



DEPARTMENT of PSYCHOLOGY



18th Annual

L. Starling Reid

**Undergraduate Psychology
Research Conference**

April 26, 2024

L. Starling Reid

L. Starling Reid was born on March 15, 1920 in Greenville, MS. He received his B.A. (1943) and M.A. (1943) from the University of Mississippi. After an interruption by service in the United States Navy, his higher education culminated with award of the doctorate from the Ohio State University in 1949.

In the same year he was appointed to the Psychology faculty at the University of Virginia, where he remained until his premature death on April 19, 1978. He served as chairman of the Department from 1960 to 1972 and during 1977-78, periods during which the Department moved into new areas of psychology and 17 new faculty members were recruited.

The range of his scholarship was broad. From his master's thesis until 1960 he was involved in studies of animal learning and motivation. His original interest in human learning and memory developed during the years at Ohio State, and this became a major focus of his research during the final two decades of his life. Dr. Reid guided the writing of a number of dissertations on the topic, some of which continue to be widely influential. He invented a new method for studying the immediate memory span; this made possible its continuous monitoring. First presented in a paper with two students in 1960, it has become such a standard procedure in the investigation of memory that the detailed citation of its origin is now considered almost superfluous.

The wide respect that Professor Reid's original work inspired led to his appointment to editorial positions for several distinguished psychological journals. He served with marked success as program chairman of the Eastern Psychological Association. His professional stature was recognized by membership in the Society of the Sigma Xi and by fellowship status in the Division of Experimental Psychology of the American Psychological Association and in the American Association for the Advancement of Science. Additional recognition included his election to the Council of the AAAS Section on Psychology.

Many aspects of University life, beyond the classroom and the laboratory, profited from his considerable energy and broad competence. He was for many years secretary of the Assembly of Professors, and was for several years chairman of the Athletic Advisory Committee and was elected for a term as president of the Atlantic Coast Conference.

His most lasting contributions to the life of this University came from his extended tenure as Chairman of the Department of Psychology. As the number of faculty tripled during his dozen years as Chairman, the centrifugal forces of specialization could easily have fragmented a group that had always enjoyed a remarkable degree of cohesiveness and interaction. It is to his everlasting credit that such an outcome was avoided, and the solid underpinning for the presently diversified Department was preserved and strengthened.

Dr. Reid's leadership was unobtrusive but steady, farsighted and at the same time responsive to daily needs. He was consistently responsive to daily needs, quietly patient and yet persistent in his strivings for the betterment of the entire Department.

In 1983 a memorial lecture series was established to recognize his contributions to the Department and the University. The Annual L. Starling Reid Undergraduate Psychology Research Conference began in 2007.

Participating Institutions

Barnard College at Columbia University

Christopher Newport University

College of William & Mary

James Madison University

Longwood University

New York University

Old Dominion University

Roanoke College

St. John's University

St. Mary's College of Maryland

State University of New York at Geneseo

George Washington University

University of Florida

Washington and Lee University

University of Virginia

Conference Schedule

Location: Ern Commons

- 8:45-9:15 Registration and Coffee
- 9:15-9:20 Welcoming Remarks: Chris Mazurek, Ph.D.
Director of Undergraduate Studies in Psychology
University of Virginia
- 9:25-11:00 Oral Presentations I (12-13 minutes each)
- Emily Davis
 - Jacob Moore
 - Katerina Scott
 - Madeleine Ames
 - Boris Nakashyan
- 11:10-12:00 Poster Session I
- 12:05-1:00 Lunch Break
- 1:10-2:00 Poster Session II
- 2:10-3:45 Oral Presentations II (12-13 minutes each)
- Hope Keller
 - Emily Eppard
 - Sara Ibrahim
 - Lexie Xirui Li
 - Haylee Ressa
- 3:50-4:00 Appreciation Remarks: Chris Mazurek, Ph.D.

Oral Presentations I
(9:25 - 11:00 AM)

Investigating the Effects of Multilingual Language Environments During Infancy on the Development of Face-processing Systems

Emily Davis

University of Virginia

Advisor: Meghan H. Puglia, Ph.D.

Early intervention for neurodevelopmental disorders is crucial for improving long-term functional prognoses, necessitating the exploration of infantile markers that can provide earlier diagnoses. However, certain cultural accommodations must be taken into consideration to distinguish between early neurodevelopmental disorder symptomatology and cognitive differences stemming from early exposure to a multilingual environment. In particular, prior research has indicated that multilingual infants selectively attend to the mouth region of talking faces in order to decode the languages being spoken. Due to inflated brain plasticity in the first year of life, selective attention towards a speaking mouth may modulate the development of larger cognitive systems such as face processing. In the present study, we investigated selective attention and event-related potential (ERP) responses of multilingual and monolingual infants when viewing non-linguistic, dynamic smiling faces longitudinally from 3 to 24 months of age. This investigation was the first in the field of infant development to examine the possible longitudinal effects of multilingualism on the maturation of the face-processing system through both eye-tracking and EEG analysis in a completely non-linguistic setting. Since avoidant eye gaze is evaluated as a potential early indicator of autism, discovering the cognitive impact of multilingual mouth fixation on face processing as a whole is imperative to avoid conflation with disorder symptomatology and prevent misdiagnoses guided by cultural assumptions.

Oral Presentations I (9:25-11:00 AM), 1st Presenter

Masculine Gender Role Stress as a Predictor of Romantic Relationship Quality

Jacob Moore

University of Virginia

Advisors: Joseph P. Allen, Ph.D. | Amanda F. Hellwig, M.A.

Masculine gender role stress (MGRS), a gender-specific form of stress that can occur when men feel that they are failing to live up to socially-sanctioned expectations of masculinity, has been associated with a range of negative outcomes in men's lives. In the context of romantic relationships, previous research has linked MGRS to elevated levels of physical aggression towards female partners. By utilizing multi-informant reports in a longitudinal study design, the present study explored the relationship between men's MGRS levels from ages 20-22 and maladaptive cognitions including romantic jealousy and insecure attachment. Additionally, this study examined the link between men's MGRS levels and the relationship satisfaction of their concurrent romantic partners along with partners' experiences of verbal abuse and criticism approximately a decade later. A sample of 54 male participants in romantic relationships were assessed on MGRS and maladaptive cognitions between ages 20-22, and romantic partners reported on their relationship satisfaction, experiences of verbal abuse, and experiences of criticism from the target male participants. As hypothesized, the concurrent romantic partners of men with higher MGRS levels in their early twenties reported reduced relationship satisfaction. Additionally, romantic partners of men with higher MGRS levels reported experiencing more criticism and verbal abuse from their male partners approximately a decade later. Finally, higher MGRS levels predicted more concurrent romantic jealousy and insecure attachment among men. Findings suggest that men's excessive preoccupation with adhering to masculine expectations is linked to unhealthy cognitions in romantic contexts and predicts lasting negative outcomes for their romantic partners.

Oral Presentations I (9:25-11:00 AM), 2nd Presenter

Art Therapy with Ukrainian Refugees: A Pilot Program

Katerina Scott

St. Mary's College of Maryland

Advisor: Elizabeth N. Williams, Ph.D.

There is little empirical research available that explores art therapy with adult refugees. Refugees face increased risk for mental health conditions such as depression, anxiety, and post-traumatic stress disorder; post-migration, they also often face challenges such as cultural isolation and a loss of community. As the number of refugees worldwide increases at an alarming rate, well-researched, culturally sensitive systems of mental health support must be made available to anyone who requires them. Group art therapy may be a particularly helpful intervention due to a focus on social connections and a de-emphasis on verbal processing, which might help lessen the impact of language barriers and support those with difficulty expressing painful experiences in words. To ensure programs are culturally sensitive, adopting the Multicultural Orientation (MCO) framework is an ideal approach. Current research on art therapy with refugees is extremely limited, particularly with adults. However, incorporating culturally significant materials into art therapy programs may be a promising route for future work. To address this gap in research, we conducted a mixed-methods study of a five-week group art therapy program incorporating culturally significant materials with adult Ukrainian refugees. Via pre- and post-intervention surveys, we analyzed the program's potential influence on anxiety, resilience, and connection to community. We also conducted brief interviews with participants about their experiences in the program and analyzed these using Consensual Qualitative Research (CQR). The results offer potential directions for research in this area that should be further explored in future studies.

Oral Presentations I (9:25-11:00 AM), 3rd Presenter

Investigating the Effects of Sibling Relationships on Infant Socialization

Madeleine Ames

University of Virginia

Advisor: Meghan H. Puglia, Ph.D.

Sibling relationships have a major influence on social development, as infants often spend equal or greater amounts of time with their siblings as their parents. However, it is unknown if this dyadic relationship impacts neural processing of social information. This study will examine how sibling relationships affect an infant's attention and approach motivation towards social stimuli, which we have termed "social acuity." We hypothesize that infants who have an older sibling (second-born infants) will exhibit greater social acuity than first-born infants. Further, we anticipate that infant-sibling relationship quality will be positively associated with second-born infants' measures of social acuity. Forty-five 8-month-old infants underwent electroencephalography (EEG) and an eye tracking paradigm as they watched videos of children playing. Parents completed the Parental Expectations and Perceptions of Children's Sibling Relationships Questionnaire. Infant social attention will be calculated as the proportion of time the infant fixated on faces and hands. Frontal alpha asymmetry (FAA), a neural correlate for an infant's approach motivation towards social stimuli, will be calculated from EEG recordings. The difference in social fixation proportion and FAA between the first-born and second-born groups will be assessed using two-sample t-tests. Additionally, within the second-born group, we will determine the relationship between sibling relationship quality, proportion of social fixation, and FAA using partial least-squares regression modeling. Results from this study will elucidate sibling relationships' neurological effects on infant socialization and allow for a more in-depth view of how family dynamics shape us as social beings from the early stages of development.

Oral Presentations I (9:25-11:00 AM), 4th Presenter

AI Adventure: Unraveling Genetic Mysteries in a Large-Lecture Educational Escape Room Experience

Boris Nakashyan

University of Virginia

Advisors: Erin Clabough, Ph.D. | David Kittlesen, Ph.D.

Embark on an immersive journey into molecular biology education through the lens of educational escape rooms. In this study, students participated in an interactive escape room adventure using a storyline where they trained an Artificial Intelligence model in cell division and genetic recombination to combat an emerging viral outbreak. The class of 800 students was split into two sections, and each underwent either the escape room experience or a conventional review before an exam. The puzzles were matched to course learning objectives and designed to hone critical thinking and collaboration skills. Puzzle progress of over 120 registered student teams was monitored in real-time using a custom digital framework over the 50-minute class. Data analysis for exam performance showed that the escape room cohort had higher average scores in grasping replication fork and telomerase sequences. Both groups showed advanced comprehension compared to prior year cohorts, especially in deciphering complex biological mechanisms. In addition, the escape room's narrative allure and its capacity for tracking and pacing groups through puzzles fostered an engaging and dynamic learning environment. The study underscores the potential of escape rooms to apply biology concepts in novel ways, offering a pathway for deeper engagement and enhanced conceptual mastery.

