relationships, as parasympathetic responding may limit social engagement and reflect individual differences in adaptability, with significant implications for health and well-being. In controlled laboratory settings, HRV reactivity to a

challenging cognitive task and to a negative emotion induction, and social engagement in a conversation task, were assessed in samples of healthy undergraduates (N = 171 and N = 448). Contrasting prior work, HRV reactivity to cognitive challenge did not significantly predict social engagement. However, as expected, it significantly predicted HRV reactivity to negative emotions, even while controlling for covariates. The latter findings provide evidence for individual differences in parasympathetic adaptability and optimal HRV reactivity levels. Implications for social, emotional, and health outcomes are discussed.

5. Giftedness Beyond High School

Presenter: Rachel Dupras

Supervisor: Dr. Chih Shen Lo

Over the last century, gifted education experienced significant paradigm shifts as a result of evolving theoretical and conceptual understanding of giftedness. Despite these changes, gifted education has remained constrained to primary and secondary education levels, leaving little known about gifted students and their needs beyond high school. This current research aims to (1) broaden the scope of gifted education to incorporate post-secondary education, (2) address the lack of knowledge about giftedness in higher education, and (3) provide future directions for educators as to the limitation of current post-secondary education curricula. This project conducted thematic analysis using posts pertaining to higher education experiences from gifted social media groups. Analysis revealed themes pertaining to issues of self-knowledge and self-advocacy, concerns with the affective curriculum of gifted programs and university education, counselling and support, the cognitive curriculum, as well as students' recommendations for future directions. These findings highlight the critical importance of post-secondary education experiences on gifted students' self-concept, mental health, self-advocacy and decisions for the future.

6. An analysis of Online Learning Methods: Video vs Audio

Presenter: Ramit Seth

Supervisor: Dr. Mark Lam

Even though a majority of educationalists worldwide have taken the route of video lecturing in the wake of an era of remote learning, some have opted to use audio lecturing instead, especially in humanitarian sciences such as Political Science and Philosophy. This study looks at the effectiveness of these two contrary learning methods in comparison to each other by exposing participants to the two lecture types and testing them on the content of the lectures. The results confirmed our hypothesis, showing the average score in the audio lecture condition to be higher than the video lecture condition, providing initial evidence for the effectiveness of audio lectures over video lectures.

7. Cognitive Consequences of Income and Expense Shocks

Presenter: Riona Carriaga

Supervisor: Dr. Jiaying Zhao

Studies of financial resilience report differences in the responses to financial shocks based on whether they are framed as income or expense shocks. We propose four

consequences that differ between the shocks: coping difficulty, life impact, loss perception and willingness to save. We further assess whether a self-affirmation intervention mitigates the impact of these shocks. Participants were given a survey and assigned to scenarios that varied in shock type, shock size and intervention type. Income shocks led to greater coping difficulty and life impact scores while expense shocks showed greater willingness to save scores. Further, a self-affirmation intervention led to lower coping difficulty. The findings suggest that income shocks impact perceived coping while expense shocks impact self-efficacy.

8. Behavioural effects of Tau Pathology in rodents

Presenter: Sara Singh

Supervisor: Dr. Jason Snyder

The research examines the role of the entorhinal cortex (EC) and dentate gyrus (DG) pathway in Alzheimer's disease (AD). Studies have highlighted a localized dysfunction in the lateral EC, which is involved in memory-related to object identity and discrimination, in AD patients and a higher tau accumulation in the LEC region in mice studies, before it spreads cortically. There is also considerable evidence for tau accumulation and specific early deterioration of object-related memory, encoded by the LEC, in preclinical patients with mild cognitive impairment. Additionally, sex differences in Alzheimer's disease has also been researched, with a greater prevalence observed in females and greater tau pathology in female mice as well. However, there isn't much evidence regarding differential effects of tau pathology manifesting at different age groups in males versus females. Using a novel viral vector-based tau model, we investigated the morphological and behavioural effects of LEC tau pathology in early versus middle age male and female mice. We hypothesized that tau pathology will differentially impact behaviour as a function of age and sex.

9. Eating Disorder Features and Nonsuicidal Self-Injury

Presenter: Simone Goldberg

Supervisor: Arezoo Shahnaz, Dr. E. David Klonsky

A substantial number of people experience eating disorder (ED) features and their associated distress and impairment, even without a formal ED diagnosis. Few studies have examined NSSI in relation to specific ED features, rather than behaviours assumed under a diagnostic category. Therefore, the present study examines a wide variety of ED features to determine which are best associated with NSSI in both male and female identifying participants in an online sample. 320 participants who endorsed ED pathology based on a screening questionnaire, were recruited through Amazon's Mechanical Turk (MTurk) and completed self-report questionnaires assessing ED features, NSSI history and other relevant variables. Independent samples t-tests revealed that participants reporting NSSI were more likely to endorse overall ED pathology ($d = .20$, $p = .09$), restricting ($d = .25$, $p = .03$), and purging ($d = .26$, $p = .02$), compared to those who did not endorse NSSI. However, different patterns emerged when analyses were conducted by gender identity. Future research should seek to further explore gender differences related to ED features and NSSI in both community and clinical samples