Oral Presentations I (9:25-11:00 AM), 5th Presenter

Poster Session I
(11:10 AM - 12:00 PM)

Textbooks Write More Positively About Autism Over Time

Alexander Maksiaev

University of Virginia

Advisor: Vikram Jaswal, Ph.D.

Both autistic and transgender people face social stigma. The way in which college-level course textbooks describe autistic and transgender people may contribute to or help reduce stigma towards these individuals. The type of language used plays a large role – more specifically, its valence, or how positive or negative the language sounds. For example, autistic people can be characterized as exhibiting “problematic behavior” and social and motor “deficits”, or they can be characterized as having “normal variations” in cognitive functioning that are different but not deficient. Transgender people may be characterized as living in a way that “does not conform” to their biological sex, or they may be recognized as “naturally expressing” their gender identities.

Using sentiment analysis, 296 textbooks from eight disciplines were evaluated for how positive or negative the autism and transgender content in them was. Both lexicon-based (a VADER-like dictionary and NLTK’s SentiWordNet module) and document-based (ChatGPT API) sentiment analysis approaches were used.

Both the individualized VADER-like dictionary and ChatGPT API’s sentiment analysis for autism search terms showed a significant positive trend across publication years for all textbooks, suggesting a general lessening of stigma in college-level education across time for autism – but not for transgender people.

Poster Session I, 11:10 AM-12:00 PM

Location – #1

Perception of Fairness in Higher Education

Desy Gallardo

Old Dominion University

Advisor: Miguel Padilla, Ph.D.

Workplace productivity is often determined by many factors including salary, leadership, and career satisfaction. These factors are also key for higher education (HE) institutions. However, one factor that is starting to gain research interest in HE is faculty members' perceptions of fairness with their college/university. One aspect that may impact this fairness perception is the quality of students enrolling to undertake college/university studies. This study examines how faculty member's perception of fairness relates to the preparedness of students undertaking college/university studies. Findings show evidence that faculty who perceive their institutions as being less fair also perceive undergraduates as being less prepared for undertaking college/university studies.

Poster Session I, 11:10 AM-12:00 PM

Location – #2

Retrieval Dynamics in Intentional and Incidental Learning

Ipshi Khan

University of Virginia

Advisor: Mariana Teles Santos Golino, Ph.D.

This study investigates the retrieval dynamics in incidental and intentional memory tests, focusing on the temporal contiguity effect (TCE) across these conditions. Incidental test participants were divided into no-orienting, shallow, and deep processing tasks, whereas the intentional group underwent all three. The study hypotheses anticipate that temporal organization will be disrupted in deeper processing tasks and incidental conditions. This study was conducted with 68 participants aged 60-99 in both incidental and intentional conditions. Results indicated the Primacy Effect was observed for the no-orienting tasks in both incidental and intentional learning. For the other level of processing tasks in both conditions, no primacy effect was observed. TCE was disrupted in all levels of processing tasks for the incidental learning condition. It was preserved for all levels of processing tasks for intentional learning. This disruption of TCE in the incidental condition and the impact of informed strategies on recall, such as mnemonic devices, are further discussed in this paper. Future research should investigate the underlying mechanisms of the disrupted TCE in shallow processing and explore intervention strategies to mitigate its effects on memory retrieval.

Poster Session I, 11:10 AM-12:00 PM

Location – #3

Navigating Crisis through Digital Mental Health Resources: Predictors of Differential Use of a Web-Based Anxiety Intervention Among Lower-Income Households During COVID-19

Franklin Jia Tsan Li | Sasha Porter

University of Virginia

Advisors: Bethany Teachman, Ph.D. | Kaitlyn Petz, B.A.

In the wake of the COVID-19 pandemic, global healthcare systems faced unprecedented challenges, especially surrounding mental health services. Digital Mental Health Interventions (DMHIs) show promise to increase access to mental health resources in populations that are underserved. Using household income data from the MindTrails intervention to reduce anxiety (<https://mindtrails.virginia.edu/>), this study investigates whether enrollment patterns in a web-based anxiety intervention changed during the COVID-19 pandemic, focusing on socioeconomic status as a predictor. MindTrails uses Cognitive Bias Modification for interpretation techniques to help shift anxious thinking patterns. Our data spans 72 weeks, September 2019 - March 2021 (6 months before the pandemic, 6 months during the COVID-19 initial rise, and 6 months after) and includes reported household income among (N = 2001) anxious adult community participants. We investigate whether income level is a predictor of enrollment in MindTrails during three critical pandemic-focused periods given the unequal impact of COVID-19 in lower-income households. We have competing hypotheses: A) individuals from lower- (vs. higher-) income households engaged with MindTrails more during the COVID-19 pandemic due to the extra health and economic stressors these households experienced during the pandemic, leading to greater anxiety, or B) individuals from lower- (vs. higher-) income households engaged with MindTrails less during the COVID-19 pandemic due to substantial demands on their time (e.g. juggling dependent care and essential services jobs) limiting their ability to prioritize mental health. This research can illustrate how socioeconomic factors may relate to the use of mental health resources during times of crisis.

Poster Session I, 11:10 AM-12:00 PM

Location – #4

Child Opportunity Index Need (COIN)

Daniella Morales | Jules Colombo

College of William and Mary

Advisor: Danielle Dallaire, Ph.D.

"Nationally, 29 percent of young adults (18 to 24 years old) in rural areas are enrolled in higher education—19 percentage points lower than their urban counterparts and 13 percentage points lower than those in suburban areas, according to U.S. Department of Education data" (United States Department of Education, 2023). Socioeconomic factors also influence college attendance rates. Although 89% of youth from high-income homes attend college, only about half of youth go to post-secondary education, and very few attend 4-year colleges and universities (United States Department of Education, 2023).

Research highlights a unique association between socioeconomic factors and rurality by identifying disparities in access to higher education and impacts on college readiness influencing postsecondary education pathways (Koricich et al., 2018). Unfortunately, there is a lack of research addressing the intersectionality between rurality and lower socioeconomic status predicting lower college enrollment rates, institutional choice patterns, and an overall enrollment gap (Wells et al., 2023). The proposed study aims to understand how socioeconomic status and rurality influence college attendance, institutional choice patterns, and general experiences in higher education. The study plans to highlight the experiences of William and Mary students from rural areas with low socioeconomic status backgrounds, providing insight to researchers on the social, economic, and academic experience of these underrepresented students. Results will contribute to possible support systems and institutional buffers that can improve college attendance and the experiences of rural students who are of a lower socioeconomic status.

Poster Session I, 11:10 AM-12:00 PM

Location – #5

Extratextual Language in Mexican Mothers during Narrative and Expository Book Sharing

Laura March

Natalia Hernández Pardo | Catherine Palacios

New York University

Advisor: Gigliana Melzi, Ph.D.

Shared book-reading interactions are a common activity that promotes children's skill development across various domains. Most research on parent-child book sharing focuses on narrative fiction picture books and the experiences of European-American families, limiting its generalizability to other socio-cultural and linguistic communities. There is limited knowledge on how Latine immigrant caregivers share expository texts and if the genre of the picture book influences how caregivers share the book. This study addressed this gap in the literature by exploring how Latine caregivers use extratextual talk as they share different genres of books. Twenty-four Spanish-speaking, Mexican mother-child dyads were selected from a larger project. Families were recruited from a local Head Start. Children were about four years old; 50% were males. Mothers had been in the US for about 13.7 (SD = 7.7) years and had attended about nine (SD = 2.7) years of formal schooling. As part of the larger protocol, dyads were asked to share two books created by the team. Books were identical in science content and similar in reading levels but differed in genre (i.e., narrative and expository). Caregivers' utterances were coded using an adaptation of Hammet et al. (2003) coding scheme and identified: section of the book, content, and extratextual type. Coding is ongoing. Results will be discussed relating to the role of genre in shaping extratextual discourse during dyadic parent-child book sharing.

Poster Session I, 11:10 AM-12:00 PM

Location – #6

Depth of Processing and Intention to Learn on Memory Retrieval

Bridget Lee | Catherine Lederman

University of Virginia

Advisor: Mariana Teles Golino, Ph.D.

Memory loss is considered one of the earliest signs of cognitive impairment and can have a detrimental impact on everyday life, especially among the aging population. However, how the different variables in memory formation and retrieval interact with each other is poorly understood. This study aimed to explore the impact of different levels of processing tasks under incidental and intentional learning conditions on recall. The sample consisted of 68 individuals over 60 years of age who completed cognitive assessment that measured short-/long-term recall, processing speed, and vocabulary skills. Immediate and delayed recall assessments under varying processing conditions (no-orienting, shallow, or deep) were given to participants with or without the intention to learn. This was used to determine the association of depth of processing and intention to learn on memory retrieval. T-test analyses of data indicate that deeper processing significantly enhanced recall in incidental learning, making its performance comparable to that of intentional learning.

Poster Session I, 11:10 AM-12:00 PM

Location – #7

Exploring the Relationship Between Brain Network Connectivity and Psychosocial Differences Between the Genders in Autism Spectrum Disorder (ASD)

Jaden Singh

University of Virginia

Advisor: John Van Horn, Ph.D.

Autism spectrum disorder (ASD) is a mental disorder marked by deficits in social communication, restricted interests, and stereotyped and repetitive behaviors. ASD is diagnosed approximately four times as often in males than females. It remains unclear the extent to which this disparity is influenced by biological differences, psychosocial differences, or a lack of effective gender-specific diagnostic criteria for evaluation. Network metrics of global functional connectivity between regions of interest, as a proxy for structural connectivity between these regions, may provide insight into differences in psychosocial behaviors that are associated with autism. In this study, psychosocial metrics and fMRI time course data were collected from both autistic and typically-developing individuals at four research institutions across the United States participating in the Autism Centers of Excellence (ACE) program. For this analysis, relevant global network metrics were computed on ASD and typically-developing (TD) individuals of both genders. Canonical correlation analyses were performed between the network metrics and psychosocial metrics, and the factor scores were then used to predict ASD condition and gender using linear discriminant analysis. Among the psychosocial metric categories, the discriminant analyses performed showed significant predictive accuracy across four categories of psychosocial metrics. Within these categories, brain network global efficiency, characteristic path length, and connection density were metrics that were consistently highly-weighted. In conclusion, these multivariate relationships, between metrics of brain network architecture and psychosocial assessments, provide useful insights into the sources of variation between ASD vs. TD children and the differential behavioral profiles of ASD boys vs. ASD girls.

Poster Session I, 11:10 AM-12:00 PM

Location – #8

Analyzing Qualitative Feedback on Mentor-Facilitated Mobile Anxiety Intervention for Adolescents

Audrey Michel | Yiyang Zhang

University of Virginia

Advisors: Bethany Teachman, Ph.D. | Emma Wolfe, B.A.

MindTrails Teen is a new app-based intervention for adolescents experiencing anxiety that integrates cognitive bias modification for interpretation (CBM-I) training with mentor-mentee support to increase adherence to the program. The current study evaluated perceptions of the program and ways to improve it based on qualitative coding of both mentor and mentee interview feedback. The process involved transcribing interviews, identifying themes, and developing two codebooks—one for mentors and one for mentees. Monitoring for thematic saturation was crucial, signaling that the analysis had comprehensively covered all significant themes. To ensure the reliability and thoroughness of the coding, the research team collaborated on a subset of transcripts, discussing discrepancies and iteratively refining the codebook. Monitoring intercoder reliability was essential for consistent application of the codebook, with a target reliability score above 0.8 indicating high agreement. Once consistently achieved, the team finalized the codebooks, allowing for independent coding of the remaining interviews. Preliminary findings suggest mentors observed a positive change in their mentees' anxiety levels and believed that both mentor and parental access to the program – in addition to teen/mentee access – should be considered for future iterations of the program. Mentees found the relatability of the scenarios and their mentors' involvement helpful for their engagement but criticized the repetitive content and communicated a preference for shorter exercises, suggesting that personalized content could enhance engagement. These insights highlighted the program's impact and uncovered valuable suggestions for enhancing user engagement, laying the groundwork for future implementation of digital mental health interventions.

Poster Session I, 11:10 AM-12:00 PM

Location – #9

How Depth of Processing and Intention to Learn Affect Recall and Temporal Organization

Jessica Grob

University of Virginia

Advisor: Mariana Teles Santos Golino, Ph.D.

This study explores factors that affect free recall and temporal organization in a younger and older cohort. Researchers hypothesized that intention to learn and deeper levels of processing will increase memory performances, a younger cohort will have higher memory performance than an older cohort, and that the temporal contiguity effect (TCE) will be disrupted in incidental learning. An older cohort (n=67, mean age=73.9±6.62) with no cognitive pathologies and a younger cohort (n=52, mean age=19.2±1.08) were randomly assigned to either an intentional or incidental learning group. Participants in the incidental group were randomly assigned to one of three levels of processing (no orienting, shallow orienting, and deep orienting). Participants in the intentional group were administered all levels of processing. A free recall paradigm of 12 semantically unrelated words was used to assess participants' memory performance. Data from each group was compared using t-tests. In both cohorts, participants performed better with intention to learn and deeper levels of processing. Overall, the younger cohort had better memory performance than the older cohort. TCE was disrupted under incidental learning conditions regardless of age; however, in intentional learning, the younger cohort showed disrupted TCE while the older cohort showed preserved TCE. Findings related to deeper levels of orienting suggest that semantic encoding plays a major role in memory retrieval. The findings related to TCE suggest that younger cohorts are using other mechanisms in addition to temporal organization, which may explain how they outperformed the older cohort.

Poster Session I, 11:10 AM-12:00 PM

Location – #10

Spatial and Semantic Learning of Minspeak: An Alternative and Augmentative Communication Platform

Ella Rose Kielmeyer

University of Virginia

Advisor: Filip Loncke, Ph.D.

Alternative and augmentative communication is used by millions of people worldwide and is continuously improved upon to better serve those who rely on these systems for communication. Minspeak is one such platform that supports both communication and language development by organizing its display with pictorial icons placed into families according to their semantic connections to other words within the system. With the availability of Minspeak and other advanced platforms comes the challenge of determining the most effective way to instruct new learners. Spatially, learners work to develop motor plans that help them access words on their device without intense cognitive effort; semantically, learners can make sense of why icons have been paired with specific words and families. This study is hoping to determine whether a semantic or spatially oriented training program is more effective in decreasing the cognitive load of learning to use Minspeak. Using a between subjects design, undergraduate students were randomly assigned to take part in a brief semantic or spatial oriented training. They were then asked to produce a variety of short sentences to test their understanding, followed by a short survey to elaborate on their experience in learning to use Minspeak. Once experimentation is complete, a one-way ANOVA will be used to analyze the data. We predict that the group who received semantic training will report less cognitive load than those who received spatial oriented training, as motor plans have been found to develop later in learning than semantic understanding.

Poster Session I, 11:10 AM-12:00 PM

Location – #11

The Genomics and Transcriptomics of Sexual Dimorphism in Autism

Arham Hussain

University of Virginia

Advisors: John Van Horn, Ph.D.

Kevin Pelphrey, Ph.D. | Ian Adoremos, B.A.

The purpose of this study is to establish whether individuals harboring a high-density of copy number variants in the pseudo-autosomal region (PAR) and regions near it (Yq11.2) are more likely to acquire an Autism diagnosis compared to non-carriers. Copy number variants have been identified from variant-annotated whole genome sequencing data (WGS) using variant effect predictor (VEP) and Manta/Canvas annotation software. To further assess the risk of acquiring a likely Autism diagnosis based on the accumulation of genetic and environmental stressors and determinants, polygenic risk scores (PRS) have been computed for all PAR and Yq11.2 copy number variant carriers and non-carriers using PRSICE2 software and compared with a reference summary statistics dataset from the Psychiatric Genomics Consortium (PGC) (Sullivan et al., 2019). Genome sequencing (Illumina Infinium Omni2.5-8 Kit) was performed on all subjects (n = 300) and compared against the 1000 Genomes reference genome. In the near future, a structural equation modeling (SEM) procedure will be developed to identify which environmental factors and determinants are significantly linked to ASD polygenic risk scores and vice-versa. Specifically, neuropsychological assessments (DAS, Vineland, SRS, CELF, RBSR, SCQ, BRIEF, and CBCL) and global measurements of brain morphometry (area, thickness, mean-curvature, mean diffusivity, fractional anisotropy) will be extracted to investigate this matter.

Poster Session I, 11:10 AM-12:00 PM

Location – #12

Event Related Potentials to C-Tactile Optimal Touch as a Biomarker for Autism in Preterm Infants

Bridget Rodig

University of Virginia

Advisor: Meghan H. Puglia, Ph.D.

Preterm infants are at a heightened risk for Autism Spectrum Disorder (ASD), making it imperative to assess this risk as early as possible. One potential biomarker for autism is that those with ASD show reduced activity in social-emotional brain regions upon stimulation of C-Tactile (CT) afferents, fibers critical in affective touch processing. Although numerous brain regions have been associated with affective touch through fMRI, only two electroencephalogram (EEG) signatures have been discovered, an event related potential (ERP) found in the frontal and somatosensory cortices. However, these CT-specific ERPs have not been explored in infants. This study aims to answer two questions: do EEG neural responses to affective touch predict autistic traits in preterm infants, and if so, which ERP component is the most predictive? To answer this question, I will use EEG data collected from n=35 preterm infants in the UVA NICU during an affective and non-affective touch paradigm. I will identify a time window in which there is a significant difference between the mean amplitude of the two conditions, indicating relative activity of social touch processing. Additionally, I will assess for associations between condition differences and ADOS scores collected at 18 months corrected age. I hypothesize that the affective touch condition will have a lower amplitude than the non-affective condition in electrodes of interest, and the difference between the two will negatively correlate with autistic traits. This study will demonstrate the benefits of EEG to study tactile perception and discover early indications of autistic traits in preterm infants.

Poster Session I, 11:10 AM-12:00 PM

Location – #13

N170 Signal Latency as a Function of ASD Trait Severity

Campbell R. Coleman | Madelyn G. Nance

University of Virginia

Advisors: Meghan H. Puglia, Ph.D | Kevin A. Pelphrey, Ph.D.

The purpose of this project is to investigate differences in N170 appearance in individuals experiencing Autism Spectrum Disorder (ASD) vs. typically developing (TD) individuals. The N170 deflection is an easily derivable event-related potential occurring 170 seconds after stimulus presentation over the bilateral posterior scalp electrodes of participants viewing faces. Some research has demonstrated notable differences between the N170 deflection between TD and ASD individuals, including signal delay and decreased magnitude, which, as some argue, supports the hypothesis that individuals with ASD have decreased neurological efficiency in the facial processing network. Still, whether these differences actually exist is the subject of debate and motivates this study. This study relies on a dataset from a nationwide ASD research consortium, which includes UVA's Center for Healthy Brain Development. Adolescents underwent a faces vs. coins reward task while undergoing EEG. This task was repurposed to analyze the N170 by comparing the data associated with faces and non-social stimuli. EEG toolbox was utilized for preprocessing, including artifact removal and signal filtering, and then isolation of the ERP. Group-based differences in signal latency and magnitude were assessed according to ASD symptom severity as measured by SRS scores. Sex-based and age-related differences were assessed additionally.

Poster Session I, 11:10 AM-12:00 PM

Location – #14

Navigating University Diversity: The Role of University Diversity Climate in STEM

Julie Wu

Barnard College at Columbia University

Advisor: Yisheng Peng, Ph.D.

Based on the career construction theory, this study investigated the impact of university diversity climate on STEM students' job search crafting and outcomes. It also examined the moderating effect of demographic characteristics such as sex, perceived minority status by ethnicity, and student status (international vs. domestic students). A three-wave survey study was conducted in a sample of graduating STEM students (N = 264). The results found that university diversity climate (Time 1) was positively associated with STEM students' career adaptability (Time 1), which was further related with their job search crafting (Time 2) and job search outcomes (Time 3; the number of interviews and offers received). University diversity climate had an indirect effect on job search outcomes via career adaptability and job search crafting. In addition, none of the demographic characteristics significantly moderated the relationship between university diversity climate and career adaptability. The findings provide implications for future research on STEM students' job search and career service practices.

Poster Session I, 11:10 AM-12:00 PM

Location – #15

Distracted while Driving: An Eye Tracker Study

**Victoria Moyer
Nina Bagley | Grace McCain**

Longwood University

Advisors: Stephanie Buchert, Ph.D. | Eric Laws, Ph.D.