10. Gender differences in engaging in prosocial behaviors during the COVID-19 pandemic:
A moderation study

Presenter: Sohrab Ghassemieh

Supervisor: Dr. Nancy L. Sin; Jin H. Wen

The tend-and-befriend hypothesis suggests women are more likely than men to engage in affiliative behaviours (e.g., seek social support) when stressed. The current analysis used online daily diary data collected from a study about coping with the COVID-19 outbreak to investigate whether the association between stress and engaging in prosocial behaviour is moderated by gender. 1189 adults (1042 women and 147 men) between 18 and 91 years of age from Canada and the U.S. participated in this daily diary study. Participants reported their perceived threat of COVID-19 in a baseline questionnaire. Subsequently, they completed daily surveys for 7 consecutive days about their daily experiences of prosocial activities. The results revealed the association between prosocial activities and COVID-19 related stress was significant only among men. Specifically, men with low COVID-19 stress were associated with more days engaging in a prosocial behavior compared to men with high COVID-19 stress. No significant association was found among women at any levels of COVID-19 stress.

11. Conversing with Chatbots

Presenter: Stephanie Yu

Supervisor: Dr. Elizabeth Dunn, Dunigan Folk

Few studies have explored human-chatbot interactions despite their growing ubiquity. Thus, our study ($n = 400$) examined human-chatbot interactions in conjunction with response style. Participants chatted via text with another “participant”, who was, in fact, a research assistant (RA) responding positively or negatively. Then after being told they had conversed with a chatbot or RA, participants responded to surveys assessing various psychological benefits. There was no difference in the benefits people reaped from conversing with a perceived chatbot versus a human. However, conversing with a positive perceived chatbot was superior to conversing with a negative human. This suggests that like humans, chatbots may be a source of connection and belonging. And the benefits chatbots can impart may be especially salient for those who lack supportive relationships.

12. The Relationship Between Depression and Suicidal Ideation in Children with Autism Spectrum Disorder

Presenter: Taylor Zaidel

Supervisor: Michelle Hunsche, Dr. Connor Kerns

Autistic youth experience higher rates of suicidal ideation (SI) and psychiatric disorders than non-autistic youth (Hedley et al., 2018), and depression may contribute to SI risk in these youth (McDonnell et al., 2020). We examined the concurrent and predictive associations between parent-reported depression and SI in a sample of 98 autistic children in middle (Time 1: age 7.7-9.7) and later childhood (Time 2: age 9.7-11.7), controlling for communication ability (VABS-Communication) across all analyses (Hunsche et al., 2020). Depression and SI were correlated in later ($r(95) = .382^*$), but not middle ($r(93) = .086$) childhood and thus the association between depression and SI was significantly stronger at Time 2 vs. Time 1 ($z = -2.402$, $p = .008$). Additionally, Time 1 depression symptoms predicted SI at Time 2 ($r(93) = .223^*$). Our findings suggest

that depression is related to concurrent risk of SI in later, but not middle childhood, and that depression in middle childhood predicts SI in later childhood. Future research should study the potential role of social factors in the relationship between depression and SI within autistic youth.

13. Major Influences on Undergraduate Students' Career Considerations

Presenter: Tianyi Tang

Supervisor: Dr. Peter Graf

Career decisions are among the most difficult decisions because many different factors shape them. The purpose of this study is to examine several factors that influence undergraduate students' career considerations during the COVID-19 pandemic. Sources examined include 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 are rated as the most influential factor to students' career considerations while career resources are rated as the least influential, and it is true for both Arts and non-Arts students. Further research might compare the ratings about influences by first-year and upper-year students when the university reopens.

14. Changes in Sleep-Related Impairment and Disturbance Due to COVID-19 Related Stress

Presenter: William Dalglish

Supervisor: Jin Wen

The present study evaluated the association between COVID-19 related stress and sleep-related impairment and sleep disturbance during the initial weeks of the pandemic. From March 18 to April 11, 2020, 4,878 participants answered questions pertaining to their stress associated with COVID-19, and their sleep during the past seven days. COVID-19 stress predicted significant increases in sleep-related impairment and sleep disturbance, as indicated on each respective PROMIS sleep scale. Our findings suggest that individual differences in trait-like COVID-19 stress may have meaningful implications on sleep and sleep problems. Increases in sleep-related impairment and disturbance are implicated in an increased risk of developing numerous mental and physical health ailments, for example, anxiety, depression, cardiovascular disease, and a weakened immune system. It may be beneficial for clinicians and health services to consider other issues in an individual's life, like stress, when suggesting potential sleep treatments.

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