We anticipate that different types of distractions will have varying effects on the ability to multitask. Doing a task that requires both imagery and verbal repetition should produce the most detriments to the ability to pick out hazards in the driving video. Doing just the imagery task should produce the next-highest detriment to picking out the hazards. Next will be doing just the repetition task. Finally, the group that just hears the word list but doesn't have to do any further concurrent tasks will have the highest ability to pick out the driving hazards. Participants will be recruited using convenience sampling via the Longwood Sona Systems online signup software. While seated in front of a computer monitor, participants will watch a 3-minute video filmed from a driver's point of view. The participant's task is to press the space bar every time a perceived hazard to the safety of the driver occurs (pedestrians in the road, etc.). During this task, they will hear a series of words spoken out loud from a speaker. The Tobii eye tracker software will measure when each participant presses the space bar, whether they looked at the hazards, how long they looked at the hazards, and whether their pupils dilated during the hazard portions of the video. After viewing the video while doing the concurrent tasks, the participants will complete a memory test about what they saw in the video. The number correct will be calculated for each of these outcome variables.

Poster Session I, 11:10 AM-12:00 PM

Location – #16

Are Dads Necessary? The Father's Role in the Development of Offspring Behavior

Trisha Maheshwari

University of Virginia

Advisors: Alison M. Perkeybile, Ph.D.

Taylor D. Hinton, M.A. | Jessica J. Connelly, Ph.D.

Like humans, prairie voles (*Microtus ochrogaster*) are naturally socially monogamous and raise their young in pairs, frequently with older offspring as alloparents. In cases of paternal absence, offspring often show developmental deficits in species-typical social behaviors. Therefore, it is important to understand fathers' roles toward offspring development, the effects of paternal care loss, and compensation alternatives. To understand the difference between care from fathers versus non-paternal males, we compared early life care under four parenting conditions, biparental care, maternal only, maternal and older sister, and maternal and older brother. In adulthood, one male and one female offspring were tested for spontaneous alloparental care and partner preference formation. We anticipate offspring in the biparental group will show species-typical alloparental care of offspring and form a pair bond with an opposite-sex partner, while offspring reared by a single mother will show deficits in alloparenting and pair bonding. We also anticipate that rearing by a mother and older sister will recover pair-bonding behavior in female offspring only, and rearing by a mother and older brother will likewise rescue pair-bonding behavior in male offspring only. If this is the case for both the mother plus alloparent-reared groups, it suggests that a same-sex alloparent is a viable alternate 'parent' for offspring when the father is not present. Alternately, if male offspring show deficits in pair bonding after rearing by a mother and older brother, this may be potential evidence that fathers possess some innate father-specific quality that cannot be replicated by an alloparent.

Poster Session I, 11:10 AM-12:00 PM

Location – #17

Negative Peer Interactions in Adolescence Predict Internalizing and Externalizing Symptoms in Adulthood

Tina Yi Lin

University of Virginia

Advisors: Jessica Stern, Ph.D.

Natasha Bailey, B.A. | Joseph P. Allen, Ph.D.

Adolescence is a sensitive developmental period during which peer influence is especially impactful on adolescents' mental health. The purpose of this study is to examine whether negative interactions between adolescents and their close peers predict psychiatric symptoms in adulthood (i.e., internalizing and externalizing problems). Participants (54% female, 46% male; 58% White, 29% African American, 15% mixed, 9% other) were 13 years old at the start of the study and re-examined each year until the age of 22. Two observational tasks were used to examine participants' interactions with their nominated closest peer during adolescence: a conflict task and a supportive behavioral task. For the conflict task, participants discussed a topic of disagreement with their peers for 8 minutes. For the support task, participants provided support for their peer's problems. Coders rated the peer's negativity (e.g., rudeness, hostility) toward the teen in each task. Observed close peer negativity during the support task at age 13 predicted greater peer-reported internalizing problems (i.e., peer-reported anxiety, depression) at age 18. Observed close peer negative relatedness toward the teen in the conflict task at ages 15 and 16 predicted increased risk for internalizing and externalizing problems at ages 18 and 22. In summary, close peer negativity during adolescence in both conflict and support contexts predicts psychiatric symptoms in adulthood. Findings highlight that adolescent friendships are vital for long-term mental health.

Poster Session I, 11:10 AM-12:00 PM

Location – #18

The Relationship Between Sleep and Interoception

Louisa G. Bynum

Washington and Lee University

Advisors: Jessica Stern, Ph.D.

Natasha Bailey, B.A. | Joseph P. Allen, Ph.D.

Objective: Sleep is a multifaceted neurobehavioral process and multiple aspects of sleep have been found to relate to anxiety and depression. Interoception, which is the ability one has to perceive internal bodily changes, has also been found to be related to depression and anxiety. Previous research signals a relationship between sleep and interoception, in addition to both being possible etiological factors of poor mental health. Given that sleep is considered endemic, and anxiety and depression symptoms are on the rise, it is of public health concern to understand the mechanisms linking interoception and sleep. As a first step, this study aimed to test the relationship between sleep and interoception. Method: Participants (N=830, 49% female, Mage = 38.04) completed a questionnaire concerned sleep over the last month as well the Interoceptive Accuracy Scale and Body Perception Questionnaire to measure interoceptive accuracy and attention, respectively. Results: A general pattern emerged from our results such that lower latency, lower wakefulness after sleep onset, greater duration, and greater quality (i.e. better sleep) was related to increased accuracy and less attention (r-values ranging from 0.047 to 0.196) (p-values ranging from <0.001 to 0.118). Conclusion: Sleep and interoception were related such that poorer sleep was associated with lower interoceptive accuracy and higher interoceptive attention.

Poster Session I, 11:10 AM-12:00 PM

Location – #19

The Relationship Between Anxiety and Brachial and Central Blood Pressure During Baseline and Stress

Paige A. Gray

Washington and Lee University

Advisor: Ryan C. Brindle, Ph.D.

Recent research suggests that anxiety scores are, inversely correlated with blood pressure. To better understand how anxiety and blood pressure relate, this study aimed to evaluate any correlation between the two using both brachial and central blood pressure measures. The Hospital Anxiety and Depression Scale (HADS) was administered to participants (N=66, 39 females, Mean age=19.74). Systolic (SBP) and diastolic (DBP) blood pressure values were measured during a baseline and a stress phase. Both traditional brachial blood pressure and central (i.e. aortic) blood pressure were measured. Stress reactivity was calculated as the difference in blood pressure between rest and stress. The mean HADS anxiety score was 9.43 (3.9). Generally, an inverse relationship was found between anxiety scores and baseline SBP (brachial M=120.16, central M=106.40, r-values range: -0.204 - -0.254, all p-value > 0.05), but anxiety had little to no relationship with DBP values (brachial M=69.48, central M=70.75, r -value range: -0.032 - -0.067, all p-value > 0.61). Anxiety scores were also related to blunted brachial and central blood pressure reactions to stress for both SBP (r-values range: 0.071 - -0.0316, all p-value > 0.34) and DBP (r-values range: -0.146 - -0.198, all p-value > 0.15). These results corroborate recent studies, showing an inverse relationship between anxiety and blood pressure.

Poster Session I, 11:10 AM-12:00 PM

Location – #20

Controlling Unwanted Memories: A Replication of the Think/No-Think Effect

Nandini Sriram

University of Virginia

Advisor: Chad Dodson, Ph.D.

Is it possible to intentionally forget and suppress memories of past events? Evidence in favor of memory suppression is provided by the “think/no-think (TNT) task.” My study is part of a multi-lab project to replicate the memory-suppression effect that is found with the TNT task. This task involves three phrases. In phase one, participants learn a series of unrelated word pairs, such as ordeal—roach or flag—sword. During the subsequent, ‘think/no-think’ stage, participants are presented with the cue word (i.e., initial word) from two-thirds of the word-pairs. The remaining one-third of the cue words are not encountered during this think/no-think stage and serve as baseline items. For some cue words, such as “flag,” participants are instructed to think about and recall the other word in the pair — in this case, “sword.” For other cue words, participants are told to not think about and to prevent the other word in the pair from reaching awareness. Finally, the last stage in this TNT task is a memory test in which participants are shown a previously-seen cue word and are required to announce the corresponding response word. Typical results show that words that had been recalled during the think/no-think stage are recalled at higher levels on the memory test as compared to baseline items. However, evidence for memory suppression is provided by the words that had been in the no-think condition. Participants are less likely to correctly recall response words in the no-think condition as compared to the baseline condition.

Poster Session I, 11:10 AM-12:00 PM

Location – #21

Characterizing Neural Connectivity in Preterm Infants

Shriya Varada

University of Virginia

Advisor: Meghan H. Puglia, Ph.D.

Functional connectivity – intrinsic temporal correlations between brain regions – differs in people diagnosed with autism spectrum disorder (ASD). ASD risk is significantly increased in children born premature, with a 23% prevalence rate compared to 7% in full-term infants. ASD can be reliably diagnosed at age 2, but the average age of diagnosis is 4-5 years. Earlier diagnosis provides an opportunity for intervention at a stage of maximal neural plasticity and can lead to optimal outcomes for long-term development in children with ASD. This study aims to identify an early biomarker of ASD by characterizing functional connectivity in preterm infants at low, moderate, and severe risk of ASD. Spontaneous EEG data in the resting state was collected from preterm infants within the first year of life, who later underwent ADOS testing (n to date = 25). Functional connectivity will be assessed using phase coherence – covariance of waves across signals detected by different electrodes – in the alpha range (6-12 Hz). This range is sensitive to early changes in brain development and is associated with long-range connectivity. Alpha phase coherence will be compared between infants in the three risk levels of ASD as diagnosed at 24 months. Based on previous studies investigating this measure in infants at high risk of ASD, we expect to see alpha phase coherence decrease in frontal regions and increase in temporoparietal regions in infants diagnosed with higher risk. Identifying an early neural biomarker of ASD has significant potential in the advancement of accurate diagnostic methods and effective treatment.

Poster Session I, 11:10 AM-12:00 PM

Location – #22

Developing a Novel Social Reinforcement Learning Task for Adolescents

Ashley Engstrom

University of Virginia

Advisor: Stefanie Sequeira, Ph.D.

Adolescence is recognized as a period of heightened sensitivity to social reward and threat. However, how adolescents learn from positive or negative social stimuli to modify their behaviors and maximize social rewards (i.e., social reinforcement learning) remains understudied and poorly understood. The limited research that has examined social reinforcement learning in youth has failed to accurately portray real-life social interactions that adolescents experience; most of these prior studies use ecologically invalid tasks in which youth learn from shapes that are associated with different probabilities of receiving positive (smiling) or negative (sad or angry) facial expressions when chosen. To address this limitation, we are developing a functional magnetic resonance imaging task that mimics peer interactions on social media to measure brain activity during social reinforcement learning in adolescents. Prior to completing the task, participants are asked to provide photos of themselves, family, and interests, which they are told will be used to create a personal profile for a new social media platform. Moreover, they are told that during the task, four peers will be evaluating their profile and providing upvotes and downvotes on the different sections to help us refine the new platform. Unbeknownst to participants, peers are fictional, and their feedback is computer-generated with random assignment to outcome contingencies: i.e., 75% (Peer 1) or 25% (Peer 2) chance of providing positive vs neutral feedback. This presentation will discuss task design and methodology to receive feedback on the task before piloting it with college students and adolescents in the community.

Poster Session I, 11:10 AM-12:00 PM

Location – #23

How Negative Neighborhood Conditions Can Affect Sleep Duration and Quality in Adolescents

Daniel Singh

University of Florida

Advisor: Xiaoya Zhang, Ph.D.

Sleep is a natural process that all humans need to survive and function. It can regulate neurons and remove toxins from the brain. It is especially necessary during adolescence, the stage in a person's life where their most biological and psychological changes occur. However, the CDC reports that over 70% of teenagers aren't sleeping long enough every night. Additionally, adolescents who feel unsafe in their neighborhood are 71% more likely to experience insufficient sleep compared to adolescents who feel safe. This study sets out to examine the link between neighborhood risk and sleep length and efficiency in adolescence, an area that has been neglected in literature. The researchers hypothesized that neighborhood efficacy and neighborhood disadvantage will increase and decrease, respectively, adolescent sleep efficiency and duration. Using data from a dataset including 4,898 children born in large US cities, Pearson correlations suggested that greater neighborhood disadvantage was linked to compromised sleep efficiency ($r = -.100$, $p = .002$). The results provide imperative implications targeting improving neighborhood safety in promoting youth wellbeing.

Poster Session I, 11:10 AM-12:00 PM

Location – #24

Poster Session II
(1:10 - 2:00 PM)

To Gift or Not to Gift: Examining the Impact of Telehealth on Client Gift Giving

Gabrielle Blew

St. Mary's College of Maryland

Advisor: Elizabeth N. Williams, Ph.D.

Gift giving is an ethical dilemma in counseling psychology, and is often discussed by many psychotherapists. There is no clear answer on how therapists should respond when they are presented with a gift by a client, which is likely due to the controversy of gift giving within psychotherapy more broadly. There is a lack of understanding on how other morally gray areas of psychology, such as the introduction of telehealth, have impacted the overall issue of client gift giving. Zoom interviews were conducted to better understand therapists' views and experiences with client gift giving, and how these experiences differed between in-person and telehealth settings. Eight therapists who had been practicing for a minimum of five years, have provided telehealth services, and who have been offered at least one gift by a client were interviewed. These interviews were analyzed using Consensual Qualitative Research methods (Hill, Thompson, & Williams, 1997; Hill et al., 2005). Major findings include that only four of the eight therapists had received gifts while seeing clients via telehealth, with these gifts usually being delivered through electronic means. Additionally, most of these therapists had only one experience where a telehealth client had attempted to give them a gift. Typically, the therapists felt like gift giving is less prevalent via telehealth, which may be related to how it fosters a less personal relationship. Overall, these results suggest that telehealth may have minimized the ethical dilemma of gift giving within the realm of psychotherapy.

Poster Session II, 1:10-2:00 PM

Location – #1

Implications of Institutional Pressures and Loss of Autonomy for Creativity in Academic Freedom

Rachel Yagusic Peyton

Old Dominion University

Advisor: Miguel Padilla, Ph.D.

Academic freedom concerns have had an impact on faculty members across all academic fields. This study centers on the impact of institutional pressure on faculty members regarding publication, grant securement and the loss of personal autonomy on creative expression in teaching practices. Research was conducted using a regression model highlighting these influences. Data suggests associations between institutional pressures to secure grants and the personal autonomy of academics, particularly regarding academic freedom in teaching.

Poster Session II, 1:10-2:00 PM

Location – #2

Exploring The Association Between Sharing and Inhibitory Control in 4-to-6-Year-Old Children

Kayla Kusel

University of Virginia

**Advisors: Tobias Grossmann, Ph.D.
Johanna Chajes, B.S. | Amrisha Vaish, Ph.D.**

Early childhood is a unique time of rapid behavioral development. Two essential lifelong skills that are actively developing during this time are the ability to share with others and the capacity to control one's impulses. Some researchers have theorized that both sharing behavior and inhibitory control may rely on a common neural mechanism that supports behavioral inhibition. However, very few studies have taken an in-depth look at the strength of the association between sharing and inhibitory control during the critical developmental time point of early childhood. The present study seeks to investigate how individual differences in sharing behavior relates to variability in inhibitory control skills in children ages 4 through 6 years (N=104). We measured children's sharing and inhibitory control using multiple behavioral tasks, hypothesizing that children with better inhibitory control skills would also share more across all of our measures. Our findings show that, while children's sharing and inhibitory control both improved with age, only one of the three inhibitory control measures was significantly associated with sharing. This work contributes to the ongoing conversation about the potential relationship between sharing and inhibitory control across early childhood.

Poster Session II, 1:10-2:00 PM

Location – #3

Effects of Discomfort on Learning and Memory Using a Novel Computerized “Circular Memory” Task

Eddie Rygalski | Shaylan Richards

Roanoke College

Advisor: David Nichols, Ph.D.

Research has shown the detrimental impacts of chronic back pain and tinnitus on cognition; however, these conditions have yet to be measured jointly. We used a repeated measures design with four conditions: a control, a noise discomfort condition meant to simulate tinnitus, a physical discomfort condition meant to simulate back pain, and a compound condition including both physical and noise discomfort. Twenty-four participants completed a computerized learning task reminiscent of a 9-item circular radial arm maze where a pattern of nine locations were marked with letters A-I. Each trial started with an initial learning phase where the pattern was visible and letters disappeared upon selecting the first location, requiring participants to remember the order of locations. Short-term memory was assessed by participants' ability to learn a pattern repeated 7 times consecutively. Delayed short term recall was assessed by a participant's performance on a repeated pattern set following an intermediate novel pattern set. Performance was measured per trial by total time, time to start, and number of errors. Learning was measured by the difference in performance within and between trials. Strategy was measured by mouse and eye movements. The task successfully encouraged learning and pattern recognition. No main effects of condition were found for any of the measures. The three discomfort conditions yielded measures of participant performance and strategy between pattern sets which were significantly different from the control but not each other. These findings must be considered in the light of limited discomfort severity compared with chronic pain and tinnitus.

Poster Session II, 1:10-2:00 PM

Location – #4

Gender and Ethnic Identity and their Relation with Adjustment

Leslie Alhakim | Annabel G. Susanin

St. John's University

Advisor: Ernest Hodges, Ph.D.

Feeling like a typical member of one's gender (gender typicality), feeling content with one's gender assignment (gender contentedness), and experiencing low pressure to avoid activities and behaviors associated with another gender is a boon for children's adjustment, including greater self-esteem (Tobin et al., 2010). In this study, we developed parallel identity measures in relation to one's ethnicity and race so that we may be able to better understand how components of identity with respect to more than one group may contribute to how sense of self develops as well as feelings of isolation and loneliness. We were particularly interested in three research questions. To what degree are dimensions of identity in relation to different groups (i.e., gender vs ethnicity/race) independent of each other? Does each dimension of identity in relation to each group (e.g., gender typicality and ethnic/racial typicality) independently predict (mal)adjustment? Can positive aspects of identity toward one group (e.g., feeling like a typical member of one's ethnic/racial group) offset negative aspects of identity toward the other group (e.g., feeling like an atypical member of one's gender)? In the first round of data collection, participants included 144 undergraduate students between the ages of 18-21 attending St. John's University. They completed a series of questionnaires to assess typicality, contentedness, and felt pressure to avoid activities and behaviors associated with other groups regarding both gender and ethnicity/race. In addition, self-esteem and loneliness were assessed. Results from correlational and multiple regression analyses will be summarized.

Poster Session II, 1:10-2:00 PM

Location – #5

Social Connection Among Recent College Graduates

Sally Park

University of Virginia

Advisors: Adrienne Wood, Ph.D. | Shelly Tsang

Social connectedness significantly impacts well-being. Recent college graduates, who are often in new environments and do not have established social connections, are a population vulnerable to loneliness. This study aims to investigate the strategies used to establish meaningful social connections and the moderating role of personality traits in individuals' proactiveness in seeking social connections. Over a six-month period of 4 waves, we surveyed recent college graduates ($n = 83$) who have relocated to new cities, collecting data on their connection strategies, social life satisfaction, and personality traits. We hypothesize that those who actively seek connections through social groups will report higher satisfaction with their social lives and establish more social connections over time. Additionally, we predict that the pursuit of social involvement will be influenced by personality traits such as extraversion and agreeableness. We found that meeting friends' friends and joining online social network groups were the social connection strategies most predictive of social life satisfaction. Interestingly, social life satisfaction was predicted by the proportion of specifically local friends, as opposed to the total number of friends (long-distance and local friendships). Regarding personality, we found that extroversion is related to social life satisfaction, but not how much someone actively seeks friends. This research contributes to a better understanding of the intentionality of people when seeking connections and the process of making new connections on a longer time scale, aiming to facilitate interventions that foster healthier social lives following relocation or life transitions.

Poster Session II, 1:10-2:00 PM

Location – #6

Resting State Neural Activity, Empathy, and Their Association with Internalizing Symptomatology

Taryn DeFusco | Maxwell Mesi

State University of New York at Geneseo

Advisor: Michael Lynch, Ph.D.

Resting state neural activity has been associated with trait empathy, but the impact of these activation patterns on empathy processes associated with psychopathology is unclear. Using functional near-infrared spectroscopy (fNIRS), blood-oxygenation levels in the dorsolateral prefrontal cortex were measured during a resting-state condition and also while the participants were completing emotion-recognition tasks. After collecting resting state data, we administered a Theory of Mind task—the Frith-Happé Animations Test—in which participants classified interactions between two animated triangles as mental, physical, or random. Correctly identified mental interactions were followed by asking which emotion best fit each triangle. Next, we administered an abbreviated form of EU Empathy Stimuli. Participants watched videos depicting emotionally salient social interactions between two people and identified the emotions present in each video. After both tasks, participants completed self-report scales to assess internalizing symptoms. Relationships among resting state neural activity, task accuracy, and internalizing symptoms were examined. We hypothesized that elevated patterns of resting state activation would predict better emotion-recognition task performance, which in turn would predict internalizing symptoms for some individuals. For these individuals, heightened awareness of the emotional states of others may be a form of hypervigilance and be associated with internalizing problems such as anxiety. Analysis of the correlates of resting state neural activity will provide greater insight into whether some people are primed and predisposed to be attentive to emotional cues in others, and whether such a predisposition may represent a possible path to internalizing symptomatology for some individuals.

Poster Session II, 1:10-2:00 PM

Location – #7

Perceived Productivity: Exploring Adaptation to Time-Saving Tools

**Isabelle Maule | Nathan Kim | Matthew Umbrell
Annie Glidden | Isabella Paras | Xin Jin**

University of Virginia

Advisors: Adrienne Wood, Ph.D. | Shelly Tsang

Most people wish to be more productive, but feeling consistently productive can be difficult to achieve. In our study, we explore how people might adapt to changes in productivity. We hypothesize that when people start working more efficiently, that new level of productivity turns into their baseline and they no longer feel as productive. To test this, we manipulated the time it takes to complete a craft-based task by giving some participants a tool that makes the task easier to complete. We randomly assigned participants to complete two rounds of the task in one of four conditions: no tool for either round, tool for the first round but not the second, tool for the second round but not the first, or tool for both rounds. We anticipate that using the tool for the first round will lead participants to adapt to that level of productivity and that losing access in the second round will cause their sense of productivity to decrease to a level below the level reported by participants who never had access to the tool. On the other hand, participants who complete one round without access to the tool and gain access to it for the second round will report an increased sense of productivity compared to participants who had access to the tool for both rounds. Our study aims to explain why people might feel less productive than they think they should be, by adapting to certain levels of productivity. The findings from this research are important to consider since feeling productive is strongly associated with happiness, and this research suggests that people may be striving to reach a sense of feeling productive that cannot be sustained.

Poster Session II, 1:10-2:00 PM

Location – #8

The Intergenerational Transmission of Parenting: A Prospective Study from Adolescence to Adulthood

Alexander Johansson

University of Virginia

**Advisors: Joseph P. Allen, Ph.D.
Jessica Stern, Ph.D. | Natasha Bailey, M.A.**

Parenting serves as a cornerstone in shaping children's emotional development and overall well-being. Understanding the intricate dynamics of parenting behaviors, both negative and positive, is crucial in comprehending their lasting impact on future generations. This 25-year longitudinal study explored the intergenerational transmission of parenting behaviors by assessing a diverse community sample of 184 adolescents (Generation 2 (G2); 86 males, 98 females; 58% White, 29% African American, 8% mixed race/ethnicity, 5% other) from ages 13-16 and their parents, Generation 1 (G1), and again later when participants became parents of young children (Generation 3 (G3); ages 3-8). The study incorporated multi-method assessments of parenting across generations, including G2's perceptions of G1's parenting behaviors during adolescence, direct observations of parent-teen interactions (G1-G2), and G2's self-reported parenting responses to their children's distress in adulthood. Findings revealed that experiencing poorer relationship quality with one's parents, diminished parental support, higher levels of parental psychological control, and greater exposure to interparental hostility during adolescence predicted unsupportive parenting behaviors (distress, minimization, and punitive reactions) toward one's own children. These associations persisted over and above effects of socioeconomic status and adolescent gender, highlighting the enduring link between early familial dynamics and parenting practices. These results underscore the importance of early intervention to break cycles of negative parenting and promote positive family relationships across generations.

Poster Session II, 1:10-2:00 PM

Location – #9

Emotional Expressive Flexibility Differences as a Function of Neuroticism and Gender

Maryclaire O'Brien | Alex Vuono

College of William and Mary

Advisor: Janice L. Zeman, Ph.D.

Emotional expressive flexibility (EF) is the ability to adapt positive and negative emotion expressions in response to the present social context using different emotion regulation (ER) strategies (e.g., enhancement, concealment; Burton & Bonanno, 2016). EF continues to develop from childhood through emerging adulthood and beyond but has not received much empirical attention. Deficits in adaptive ER ability are likely related to the development of internalizing symptoms. Given the potential importance of EF in transitional periods such as emerging adulthood, the current study examines whether EF differs depending on level of neuroticism and gender. Participants were 341 university students (185 females, Mage = 19.23 years, 63% White) who completed the neuroticism scale of the Big Five Inventory-2 (BFI-2, Soto & John, 2017) and the Flexible Regulation of Emotional Expression (FREE; Burton & Bonanno, 2016). From the BFI-2, using the mean \pm 0.5 SD, three groups were created: low (n = 111), average (n = 94), and high (n = 136). Tukey's HSD post-hoc analyses indicated that the high neurotic group had significantly lower EF scores than the low and average neurotic groups. The high neurotic group also enhanced emotions significantly less than the low neurotic group and suppressed negative emotions significantly more than the other two groups. There was also a gender main effect in which women reported significantly more EF than men. Women also practiced emotional enhancement than men, but there were no significant gender differences for suppression.

Poster Session II, 1:10-2:00 PM

Location – #10

Learning from Hardships: Effects on Well-being and Curiosity

Sae-Yoon kim

University of Virginia

Advisor: Jazmin Brown-Iannuzzi, Ph.D.

Post-traumatic growth has been shown to be associated with greater well-being. However, there are limited explanations of specific mechanisms in which individuals derive levels of well-being and curiosity from hardships. In this study, learning lessons from hardships are examined as a potential facilitator of curiosity and well-being through facets of satisfaction, meaning, and psychological richness in life. Through an online study, 304 students from the University of Virginia were randomly assigned to two experimental groups. One experimental group was tasked to explain a hardship they have experienced within the past year before completing well-being and curiosity questionnaires and a curiosity task. The second experimental group was similar to the first group but was additionally asked to reflect on the lessons they learned from their hardship before completing well-being and curiosity measures. Potential relationships between hardship learning, well-being, and curiosity measures will be statistically examined through correlational analysis, analysis of variance, and moderation analysis. We hypothesize that participants in the experimental group who are asked to reflect on the lessons of their hardship will be associated with greater well-being scores of satisfaction, meaning, and psychological richness in life. Additionally, we hypothesize that participants who reflected on hardship learning will be associated with greater curiosity levels. This study will provide insight into how lessons learned from hardships may mediate levels of well-being and curiosity, potentially guiding future studies to investigate how introspection facilitates growth from hardships.

Poster Session II, 1:10-2:00 PM

Location – #11

Investigating the Impact of COVID-19 on Cognitive Performance in Young and Older Adults

Julia “Elise” Reichle

University of Virginia

Advisor: Mariana Teles Santos Golino, Ph.D.

Since the outbreak of the COVID-19 virus in 2020, the pandemic has had enduring, multifaceted impacts on global health. Research investigating consequences of the COVID-19 pandemic has focused on older adults, due to this group's heightened health risks. The adverse mental and physical consequences of social isolation in older adults are well established, but little is known about relationships in different age groups, especially within the context of the pandemic. Due to the contagious nature of the virus, previous studies have utilized subjective self-report measures, often collected retrospectively. Our study explores the influence of COVID-19 infection severity, vaccination status, and social isolation on specific cognitive abilities, and the differences in impact of COVID-19 on cognitive performance in different age groups. We utilized a cohort of younger and older individuals (N=100), each assessed with a robust set of objective cognitive assessments. 50 older adults, age 65 and older, from the Virginia Cognitive Aging Project, and 50 younger adults, ages 18-21, from the UVA psychology participant pool completed assessments for memory recall, vocabulary, and abstract problem solving, alongside a questionnaire regarding COVID-19 infection, symptomatology, vaccination status, and social isolation. We hypothesize that increased severity of COVID-19 related factors will negatively impact tested cognitive abilities, and that the impact on cognitive performance will be more profound in older adults. By addressing gaps in previous research, we aim to contribute to a holistic understanding of the long-term cognitive and social effects of the pandemic.

Poster Session II, 1:10-2:00 PM

Location – #12

Is Fairness Intuitive? The Effect of Time Pressure on Children's Decision Making

Hailey Costello

University of Virginia

**Advisors: Amrisha Vaish, Ph.D.
Tobias Grossmann, Ph.D. | Johanna Chajes, B.S.**

An ongoing question within psychological sciences involves the mechanisms that drive fairness and support cooperation. There is some evidence that among adults, fairness is intuitive rather than deliberate (Rand et. al, 2012), however it is unclear whether fairness is intuitive in children as well.

To assess this question in children ages 4-9 years old ($n=144$), we designed a novel Modified Dictator game in which children chose between a fair or selfish distribution of virtual resources for themselves and another child. Participants were randomly assigned to either a Time Pressure condition (decide within 10 seconds) or Time Delay condition (decide after 10 seconds) when making their choice. If children make more fair choices under time pressure, then fairness may be intuitive for children, whereas if they make more selfish choices under time pressure, then fairness may be the result of deliberation.

Consistent with prior findings, younger children (4-6) were more likely to choose selfishly across conditions whereas older children (7-9) were more likely to choose fairly, $p<.001$. Additionally, older children were somewhat more likely to choose the fair option when under time delay than under time pressure, $p=.081$. Younger children's choices did not differ between time delay and time pressure conditions, $p>.56$. These findings suggest that by age 7, children reliably prefer fair over selfish distributions, but this preference is not yet intuitive but rather a somewhat deliberate decision. It may only be later in development, once fairness norms are sufficiently internalized, that fairness becomes an intuitive response.

Poster Session II, 1:10-2:00 PM
Location – #13

Children's Beliefs: What is Autism?

Veronica Pitts

University of Virginia

Advisors: Zoe S. Robertson | Vikram Jaswal, Ph.D.

A large breadth of studies have investigated children's attitudes towards peers with autism spectrum disorder, but fewer have examined children's beliefs about autism. Beliefs can inform and shape the way children treat disabled peers (Hong et al. 2013), and in fact, disabled children often face negative behavior from peers (Wainscot et al. 2008). This study aims to better understand children's beliefs and knowledge of autism through their own descriptions. Across three studies, 8-10 year-old children (N = 246) answered the open-ended question: "What is Autism?" We transcribed the responses and assigned descriptive codes based on content (Braun & Clarke, 2006, 2020). Prior research in this topic (Campbell & Barger, 2011) inspired an inductive approach, in which each response received one or more codes. Based on established codes, we developed higher-level themes to categorize the responses. Over half of children did not know what autism was. Of those that did, we distinguished themes such as "internal deficits" referring to internal challenges not physically visible, "external deficits" referring to readily observable deficiencies, "internal differences" referring to a neutral description of attributes not externally observable, and "external differences" referring to observable characteristics without a negative connotation. These results highlight children's conceptions of autism, including that they often described autism as characterized by deficits vs. differences, and that many children lacked knowledge of autism overall. Future studies can investigate not only the beliefs children hold about disability, but how these connect to their other attitudes and behaviors (Robertson & Jaswal, 2024).

Poster Session II, 1:10-2:00 PM

Location – #14

Camp Counselor Experiences: The Influence of Training, Self-Efficacy, and Organizational Cohesion

Angelie Roche

St. Mary's College of Maryland

Advisor: Libby N. Williams, Ph.D.

Teenagers and young adults from across the world work at overnight camps each summer, an experience that can be both rewarding and straining (Baker, 2018; McCole et al., 2012). To mitigate this, many camps have created Counselor-in-Training (CIT) programs which educate adolescent campers on leadership and provide a pathway to become a counselor (Annessi et al., 2020; Fleischner, 2020). Although research has investigated the efficacy of individual CIT programs, studies have not yet directly compared the experiences of previous CITs to the experiences of new, non-CIT counselors across camp types. In the current study, I hypothesized that a.) counselors who completed CIT programs would report higher self-efficacy, organizational cohesion, job fit, sense of connection to their camp, and satisfaction with pre-camp training; and b.) counselors who report lower self-efficacy would also report higher levels of burnout, lower levels of growth, and a lower likelihood of returning to camp. I recruited 314 camp counselors (130 former CITs and 185 non-CITs) from camps across the US and Canada for an online survey. Although neither the completion of CIT programs nor a counselor's age affected their self-efficacy or organizational cohesion, factors such as job fit, satisfaction with training, and comfort talking to administrators were significantly correlated to both. Furthermore, counselors who reported higher levels of discrimination at their camp also reported lower organizational cohesion. These findings suggest that more between-camps research is needed to examine training, camp climate, and the true efficacy of CIT programs.

Poster Session II, 1:10-2:00 PM

Location – #15

The Relationship Among Oral Contraceptive Use, Sleep, and Sexual Behavior

**Sureyya Sanchez | Kailee Corbett
Caitlyn Hewitt | Olivia Hornung | Cameron McKinney
Alexandra Sheffield | Kieran Donohue**

James Madison University

Advisor: Jeff Dyche, Ph.D.

The aim of this study is to look at the relationship among oral contraceptive use, sleep, and sexual behavior. To examine the relationship between these variables, participants with a regular menstrual cycle who are on oral contraceptives (or lack thereof), were recruited through SONA at James Madison University. During the initial intake session, participants completed the consent form, baseline and demographic packet, and were assigned a participant number to deidentify their data. Participants tracked their sleep using an Apple Watch or Fitbit for a two-week period and upon awakening every morning, filled out a questionnaire about their sleep and sexual behavior the previous day. Based on previous research, it is anticipated that participants will demonstrate better sleep quality in the luteal phase, and that those who take oral contraceptives and/or have greater average sleep duration will have greater average sexual desire.

Poster Session II, 1:10-2:00 PM

Location – #16

Menopause in the Workplace

Alexandra Savage

The George Washington University

Advisor: Yisheng Peng, Ph.D.

The experience of menopausal employees in the workplace remains an underdeveloped area of research. While data suggests that older, female employees face negative stereotypes at work, the specific impact of menopause on their work outcomes, including their job satisfaction and performance, is not well understood. This study aims to discover how menopause impacts the participants' experiences as employees, including their performance outcomes and their interpersonal relationships with colleagues and supervisors. Five-hundred participants with ovaries between the ages of 30 and 70 answered quantitative and qualitative questions to provide a full scope of their experiences. Multiple regression analyses were conducted to test demographic (race and age) differences in menopausal experiences and examine the impact of menopause on work outcomes. Results indicated that there were no significant age and racial differences in menopausal experiences (i.e., symptoms), but menopausal symptoms had significant relationships with work outcomes (i.e., job satisfaction, performance, and turnover). Qualitative thematic analysis will be conducted on the qualitative data to better determine what issues menopausal employees experience and what forms of workplace social support these employees wish to receive from their organizations. The findings from this study will serve to inform organizations how they can best support their menopausal employees, carrying implications for supervisor training, healthcare benefits, and additional modifications that will improve worker experiences.

Poster Session II, 1:10-2:00 PM

Location – #17

Deciphering the Hospice Journey: Quantitative Study on Factors That Impact Good Death

Sevrin VanDevender | Sofia Duque

Christopher Newport University

Advisor: Sherman A. Lee, Ph.D.

Evaluating perceptions of hospice care is a fundamental step towards improving hospice care experiences. This study examined 118 caregivers' perceptions regarding the quality of their loved one's death and whether those perceptions were associated with their grief. Caregivers completed a survey consisting of questions that determined demographic information about the primary caregiver, as well as the deceased, as well as 4 'good death' questions, and 10 prolonged grief disorder symptoms. We hypothesized that a good death for the deceased would lead to better adjustment in terms of lower grief symptoms for the caretakers, while conversely, the worse conditions of death (e.g., physical pain) should lead to greater bereavement struggle in terms of higher grief symptoms. Spearman Rho correlation analyses revealed significant associations between several different variables, supporting our hypothesis.

Poster Session II, 1:10-2:00 PM

Location – #18

Interferon regulatory factor-1 in the 5xFAD model of Alzheimer's disease

Abhi Verma

University of Virginia

Advisor: John Lukens, Ph.D.

Type-I interferons (IFN-I) are chemical messengers that are expressed in response to host-derived factors (e.g. genotoxic stress, etc.) and recognition of pathogen associated molecular patterns, commonly viral RNA or DNA, by pattern recognition receptors on cell surfaces. IFN-I serve to promote pro-inflammatory processes to enhance the cell's antiviral response. Interferon regulatory factor-1 (IRF1) is a transcription factor involved in the production of IFN-I and antiviral effector proteins. Although previous studies have shown IFN-I signaling is detrimental in models of Alzheimer's disease (AD), what role IRF1 plays within AD is unknown. Here we show that a global knockout of *Irf1* in the 5xFAD mouse model of AD causes a reduction in APP positive puncta surrounding neurons, suggesting reduced neuritic dystrophy and improved neuronal health. Our results also indicate a trend toward reduced insoluble beta-amyloid1-42 peptide by ELISA. Additionally, synaptic loss is a hallmark feature of AD that has been shown to be mediated by Type-I interferons. We find a trend toward increased pre-synaptic loss in our model. These results suggest a role for IRF1 in mediating AD pathology in the 5xFAD model. A better understanding of IRF1's role in immune response signaling in AD may provide novel therapeutic insights to regulate the innate immune response in A β -mediated neurological disease.

Poster Session II, 1:10-2:00 PM

Location – #19

The Impact of Stress on SynCAM 1 Distribution in Prefrontal Interneurons of Mice

**Frank Kennedy | David Dzul | R. Spencer Buddington
Simran Darhele | Antonio Rosario | Robert Williams**

University of Virginia

Advisor: Adema Ribic, Ph.D.

Stress is a risk factor for major depression, which affects 21 million adults in US each year. The prefrontal cortex (PFC) is important for coping with stress. In mice, the stability of excitatory connections (synapses) on Parvalbumin (PV) inhibitory interneurons in the PFC is linked to stress resilience. SynCAM 1 protein stabilizes excitatory synapses, suggesting that heightened expression of SynCAM 1 can promote resilience to stress. As the tools to regulate expression of SynCAM 1 are readily available, it is important to test if stress changes the expression of SynCAM 1 in PFC PV interneurons. To do this, we used quantitative immunohistochemistry of mice that have undergone subchronic stress and control mice. We detected Parvalbumin and SynCAM 1 using confocal microscopy and quantified the expression of SynCAM 1 using semi-automated image analysis in ImageJ (NIH). Contrary to our original hypothesis, the density and size of SynCAM 1 signals on Parvalbumin interneurons were not altered by stress. While previous literature demonstrates increased synaptic stability in mice resilient to stress, our results suggest that SynCAM 1 is dispensable for stress-related synapse stabilization. Our results are limited by our experimental sample as all mice used succumbed to stress. Further, as confocal microscopy cannot resolve structures under 200 nm such as synapses, the application of confocal microscopy is limited to large changes in the expression and distribution of synaptic proteins such as SynCAM 1. This research was conducted in class (PSYC 3559).

Poster Session II, 1:10-2:00 PM

Location – #20

The Influence of Cellphone Co-rumination and Societal Expectations of Happiness on Depression

Matthew Santos Flynn

Washington and Lee University

Advisors: Wythe Whiting, Ph.D. | Karla Murdock, Ph.D.

The prevalence of mental health issues amongst young adults in the United States has continually risen in recent decades, making it increasingly important to identify the underlying causes of this epidemic. It is notable that cell-phone and social media usage has also expanded dramatically in recent decades. The current study investigated the relationship between social media use (TikTok, messages, Instagram) and depression as the outcome variable. We also examined societal expectations of happiness as a moderator of these relationships. The study included 286 individuals, aged 18-25 years old (48% self-identifying men, 49% self-identifying women, and 3% identifying otherwise or not disclosing their gender) in the southeastern United States. Participants completed an online survey, including questionnaires on mental health and perceptions of emotion, as well as a report of their cell phone information on screen time/social media usage. We hypothesized that higher rates of social media use would correlate with higher depression. It was also hypothesized that those with higher cell-phone co-rumination would exhibit stronger correlations between social expectations of happiness and depression symptoms. Though final data analysis is still being conducted, our data support the hypothesis that higher levels of social media use are associated with higher levels of depression.

Poster Session II, 1:10-2:00 PM

Location – #21

The Effect of Caregiver's Income and Coping on Children of the Incarcerated's Emotion Regulation.

Samuel Joel Gruber

College of William and Mary

Advisor: Danielle Dallaire, Ph.D.

Parental incarceration is associated with stressed family resources and caregiver stress and emotional wellbeing. Children's emotional well-being is also impacted by parental incarceration. However, the impact of family income and caregiver emotional coping strategies on children's emotional regulation has not yet received systematic study. This paper examines caregivers' income and self-reported emotion coping strategies in relation to children's emotion regulation in a sample of 104 caregiver-child dyads. All caregivers were female and children (43.4% male) were in grades kindergarten through five. Planned analyses will explore the moderating impact of family income on the relation between caregiver emotion coping and children's emotion regulation.

Poster Session II, 1:10-2:00 PM

Location – #22

GIVE ME A BREAK: Psychometric analysis of the relationships between the Multidimensional Pain Inventory and the Five Factor Model of Personality

Jacob Woodford

University of Virginia

Advisor: Karen Schmidt, Ph.D.

Chronic pain is a severe and potentially debilitating experience affecting millions across the globe. As reported by the CDC, one of the most prevalent cases is arthritis, which affects 58.5 million adults in the United States. The cost of this pain – when considering the cost of health care, work missed, and lower wages – was estimated to be approximately \$303.5 billion per year. The range of this experience varies within and across populations – with pain intensity and its locations being unique to each individual. Within this variability lies even more inconsistency with an individual’s reporting of their day-by-day pain. To explore the variability in self-reported average pain in individuals, a battery of questions was asked to 1,346 participants to measure their personalities using the Five Factor Model of Personality by McCrae and Costa (1987), as well as recording their pain levels via the Multidimensional Pain Inventory by Kerns, Turk & Rudy (1985). Respondents were grouped into a “Break” (n = 504) group if reported average pain was below a score of 3 and a “No Break” (n = 918) if not. Exploratory factor analysis was performed on the items comprising the five factors of personality using the GPArotation package in R to determine groupings of items. Mean scores of these factors were then derived and compared across the “Break” and “No Break” groups with t-tests. Results of these tests indicated that there was a statistically significant difference in personality scores across the break and no break groups for each derived factor.

Poster Session II, 1:10-2:00 PM

Location – #23

Non-autistic People Believe Autistic People are Hypersensitive to Pain, but Experience Similar Levels of Happiness and Unhappiness

Skye Ferris

University of Virginia

Advisors: Vikram Jaswal, Ph.D. | Abha Basargekar, B.A.

People attribute different levels of capacities of experience including pain and joy to different entities (Gray et al., 2007). Past research has shown that autistic adults are believed to feel more pain than non-autistic adults (Basargekar et al., 2024). One possibility is that autistic people are believed to have heightened sensitivity to any experience. This pre-registered study aimed to determine if autistic individuals are also believed to experience more happiness and unhappiness than non-autistic individuals. Non-autistic participants (N = 210) completed rating scales that measured their beliefs of how much pain, happiness, or unhappiness an autistic or a non-autistic adult target would feel in a number of scenarios. Replicating past findings (Basargekar et al., 2024), non-autistic participants believed the autistic target would experience more pain. Interestingly, however, participants believed the autistic and non-autistic targets would feel similar levels of happiness and unhappiness. Thus, the finding that autistic people are believed to experience more pain than non-autistic people does not seem to reflect more general beliefs about hypersensitivity in autistic people.

Poster Session II, 1:10-2:00 PM

Location – #24

Evaluating the Social Responsiveness Scale (SRS-2) as an Identifier of Social Impairment in Autistic Adolescents

Samantha Remmey

University of Virginia

Advisor: Karen Schmidt, Ph.D.

Contemporary approaches to the study of autism spectrum disorder (ASD) have yielded remarkable discoveries regarding the link between autism and social impairment. Social impairment is a highly nuanced hallmark of ASD, and the psychological assessments we use to identify and discern its various manifestations must be continually analyzed to ensure they are measuring symptomatology as intended and to identify any potential latent dimensions present in participant responses. The Social Responsiveness Scale, Second Edition (SRS-2) is widely used to assess social impairment associated with ASD. The scale consists of 65 items with five subscales for scoring. The present study aimed to assess both the construct validity and predictive validity of the SRS-2 via various psychometric techniques sensitive to subtleties in subscale scores from 421 respondents (208 females, 213 males; ages 8-18). Results of a series of exploratory and confirmatory factor analyses suggest that the five-subscale structure of the SRS-2 effectively captured one underlying construct associated with autism, but that this one-factor model may not necessarily hold among specific subgroups of individuals within our overall set of respondents. Moreover, calculations performed in pursuit of evaluating predictive validity indicated that, within our set of respondents, the SRS-2 effectively designated non-autistic individuals as such, but was slightly less effective at designating autistic individuals as such. These findings provide further insight into the SRS-2's ability to identify the presence and severity of social impairment associated with ASD and may guide future efforts by uncovering potential discrepancies in the scale's posited factor structure.

Poster Session II, 1:10-2:00 PM

Location – #25

Oral Presentations II
(2:10 - 3:45 PM)

"No Dunking Allowed": Influencing Attitudes Towards People with Disabilities

Hope Keller

Roanoke College

Advisor: Andrea Burchfield, Ph.D.

Disability language and societal perspectives have been shown to influence attitudes towards disabilities. Two types of disability language exist: identity-first language (I am an autistic person) and person-first language (I have autism). After surveying 80 participants with various disabilities, including Dyslexia, Autism, Visual Impairments, Hearing Impairments, Mild Cognitive Impairments (Dementia), and Long-Term Health Conditions and Disability, no clear patterns of language preference emerged, suggesting that language preference is based on the individual. Taking this information into account, the purpose of the current study is to assess attitudes towards people with disabilities using a survey tool where participant's language preference is specified first, and item language is adjusted to match their preference. Additionally, this study observes if individuals will have more positive attitudes after participating in a wheelchair basketball tournament at Roanoke College. Participants will fill out the Attitudes and Perspectives towards Persons with Disabilities (APPD) scale, where they will be able to select if they prefer person-first or identity-first language. Participants will complete a series of questions before and after the tournament. Data will then be analyzed to determine if attending the event influenced attitudes towards people with disabilities, controlling for language preference, education, and level of everyday contact with people with disabilities.

Oral Presentations II (2:10-3:45 PM), 1st Presenter

Beyond the Single Trait Paradigm: Understanding Personality Profiles and Their Impact on Leadership

Emily Eppard

University of Virginia

Advisor: Jeffery B. Lovelace, Ph.D.

Researchers have long examined the impact of leaders' personality traits on leadership styles and outcomes. However, traits are typically measured as stand-alone variables. This approach does not align with an intuitive understanding of someone's disposition. Personality is an amalgamation of many traits, and they cannot be observed in isolation to gain a full understanding of the impact of a person's nature on their success as a leader. We are therefore conducting latent profile analysis (LPA) in R on HEXACO data for a sample of leaders and assessing the relationship between each observed profile and leader styles.

Oral Presentations II (2:10-3:45 PM), 2nd Presenter

Individual Differences in Child Negative Affect and Surgency Linked to Internalizing Symptoms

Sara Ibrahim

University of Virginia

Advisors: Tobias Grossmann, Ph.D. | Johanna Chajes, B.S.

Temperament is considered an important indicator of individual differences in children's tendency to react to their environment, predicting internalizing disorders such as anxiety. Given the clinical relevance of individual differences in child temperament and the need to detect early warning signs for developing internalizing disorders, the current study examined the link between individual differences in temperament and internalizing symptoms in a sample of typically developing 3-year-old children (N = 51). Specifically, we investigated how variability in temperament along three established dimensions: (1) surgency, (2) negative affect, and (3) effortful control using the Child Behavior Questionnaire in its short form (CBQ-S, Putnam & Rothbart, 2006), was associated with variability in internalizing symptoms using the Child Behavior Checklist (CBCL, Achenbach, 1999). Moreover, our data was collected when COVID-19 was highly prevalent and in its early stages; consequently, our sample was likely exposed to unique environmental factors during infancy and early toddler years, such as lack of peer socialization and increased parental stress. Our results showed that increased negative affect was associated with higher levels of internalizing symptoms, whereas increased surgency was associated with reduced levels of internalizing symptoms. The current findings suggest that individual variability in child temperament is systematically linked to internalizing symptoms in young children. The insights gleaned from these findings can inform clinical approaches and measures towards the early identification and intervention for children at risk for internalizing disorders.

Oral Presentations II (2:10-3:45 PM), 3rd Presenter

Investigating the Influence of Tonal Language Background on Non-Tonal Language Tone Processing: A Comparative Study of Native Chinese and English Speakers

Lexie Xirui Li

University of Virginia

Advisors: Filip T. Loncke, Ph.D. | Daniel T. Willingham, Ph.D.

This study investigates the influence of a tonal language background on the perception and production of English, a non-tonal language, among native Chinese speakers. Given that tonal languages are widely used in the world, where pitch variations can alter word meanings, this research fills a critical gap in our understanding of speech perception across different language systems. Previous studies, such as that by Gao et al. (2019), have shown that tonal language speakers process pitch and linguistic sounds in an integrated manner, contrasting with non-tonal language speakers who treat pitch variations as non-semantic. This study aims to explore whether native speakers of Chinese categorize English words tonally, the impact of early tonal language exposure on untuned language perception, and how this influences accent formation in Chinese speakers learning English compared to non-native English speakers from non-tonal language backgrounds. Utilizing a controlled experimental design, the study compares the tonal perception between native Chinese and English speakers through a series of speeded classification tasks involving pairs of English words. This approach seeks to isolate the specific cognitive processes involved in lexical tone perception and its potential interference in non-tonal language acquisition. Anticipated findings include a tone-to-syllable processing disadvantage among Chinese-English bilinguals, suggesting that tonal language background may affect the accuracy and response time in perceiving syllable and tone differences in a non-tonal context. These results are expected to contribute to a deeper understanding of bilingual speech perception, offering valuable insights for developing more effective language teaching methodologies for tonal language speakers learning non-tonal languages, and enhancing our comprehension of accent formation and early language development.

Oral Presentations II (2:10-3:45 PM), 4th Presenter

Brain Microstructure and Behavioral Severity in Autism Spectrum Disorder

Haylee Ressa

University of Virginia

Advisors: John Van Horn, Ph.D. | Kevin Pelphrey, Ph.D.

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder characterized by deficits in social communication and repetitive behaviors. A diagnosis of ASD is provided by a clinician following cognitive and behavioral evaluations, but there is currently no biomarker associating these metrics with neurological changes. Our lab has previously found differences in brain cellular microstructure between ASD and neurotypical adolescents. Specifically, g-ratio, the proportion of axon width to myelin diameter, and axonal conduction velocity, which is associated with the capacity of an axon to carry information, are both decreased in ASD individuals. By associating these differences with performance on cognitive and behavioral tests, we can evaluate which tests are most revealing of changes in the brain. Diffusion magnetic resonance imaging (dMRI) and behavioral data were collected from 273 subjects (148 with ASD) ages 8 to 17 through an NIH-sponsored Autism Centers for Excellence network. We observe widespread associations between behavioral and cognitive evaluations of autism and microstructural metrics. When analyzing data from all subjects, conduction velocity but not g-ratio was significantly associated with many behavioral metrics. However, this pattern was reversed when looking solely at ASD subjects in that g-ratio but not conduction velocity showed significant associations. This reversal may suggest that the mechanism underlying differences between autistic and non-autistic individuals may be different than the mechanism underlying ASD behavioral severity. By associating neuroimaging metrics with ASD, it may be possible to measure and identify individuals at high risk of ASD before they are able to be evaluated by behavioral tests.

Oral Presentations II (2:10-3:45 PM), 5th Presenter